

# **User Manual**

EUROSTSTEMS License Agreement	I
Important Information for EuroCUT Clients	5
System requirements	5
Second User License	7
Support And Sales Information	9
Copyright	11
EuroCUT uses the OpenCV	11
EuroCUT uses NLog	12
Restriction of Guarantee	13
Trademark	
About This Manual	15
Typographical Orientation Guides	
1 Preface	47
i Preface	17
2 Abilities of EuroCUT - Feature List	19
3 Quickstart and Installation	27
3.1 Quickstart.	
3.1.1 How to Install EuroCUT?	27
3.1.2 Enter License Data (without Dongle)	31
3.1.3 Enter License Data (with Dongle)	33
3.2 The Cut Marks Toolbar	33
3.2.1 The Cut Marks Workflow	34
3.2.2 The Cut Marks Toolbar in CorelDRAW X3-X6	34
3.2.3 The File Menu Entries in Illustrator CS3-CS6, CC	
3.3 Autoexport - Scripts	
3.3.1 Insert EuroCUT Icon in CoreIDRAW Toolbar	
3.3.2 EuroCUT Script in Adobe Illustrator 8-10, CS-CS6, CC	
3.3.3 EuroCUT Script in Macromedia Freehand	41
3.3.4 EuroCUT Script in AutoCAD	41
3.4 Selection of The Device Driver	43
4 How to work with EuroCUT	45
4.1 Desktop and Working Sheet	45
4.1.1 l. Desktop	45
4.1.2 II. Working Area	
4.2 Overview Hotkeys	50
4.3 Functional Principle of The EuroCUT Software	51
4.3.1 Tool Assignment Via Layer	52
4.4 The EuroCUT Layer dialog	56
4.5 Import	57
4.5.1 Import Presettings	57

4 HOW TO WORK WITH EUROCUT	
4.5.2 PDF Import	59
4.6 Export	
4.6.1 PDF Export	63
4.7 Typical Applications	65
4.7.1 Contour vs Outline vs Contour Line	65
4.7.2 Label Production with Cutters with Optical Sense	or69
4.7.3 Flex-Cut, Half-Cut - Punch Function	
4.7.4 Cutting - Milling - Creasing - Drawing	
4.7.5 The Layout View Mode	
4.7.6 Printing	
ŭ	
5 Reference Part	117
5.1 The File Menu	
5.1.1 The New Command	
5.1.2 The New from Template Command	
5.1.3 The Last Version Command	
5.1.4 The Open Command	
5.1.5 The Save Command	
5.1.6 The Save as Command	
5.1.7 The Save all Command	
5.1.8 The Save all Command	
5.1.9 The Online Service Command	
5.1.10 The Import Command	
5.1.11 The Export Command	
5.1.13 The Print Command	
5.1.14 The Output Command	
5.1.15 The Scan Command	118
5.1.16 The Choose Scanner Command	118
5.1.17 The Quit Command	
5.1.18 The Job History	119
5.2 The Edit Menu	
5.2.1 The Undo Command	120
5.2.2 The Undo Stack Command	
5.2.3 The Redo Command	
5.2.4 The Redo Stack Command	
5.2.5 The Cut Command	120
5.2.6 The Copy Command	
5.2.7 The Paste Command	121
5.2.8 The Paste Special Command	121
5.2.9 The Select All Command	121
5.2.10 The Reverse Selection Command	121
5.2.11 The Job Info Command	
5.2.12 The Color Layer Command	
5.2.13 The Prepare to Cut Command	
5.2.14 The Multi Copy Command	
5.3 The Design Menu	129
5.3.1 The Rotate Axis Command	

	5 Reference Part	
	5.3.2 The Rotate Axis With Page Command	123
	5.3.3 The Horizontal Mirror Command	
	5.3.4 The Vertical Mirror Command	
	5.3.5 The Delete Command	123
	5.3.6 The Mirror on the X Axis Command	
	5.3.7 The Mirror on the Y Axis Command	123
	5.3.8 The Duplicate Command	
	5.3.9 The Clone Command	
	5.3.10 The Group Command	124
	5.3.11 The Break Group Command	124
	5.3.12 The Combine Command	124
	5.3.13 The Break Combination Command	125
	5.3.14 The Fill Function	
	5.3.15 The Contour Function	
	5.3.16 The Draw Command	
	5.3.17 The Align Command	
	5.3.18 The Sort With Simulation Command	
	5.3.19 The Sort Manually Command	129
	5.3.20 The Clockwise Command	129
	5.3.21 The Counterclockwise Command	129
	5.3.22 The Close Contour Command	
	5.3.23 The Open Contour Command	130
	5.3.24 The Round Corners Command	
	5.3.25 The Reduce Nodes Command	
	5.3.26 The Add to Clipart Group Command	
	5.3.27 The Change to Container Command	130
	5.3.28 The Cancel Container State Command	
	5.3.29 The Container Setup Command	
	5.3.30 The Weeding Border Command	131
5.4	The View Menu	132
	5.4.1 The Zoom In Command	132
	5.4.2 The Zoom Out Command	132
	5.4.3 The Full Page Command	
	5.4.4 The Show All Command	132
	5.4.5 The Show Selected Objects Command	132
	5.4.6 The To Front Command	132
	5.4.7 The To Back Command	
	5.4.8 The Forward One Command	133
	5.4.9 The Back One Command	133
	5.4.10 The Reverse Order Command	133
	5.4.11 The Change Order Command	133
	5.4.12 The Show Layout Command	
	5.4.13 The Contour View Command	
	5.4.14 The Enhanced View Command	
	5.4.15 The Always on top Command	134
	5.4.16 The Refresh Screen Command	134
5.5	5 The Tools Menu	135
	5.5.1 The Vectorizing Function	

	5 Reference Part	
	5.5.2 The Revectorizing Function	135
	5.5.3 The Contour Line Function	135
	5.5.4 The PhotoCut Function	
	5.5.5 The Insert Program Command	136
	5.5.6 The Edit Program List Command	136
	5.5.7 The Set Jog Marks Command	136
	5.5.8 The Search / Replace Video Marks Command	136
	5.5.9 The Measure Command	
	5.5.10 The Optimize Material Function	
	5.5.11 The Outline Function	
	5.5.12 The Welding Command	
5.6	The Text Menu	
0.0	5.6.1 The Add Text Command	138
	5.6.2 The Edit Text Command.	
	5.6.3 The Textbox Command	
	5.6.4 The Convert Text to Curves Command	
	5.6.5 The Convert Text to Lines Command	
	5.6.6 The Fontmanager Command	138
<b>5</b> 7	The Settings Menu	
5.7	5.7.1 The Standard Settings Menu	
	5.7.2 The Color Palette Command	
	5.7.3 The Control Panel Command	
	5.7.4 The Working Area Command	152
	5.7.5 The Rulers Function	
	5.7.6 The Hulers Function	153
	5.7.7 The Grid Function	
	5.7.7 The Grid Function	
	5.7.9 The Cross-Hair Command	
	5.7.10 The Guidelines Function	
	5.7.11 The Snap Mode Function	155
	5.7.12 The Lock Guidelines Command	
	5.7.13 The Guidelines Visible Command	155
	5.7.14 The Choose Language Command	
5.8	The Window Menu	
	5.8.1 The New Window Command	
	5.8.2 The Tile Horizontally Command	
	5.8.3 The Tile Vertically Command	
	5.8.4 The Cascade Command	
	5.8.5 The Close Command	
	5.8.6 The Close All Command	156
	5.8.7 The Standard Command	
	5.8.8 The Sidebar Command	
	5.8.9 The Setup Command	
	5.8.10 The Common Tools Command	
	5.8.11 The Text Command	157
	5.8.12 The Object Tools Command	157
	5.8.13 The Object Parameters Command	
	5.8.14 The Status Bar Object Info Command	157

	5 Reference Part	
	5.8.15 The Status Bar Element Info Command	157
	5.8.16 The Active Windows List	
	5.8.17 The Further Windows Command	158
	5.9 The Help Menu	159
	5.9.1 The About Command	159
	5.9.2 The Help Command	
	5.9.3 The Object Info Command	159
	5.9.4 The Install Autoimport Plug-Ins Command	159
	5.9.5 The Online Support Command	159
	5.9.6 The Remote Support Command	
	5.9.7 The Live Update Command	
	5.10 Context Menu Left Mouse Button	161
	5.10.1 Context Menu Ruler	
	5.11 Context Menus Right Mouse Button	
	5.11.1 Reference List of All Context Menu Commands	164
	5.11.2 Context Menu on Empty Working Area	167
	5.11.3 Context Menu Text Block	167
	5.11.4 Context Menus Node Editing	174
6	Reference Part Output Preview	179
	6.1 The Output Menu	179
	6.1.1 The Output Command	
	6.2 The Options Menu	179
	6.2.1 The Save As Command	179
	6.2.2 The Rotate Axis Command	179
	6.2.3 The Horizontal Mirror Command	
	6.2.4 The Vertical Mirror Command	
	6.2.5 The Optimization Command	179
	6.2.6 The Sort With Simulation Command	
	6.2.7 The Recalculate Command	
	6.2.8 The Initial View Command	
	6.2.9 The Horizontal Weeding Lines Command	
	6.2.10 The Vertical Weeding Lines Command	180
	6.2.11 The Test Drive Command	
	6.3 The View Menu	
	6.3.1 The Material Width Command	
	6.3.2 The All Objects Command	181
	6.3.3 The Selected Objects Command	181
	6.3.4 The Total Area Command	۱۵۱۱۵۱
	6.4.1 The New Window Command	
	6.4.2 The Tile Horizontally Command	182
	6.4.4 The Cascade Command	182
	6.4.5 The Close Command	۱۵۷۱۵۷
	6.4.6 The Close Command	
	6.4.7 The Common Tools Command	
	6.4.8 The Ohiect Parameters Command	

	6 Reference Part Output Preview	
	6.4.9 The Status Bar Object Info Command	183
	6.4.10 The Status Bar Element Info Command	183
	6.4.11 The Active Windows List	183
	6.4.12 The Further Windows Command	183
	6.5 The Help Menu	183
	6.5.1 The About Command	183
	6.5.2 The Help Command	183
	6.5.3 The Install Autoimport Plug-Ins Command	
	6.5.4 The Online Support Command	
	6.5.5 The Remote Support Command	184
	6.5.6 The Live Update Command	184
	6.6 Context Menu of The Right Mouse Button	18
	6.6.1 Context Menu Output Preview	185
7	Toolbars	187
	7.1 The Standard Toolbar	187
	7.2 The Setup Toolbar	187
	7.3 The Text Editor Toolbar	188
	7.4 The Node Toolbar	190
	7.4.1 Direct Input of Coordinates of Node Positions	19
	7.5 The Object Tools Toolbar	197
	7.6 The Object Parameter Toolbar	198
	7.6.1 The Multi Copy Command	198
	7.7 The Status Line Object Info	200
	7.8 The Status Line Element Info	200
	7.9 The Preview Tools Toolbar	
	7.10 The Preview Object Parameters Toolbar	202
8 '	Tools	203
	8.1 The Desktop	203
	8.1.1 Cursor forms on the working area and their meaning	204
	8.2 The Textbox Dialog	20
	8.2.1 Edit Text	214
	8.3 The Outline Function	219
	8.4 The Undo Redo Stack	22
	8.5 The Alignment Function	223
	8.6 The Sort With Simulation Tool	224
	8.6.1 Simulation	224
	8.7 The Pen Attributes Tool	
	8.8 The Welding Tool	23
	8.8.1 Seams	233
	8.9 The Color Bucket Tool	234
	8.10 The Measure / Measurement Tool	24
	8.11 The Stop Watch	243
	8.12 The Tracing Tool (Vectorization)	
	8.12.1	
	8.12.2 Color assignment	
	8 12 3 Parameters	2/10

	8 100IS	
	8.12.4 Sliders	
	8.13 The Contour (Line) Function	
	8.14 The Job Info	
	8.15 The Plot Manager	
	8.15.1 Creation And Modification of Device Configurations	
	8.15.2 Monitoring the Output Processes of the Jobs	
	8.15.3 Output of Data to Local Ports	
	8.15.4 Administration of Hotfolders	
	8.15.5 Plot Server Function	
	8.15.6 Devices Folder	
	8.15.7 Settings of the Plot Manager	
	8.16 The PhotoCUT Function	
	8.16.1 The PhotoCUT Dialog	263
٩т	he Sidebar	271
٠.	9.1 Term Definition Sidebar.	
	9.2 The Anchorage Control	
	9.3 The Layer Tab	
	9.3.1 A) The Layer Area	
	9.3.2 B) The Layer Options	
	9.3.3 C) The Palettes Options	
	9.3.4 Status Indicator Layer	
	9.3.5 I. Layer SettingsOutput Setup	278
	9.3.6 II. Layer Settings Color Setup	279
	9.3.7 Hotkeys in the layer processing	281
	9.4 The Cliparts Tab	
	9.4.1 Clipart Management	282
	9.4.2 The Context Menus	289
	9.5 The Macros Tab.	
	9.5.1 The Macro List	291
	9.5.2 The Tool Bar Area	291
	4.110	
10	Add Ons	
	10.1 The PhraseWriter	
	10.1.1 How are text modules being created?	
	10.1.2 The Icon In The Windows Info Bar	296
	10.1.4 The Settings Window	296
	10.1.5 Reference Part PhraseWriter	297
	10.1.5 Reference Part Phrasewriter	
	10.2.1 What Can The Fontmanager?	202
	10.2.2 Toolbars.	
	10.2.3 Reference Section.	
	10.2.4 The Context Menus.	-
	TO.2.7 THE CONGRAL INIGHUS	2
11	Tips & Tricks - Trouble Shooting	333
	11.1 Buffer Overflow Serial Port	333
	11.2 Output Size Mimaki	

11 Tips & Tricks - Trouble Shooting	
11.3 Output Size Graphtec	333
11.4 Computer without serial COM port	334
11.5 Tracing (Vectorization)	334
11.6 Cutter Does Not Respond!	
11.7 Buffer Overflow	
11.8 Script Font Welding	335
11.9 Generate Circle Segments	335
11.10 Data Import From Apple Computers	336
11.11 Typical Sources of Errors When Cutting	336
11.12 Plotter Via USB Is Not Working!	337
11.13 Summa Plotter Does Not Read Out!	
11.14 The Values for Cutting Pressure And Speed Are Not Saved	338
11.15 Error Message While Output into File	
11.16 Code is not accepted with Windows 7 or Vista (No Dongle)	338
Annex	
A The ANSI Character Table	
B EuroCUT Basic 7 Fonts	
C EuroCUT fonts	
D EuroCUT symbol fonts	
D.1 Sign symbols (ECSignsymbole)	
D.2 Sport symbols (ECSportsymbole)	
D.3 Frame symbols (ECRahmensymbole)	
E Driver List	
F Dictionary of Technical Terms	375
G Glossary	384
H Imprint	389
	004

## **EUROSYSTEMS License Agreement**

Below you will find set out the conditions of the agreement for the use of EUROSYSTEMS by you, the end-user (hereinafter also called the Licensee). This legal document is an agreement between you, the end-user, and EUROSYSTEMS S.à.r.l. By opening the sealed disk package, you are agreeing to become bound by the terms of this agreement. Therefore, please read the following text carefully and in full. If you do not agree to the terms of this agreement, do not open the disk package, promptly return the unopened disk package and the other items (including all written documentations, ring binders, if applicable dongle/hard ware copy protection or any other boxes) of the purchased product to the place where you obtained them.

SINGLE-USER LICENSE - SECOND-USER LICENSE - DEMO LICENSE - SCHOOL LICENSE - MULTI-USER

### 1. Scope of the License Agreement

The agreement applies to computer programs and files stored on data carriers, the program description and operating instructions and any other related written material and hardware, hereinafter also called "Software". EUROSYSTEMS points out that the present level of technology does not allow computer software to be produced in such a way that it works perfectly in all applications and combinations. Thus, the agreement is only applicable to software which is basically usable in accordance with the program description and the user operating instructions.

#### 2. Granting of License

Single-User/Main License

EUROSYSTEMS grants you the right to use the enclosed copy of the EUROSYSTEMS Software on only one terminal connected to a single computer (i.e. with only one CPU). You may not use the Software in a network or on more than one computer or computer terminal in any way or at any time whatsoever.

Exception: When the Licensee possesses a so called Second-User License.

#### Second-User License

A Second-User License as well is only valid in connection with a Single-User or Main License for the Professional version. It is protected in the same way as the Single-User/Main License (with dongle copy protection). The functions of a Second-User License are the same as those of a Main License. A maximum of two additional Second-User Licenses may be acquired for each Single-User/Main License. If more than three licenses are required in a multi-user environment, it is first of all necessary to acquire a further Single-User or Main License. This license can then be used to acquire two more Second-User Licenses. Any additional licenses beyond this are to be agreed individually with the producer in writing.

#### Demo License

The demo license authorizes the Licensee to test all the Software functions, especially to check if they are in accordance with the licensor"s descriptions and/or if the software is compatible with the user"s computer system. It is expressly forbidden to use the Software for commercial purposes, to transmit it to third parties or to copy it without explicit written consent of the producer.

#### **EUROSYSTEMS** License Agreement

#### School License

A School License consists out of a main license for one teacher workplace and a so called 'Multi-User' license for student's workplaces. The 'Multi-User' license is a functionally restricted version of the software. Usage is allowed on multiple workplaces / computers in the offices of the single place / main licensee.

#### 3. Copyright

The Software is the property of EUROSYSTEMS and is protected against copying by laws on copyright, international agreements and other national regulations. If the Software does not have a device to protect it from being copied you may either make one copy as backup or for your records or copy it to a single hard disk as long as the original copy is to be stored exclusively as backup or for your records. You are not permitted to delete the reference to copyright in the Software or the registration or serial code or dongle numbers. It is expressly forbidden to copy the Software and the written material such as manuals either in full or in part or to reproduce them in any way.

#### 4. Special Restrictions

#### As Licensee you are not permitted

- \* to transfer, assign, rent, lease or otherwise dispose of the Software or related material to a third party without the prior written consent of EUROSYSTEMS. But you are allowed to permanently assign the rights from this EUROSYSTEMS Licensing Agreement to another person, provided that you transfer the EUROSYSTEMS Licensing Agreement together with all copies of the Software and the accompanying hardware and the recipient consents to be bound by the terms of the agreement. The transfer must include the latest update and all earlier versions and EUROSYSTEMS must be notified in writing.
- \* to transfer the Software from one computer to another via a network or a data transmission channel.
- \* to modify, translate, reverse engineer decompile or disassemble the Software without the prior written consent of EUROSYSTEMS.
- \* to create derivative works based on the Software or reproduce the written material.
- \* to translate or modify the written material or produce derivative material.

#### 5. Ownership of rights

With the purchase of the product you only possess the physical data carrier on which the Software is recorded or fixed. A purchase of rights of the Software is not connected with it. EUROSYSTEMS especially reserves the rights for the publication, duplication, edition and commercialization of the Software to itself.

#### 6. Duration of the contract

This License is effective indefinitely. This license will terminate automatically without notice from EUROSYSTEMS if you fail to comply with any provision of the License. Upon termination you are obliged to destroy the original data carriers as well as all copies of the Software, modified copies including the written materials. You must return the hardware and donale to the manufacturer.

7. Damages for Non-Compliance with the Agreement

EUROSYSTEMS points out that you are liable for any damage resulting from breach of copyright incurred by EUROSYSTEMS on account of your non-compliance with the terms of this agreement.

#### 8. Modifications and updates

EUROSYSTEMS may create updated versions of the Software at its discretion. EUROSYSTEMS is not bound to make such updates available to Licensees who have not returned their registration card to EUROSYSTEMS duly filled out or who have not paid the update fee.

- 9. Limited Warranty and Disclaimer of Warranty
- \*1: EUROSYSTEMS guarantees to the original Licensee that, at the time of acquisition, the data carrier on which the Software is recorded and fixed and the related hardware supplied with it function perfectly under normal operating and servicing conditions.
- \*2. If the data carrier or the hardware supplied with it is faulty, the purchaser can demand a replacement during the warranty period of six months after delivery. He must return any hardware supplied including the backup copy and the written material and a copy of the invoice/receipt to EUROSYSTEMS or the dealer from whom he purchased the product.
- \*3. If a replacement for a faulty item, as mentioned in 9.2, is not provided within a reasonable period of time, the purchaser can demand either a reduction of the purchasing price or termination of the agreement.
- \*4. For the reason mentioned in 1, EUROSYSTEMS does not guarantee the freedom of errors for the Software. Especially, EUROSYSTEMS does not guarantee that the Software meets the Licensee's requirements and purposes or works together with other programs selected by him. The Licensee bears all responsibility for the correct choice and the consequences of using the Software and for the results intended or actually achieved. The same applies to the written material accompanying the Software. If the Software is not usable in accordance with 1., the Licensee has the right to terminate the contract. EUROSYSTEMS has the same right when it is not possible to manufacture usable Software at reasonable cost in accordance with 1.
- \*5. EUROSYSTEMS is not liable for damage unless the damage was caused deliberately or through gross negligence on the part of EUROSYSTEMS. Any liability for gross negligence towards dealers is excluded. Liability due to properties maybe warranted by EUROSYSTEMS remains untouched. Liability for consequential harm caused by a defect that is not included in the warranty is excluded.

#### 10. Traders

If the Licensee is a trader, this agreement shall be subject to the law of Luxembourg and the jurisdiction of national and federal courts located in Luxembourg.

#### LIMITED WARRANTY

\* Limited Warranty - EUROSYSTEMS guarantees that the Software functions largely in accordance with the accompanying product manual for a period of 90 days from receipt.

#### **EUROSYSTEMS License Agreement**

This guarantee is given by EUROSYSTEMS in its capacity of producer; it does not replace or restrict any possible legal claims regarding warranty or liability which may be made on the distributor from whom you purchased your copy of the Software.

- \* Customer"s Rights EUROSYSTEMS" entire liability and your sole right consists in a refund of the price paid or the repair or replacement of Software which is inadequate under the terms of EUROSYSTEMS" limited warranty and which has been returned to EUROSYSTEMS together with a copy of the invoice. This limited warranty does not apply when the non-functioning of the Software or hardware is due to an accident, improper use or incorrect application.
- \* No Further Guarantee EUROSYSTEMS does not assume any other responsibility for the Software, related manuals and written materials or the accompanying hardware.
- \* No Liability for Consequential Damage Neither EUROSYSTEMS nor the distributors of EUROSYSTEMS are liable for any damages (unlimited included are damages for loss of business profits, business interruption, loss of business information or data or from other financial loss) arising out of the use or inability to use such product even if EUROSYSTEMS has been advised of the possibility of such damage. In any case EUROSYSTEMS" liability is confined to the amount actually paid for the product. This disclaimer does not apply to damage caused deliberately or by gross negligence on the part of EUROSYSTEMS. Neither does it affect any rights based on legal regulations concerning product liability.

Should you have any queries about this agreement, please contact

Euro-Systems S.à.r.l Villa Machada 1 Rue Kummert L-6743 Grevenmacher Luxembourg © EUROSYSTEMS S.à.r.l. 2014

## Important Information for EuroCUT Clients

Please check the merchandise after the reception upon completeness and announce possible absence of single parts immediately to your trader.

EuroCUT is available in different versions: EuroCUT *Professional*, EuroCUT *Basic*. EuroCUT *Design* (schools also)

The single versions differ in the complexity of functions.

#### The **scope of delivery** of a EuroCUT version includes:

- Program CD (apart from download version)
- Hardware copy protection USB dongle (Professional only)
- Manual (as PDF file for download version)

#### Code number

The sticker is on the inner side of the manual cover. In case of online buy code number is delivered via email.

#### Important Note: If the copy protection is lost, the license is terminated!

#### Please check (Professional only):

- 1. Beside your program CD it is most important to check the existence of the copy protection (dongle) as this is at the same time your license.
- 2. The number on your copy protection **must** correspond to the 1. block of the serial number (**000123**-EC7B-...).

Underneath the product description is your personal code number **serial number** (e.g. 000123-EC7B-123973-00089754). This code will be inquired after the successful installation of the software - at the first start - as initialization. Another start of the program is only possible after the verification of the code.

## System requirements

- Minimum requirement: Pentium 1.5 GHz with 512 MB RAM
- Recommended: Pentium 4 or newer with 1 GB RAM
- Windows XP SP3, Windows Vista, Windows 7 / 8 (32 or 64 bit)
- Minimum graphic resolution: 1024 x 768 pixel

System requirements

## Second User License

Requirement for its use is a registered main license.

With the EuroCUT **second user license** you purchase an adequate further program package with dongle that can be used specially separated from your main system. The second user license is especially suitable for branches or for the mobile application. Order congestions or plant extensions can thus be handled flexibly. The installation of the second user license is identical with the installation of the main version. All second-user licenses get the same dongle number as the main license.

For EUROSYSTEMS software products, which are protected via **hardware copy protection (dongle)**, with each second user license another dongle is provided. For EUROSYSTEMS software products, which are protected via **software copy protection (code number)**, with each second user license another full license code is provided.

Second User License

## **Support And Sales Information**

Dear user,

in order to guarantee the direct communication with your competent contact person in case of problems and questions and in order to avoid or shorten waiting times on the phone we offer the service of the technical **hotline**.

This service is available free of charge from:

Monday - Friday from 9:00 a.m. until 12:00 noon MET

Phone: ++49 6502-9288-11

Further helpful information as well as tips and tricks are on our website:

#### www.eurosystems.lu

under the category Support / FAQ

Our support staff members only give information to **registered** users. Therefore, please give following information upon each call:

- Version-No.: e.g. EuroCUT Professional 7.005
- Dongle or serial number of respective product

Thank you for your understanding that inqueries by phone can only be handled by using this phone number. Other direct dialling numbers that may be known to you are reserved for purchase and sales department.

In order to guarantee a smooth and competent support for yourself and others, we kindly ask you to get registered. Immediately after the reception of your registration card, your registration per fax or online, you will be added to our user-database.

RCS Systemsteuerungen GmbH Generaldistributor für EUROSYSTEMS-Produkte.

PS.: For written inquiries or the fast registration per fax or online, please use the following number or address:

Fax: ++49 6502-9288-15

Web Site: www.eurosystems.lu

Support And Sales Information

## Copyright

Copyright © 2014 by Euro-Systems S.à.r.l.. All rights reserved.

Any duplication of this manual as well as the computer software EuroCUT for Windows will be prosecuted.

The rights for the documentation to EuroCUT lie with Euro-Systems S.à.r.l., Villa Machera, 1 Rue Kummert, L-6743 Grevenmacher, Luxembourg

Manual text/-set/-layout: Peter Bettendorf, Frank Thömmes RCS Systemsteuerungen GmbH, Longuich

The legitimate acquisition of the CD-ROM allows the use of the program, analogously to the use of a book.

According to the impossibility that a book is read at the same time in different places by several persons the software program EuroCUT may not be used at the same time from different persons in different places and on different devices.

CD copies may be created only for the purpose of the data backup.

## **EuroCUT uses the OpenCV**

(Open Source Computer Vision Library)

IMPORTANT: READ BEFORE DOWNLOADING, COPYING, INSTALLING OR USING.

By downloading, copying, installing or using the software you agree to this license. If you do not agree to this license, do not download, install, copy or use the software.

Intel License Agreement

For Open Source Computer Vision Library

Copyright (C) 2000, 2001, Intel Corporation, all rights reserved.

Third party copyrights are property of their respective owners. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

#### EuroCUT uses the OpenCV

\* The name of Intel Corporation may not be used to endorse or promote products derived from this software without specific prior written permission.

This software is provided by the copyright holders and contributors 'as is' and any express or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed.

In no event shall the Intel Corporation or contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage.

## **EuroCUT uses NLog**

NLog is a free logging platform for .NET, Silverlight and Windows Phone with rich log routing and management capabilities. It makes it easy to produce and manage high-quality logs for your application regardless of its size or complexity.

Copyright (c) 2004-2011 Jaroslaw Kowalski

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of Jaroslaw Kowalski nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## **Restriction of Guarantee**

We have given the greatest effort with the illustrations and while writing the texts. Nevertheless, mistakes for this manual and the corresponding programs can not be entirely excluded. No guarantee is taken for the correctness of the content of this manual, its translation, its completeness and exactness.

We expel the liability for all losses which appear by the use of the EuroCUT or its documentation. The content of this manual can be changed without announcement and is not to be considered as an obligation of EUROSYSTEMS S.à.r.l.

The authors cannot take over any responsibility or liability for incorrect information and their consequences.

### **Trademark**

Possibly found trademarks are used without their usability can be guaranteed.

The following programs were applied among other things: CorelDRAW, Postscript, Microsoft, Windows, Illustrator, Freehand and AutoCAD. These trademarks are owned by the respective producer.

Trademark

### **About This Manual**

With this manual you receive EuroCUT. This manual is divided in 8 chapters.

In chapter "Quickstart and Installation" the installation of EuroCUT on your Windows computer will be explained. Please follow the installation instruction carefully as the correct installation is the basic for the smooth usage of EuroCUT.

The chapter "How to work with EuroCUT?" is an introduction in handling, tools and functions. The functional principle will be concretized by means of practical examples.

In chapter "Reference Part" all menus and their menu items in their chronological order are explained. This chapter is thought of as reference book and should be used in case of doubts about the exact functioning of a command.

In chapter "Reference Part Output Preview" all menus and their menu items in the display preview in their chronological order are explained. As chapter "Reference Part" it is thought of as reference book and should be used in case of doubts about the exact functioning of a command.

In the next chapter all "*Toolbars*" are described. Toolbars contain important tools that are placed in a freely movable toolbar.

In the following chapter the functioning of the "Tools" is described in detail.

In the chapter "*The Sidebar*" the side toolbar with tabs (similar to the so-called dockers in CorelDRAW) is described in detail in its functioning. Summarized are layer editing, cliparts, object manager and file management. The selection of the various functional areas is implemented via so-called tabs.

In chapter "Add Ons" additional program modules are described in detail. Add Ons are program components that are separated from the main program. Usually they are provided by user defined installation.

In chapter "*Tips and Tricks - Trouble Shooting*" we have explained a selection of daily problems from our hotline and support experience and give you information for dealing with technical problems.

## **Typographical Orientation Guides**

Display Meaning

Bold Headlines

Italic Indications, accentuations

Bold, italic Menus, fields, options e.g. new-command

CAPITAL Name of keys on the keyboard e.g. INS, SRTG, ...

LETTERS

KEY1+KEY2 The plus (+) between the key names means that the first key must be

kept pressed while pressing the second key. Afterwards, let go the two

keys.

KEY1,KEY2 A comma (,) between the key names means that you press the keys one

after the other and let them go.

Shortcuts and hotkeys

... Three dots after menu entries and commands always mean that, when

activating, a dialog window will be opened.

## 1 Preface

Welcome to EuroCUT, the innovative signmaking software that will help you design all types of signs and sign related products and cut them out of a variety of materials.

Whether you are new to sign-making or consider yourself an expert, EuroCUT gives you all the tools you need for professional results.

You will soon realize just how powerful EuroCUT is, whether your application is display or vehicle graphics, signmaking or exhibit building.

You may be involved in screen printing or signage - EuroCUT is equally capable of handling any of these tasks. And there are many more applications: e.g.

Stone masons – sandblasting applications

Department - window displays

stores

Film. photo – sceneries, decorations.

and TV studios directional

signage

Builders, - construction and

architects architectural

signage

Major – interior and exterior

corporations signage,

exhibit displays

Wood-working - pos. and neg.

sandblasting

Before you begin working with EuroCUT, you should be familiar with the basics of operating your PC and Microsoft Windows.

1 Preface

Compare List	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7 Basic	CoCUPPro 2011	<b>COCU</b> †
Design Tools	✓ · · · · · · · · · · · · · · · · · · ·	×	*	*	*
Draw	<b>~</b>	<b>~</b>	*	*	*
Block Shadow	~	~	×	×	×
Envelope	<b>~</b>	~	×	×	×
Perspective	<b>~</b>	~	×	×	×
Duplicate	<b>~</b>	~	<b>~</b>	~	<b>~</b>
Circle	<b>~</b>	~	~	×	×
Digitizing Mode	<b>✓</b>	~	<b>~</b>	×	×
Freehand	✓	~	~	×	×
Geometric Shape	~	~	×	×	×
Line	✓	~	~	×	×
Square	<b>✓</b>	~	<b>~</b>	×	×
Define Drill Holes	~	~	×	×	×
Register Mark	~	~	<b>~</b>	~	×
Bitmap Functions	~	~	×	×	×
Bas-Relief	~	~	×	×	×
Brightness	~	~	×	×	×
Contrast	~	~	×	×	×
Convert to Bitmap	<b>~</b>	~	×	×	×
Crossfade	~	~	×	×	×
Cut Region	<b>~</b>	~	×	×	×
Gamma Correction	~	~	×	×	×
Gray Scales	<b>~</b>	~	×	×	×
Invert	~	~	×	×	×
Posterize	~	~	×	×	×
Properties	~	~	×	×	×
Reduce Colors	<b>~</b>	~	×	×	×
Rotate in 0.1° Steps	~	~	~	×	×
Saturation	~	~	×	×	×
Sharpness	~	~	×	×	×
PhotoCUT	~	~	~	~	×
Convert Halftone Templates	~	~	~	~	×
Different Reliefs	~	~	~	~	×
Result Invertible	~	~	~	~	×
Stripe Direction selectable	~	✓	~	~	×
Stripe Distance Adjustable	~	~	~	~	×
Stripe Form selectable	~	~	~	~	×
Stripe Width Adjustable	~	~	~	~	×
Variable Clip Width	~	~	~	~	×
Weeding Frame	~	~	~	~	×
Welding	<b>~</b>	~	<b>~</b>	<b>~</b>	X
Automatic	~	~	<b>~</b>	~	X
By Color	<b>~</b>	~	<b>Y</b>	<b>Y</b>	X
Fill	~	~	×	×	X
Full Surface	~	~	~	~	X
Manually Onen Trimming	<b>V</b>	<b>~</b>	~ ~	· ·	X
Open Trimming	~	~	X	×	×

Compare List Euro Professional D	Cut 7 Euro Cut 7 CoCut Pro Col	2011
Screen Printing	✓ X ✓	×
		×
		×
		×
•		×
		×
		×
		×
		×
		×
·		×
*	<b>y y y</b>	×
		×
Variable Display	<b>Y Y Y</b>	×
		×
Background Update	v x v	×
*.CDR and *.CMX Import 1)	✓ X ✓	×
,		×
	✓ X ✓	×
	v x v	×
	v x v	×
	✓ X ✓	×
	✓ X ✓	×
	✓ X ✓	×
	v x v	×
<del>*</del>	✓ X ✓	×
	✓ X ✓	×
	✓ X ✓	×
	✓ X ✓	×
	v x v	×
		×
	<b>v v v</b>	×
	<b>~ ~ ~ ~</b>	×
	<b>Y Y Y</b>	×
	<b>v v v</b>	×
	<b>v v v</b>	×
	<b>v v v</b>	×
		×
	× v v	×
	x	×
	<b>~ ~ ~ ~</b>	×
Visable / Unvisible	<b>v v v</b>	×
		×
Step By Step	v х х	×
Object Manager	✓ x x	×
Attributes Tab	✓ X X	×
Color Bar	✓ x x	×
	✓ x x	×
Object List	✓ x x	×

Compare List	Euro (U) 7 Professional	Euro Cut 7 Design	Euro Cut 7	CO (2011) Pro	<b>CoCu</b> †
Object Names	~	~	×	×	×
Object Names Tab	~	<b>~</b>	×	×	×
Object Preview	~	~	×	×	×
Object Selection with Preview	<b>~</b>	~	×	×	×
Object Tree	~	~	×	×	×
Object Types Tab	<b>~</b>	~	×	×	×
Show Object Attributes	~	✓	×	×	×
Tree Buttons	~	~	×	×	×
Zoom Buttons	~	✓	×	×	×
Zoom Slider	~	~	×	×	×
Miscellaneous	<b>✓</b>	<b>~</b>	*	*	*
Adjust	<b>~</b>	~	~	<b>~</b>	~
Axis Change	~	~	~	<b>~</b>	~
Bitmap Fill	~	~	~	×	×
Outline Pen	~	~	~	<b>~</b>	×
Contour Mode	~	~	~	~	~
Crosshair	_	~	_	x	×
Dimensioning	,	,	×	×	×
Fill	_	· ·	~	×	×
Gradient Fill	· ·	-		×	×
Guide Lines (also transversely)	~	,	,	×	×
Magnifier	,	Ż	· ·	Ÿ	Ž
Measure (Distance, Angle)	Ž	Ž	Ž	, i	×
Metric	Ž	Ž	· ·	Ž	ŷ
Mirror Horizontal	Ž	·	ž		•
Mirror Vertical	· ·	Ž	· ·	,	· ·
Raster	~	~	~	×	×
Rotate in 0.1° Steps					
Ruler		· ·	· ·	· ·	×
Snap Mode	<b>V</b>	<b>Y</b>	<b>~</b>	<b>~</b>	<b>~</b>
Stopwatch	~	<b>~</b>	~	<b>Y</b>	<u> </u>
·	~	~	<b>Y</b>	X	X
Node Editing	<b>~</b>	~	*	X	X
Align Horizontally	~	~	~	×	×
Align Vertically	<b>~</b>	~	<b>~</b>	X	X
Break Nodes	~	~	~	×	×
Bridges	~	~	×	×	×
Curve to Line	~	~	~	×	×
Cusp Node	~	~	~	×	×
Delete Nodes	<b>✓</b>	~	~	×	×
Direct Input of Coordinates	<b>~</b>	~	~	×	×
Insert Nodes	~	~	~	×	×
Join Nodes	~	~	~	×	×
Line to Curve	~	~	~	×	×
New Origin	<b>~</b>	~	<b>~</b>	×	×
Orthogonalise	~	~	~	×	×
Reduce Nodes	~	~	~	×	×
Rounding	~	~	~	×	×
Smooth Curve	~	~	~	×	×
Symmetric Nodes	~	~	<b>~</b>	×	×

Compare List	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7	CoCUPPro 2011	<b>CoCu</b> ‡
Outline/Inline	<b>~</b>	<b>~</b>	<b>~</b>	~	×
Productivity Tools	<b>~</b>	*	×	*	*
CMX Transfer (Drag & Drop)	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>
Best Import of TTF Contours	~	~	_	~	~
Export from CorelDRAW as CMX	~	<b>~</b>	<b>/</b>	~	~
Job Filter in CorelDRAW	_	~	_	~	~
Takes Color and Gradients	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~
Print	<b>~</b>	~	×	~	×
Color Separation		~	×		×
Define Print Ratio	<b>~</b>	~	<b>~</b>	~	×
Print on Roll	~	· ·	×	· ·	×
Print to File	,	· •	Ÿ	· •	X
Tile Preview	ż	j	×	Ż	×
Tile Selection	· ·	j	×	,	×
Tiles with Overlapping	Ž	Ž	Ŷ	Ž	â
Export Filter	Ž	Ž	Ŷ	*	x
PDF	Ž	Ž	Ž	Ĵ	â
Access Rights Management					×
Document Encryption	~	· ·	· ·	· ·	
Twin Password Protection	<b>v</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	X
CMX	~	~	~	~	X
	~	~	~	<b>Y</b>	X
DXF	~	~	<b>~</b>	X	×
EMF	~	~	~	~	×
EPS with OPI	~	~	~	~	×
HPGL	~	~	~	~	×
JOB (EuroCUT 4, 5, 6)	~	~	~	×	×
JPG, TIF, BMP, PCX, PNG	<b>~</b>	~	<b>~</b>	~	×
SOR	~	~	~	~	×
Routing & Engraving	<b>~</b>	×	×	×	×
Hatch Fill	~	×	×	×	×
Island Fill	~	×	×	×	×
Start Tool Path (Lead In / Out)	<b>~</b>	×	×	×	×
Routing Path Preview	<b>~</b>	×	×	×	×
Path Adjustment Inline	<b>~</b>	×	×	×	×
Path Adjustment Outline	<b>~</b>	×	×	×	×
Import Filter	~	~	×	*	*
GIF, JPG, TIF, BMP, PCX, PNG	~	~	_	~	~
Al	<b>~</b>	<b>~</b>	<b>/</b>	~	~
CCJ (CoCut Job)	_	~	~	~	~
CMX, CDR, CDT 2)	<b>~</b>	~	<b>~</b>	~	~
DXF	~	-	-	V	· /
EMF, WMF	,	,	,	Ż	Ż
EPS	Ž	Ž	Ž	Ž	Ž
GTP	Ž	Ž	Ž	x	×
IK (URW Signus)	Ž	Ž	×	x	x
PDF	Ž	Ž	- Ç	Û	Û
PLT (HPGL)	ž	Ž	Ž	Ž	Ž
Job-Info	•	•	~	Ž	~
Creation Date	ž	Ž	· ·	Ž	Ž
C. Salion Date	•	•	•	•	•

Compare List	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7	CoCUPPro 2011	<b>CoCU</b>
Customer Address	~	V	<b>~</b>	<b>~</b>	✓
Kind of Material / Color Number	<b>✓</b>	~	<b>✓</b>	<b>✓</b>	<b>~</b>
Length / Height / Number / Price	~	<b>~</b>	~	<b>~</b>	<b>~</b>
Memo Field	~	~	~	<b>~</b>	<b>~</b>
Optional Fields Definable	~	<b>~</b>	~	<b>~</b>	<b>~</b>
Password Protection	~	~	~	<b>~</b>	<b>~</b>
Printable Job-Info	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>
Processor / Processing Time	~	~	~	~	~
Job Calculation	<b>~</b>	<b>~</b>	×	×	×
Font Height+Material Mode	~	~	×	×	×
Font Type+Material Mode	<b>~</b>	<b>~</b>	×	×	×
Object Mode	~	~	×	×	×
Signboard Area	~	~	×	×	×
Special Character Option	~	~	×	×	×
Optimization	<b>~</b>	×	~	~	×
Foil	~	×	_	~	~
Mark	~	×	<b>~</b>	~	×
Plate	~	×	~	~	×
Segment	~	×	_	~	<b>~</b>
Segment	· /	×	_	,	_
Automation / Macros	~	~	,	~	×
Clone	· ·	· ·	· •	· /	*
Close Objects Automatically	ż	Ż	Ż		×
Contour Line (Print & Cut)	· •	· ·	,	,	×
Object Orientation changeable	ż	ż	ż		×
Positioning 1/100 mm exactly	Ż	, ·	,	,	×
Reference Job (*.JRF)	· ·	~	,	,	V
Serial Numbers	ż	Ż	×	×	×
Video Marks (Print & Cut)	· ·	~	~	Ÿ	×
Sort Manual	ż	ż	Ż	j	×
Sort with Simulation	,		,	,	Ž
Templates (*.JTP)	j	j	Ż	×	×
Text Editor	Ž	Ž	•	×	×
Fonts	, i	Ż	Ż	×	×
102 EC-Fonts (Type 1)	Ž	Ž	•	x	x
Font Sign Symbols	Ž	·	Ž	x	x
Font Sport Symbols	Ž	Ž	•	x	x
Font Frame Parts	ž	ž	Ž	x	x
Font Barcode (EAN)	Ž	Ž	Ž	x	x
Alignment	ž	Ž	Ž	x	×
Autom. Run Length Adjustment	Ž	Ž	•	x	x
Caps Height	ž	Ž	· ·	x	x
Change Kerning Values (Type 1)	Ž	Ž	•	x	x
Character Spacing	~	Ž	•	x	×
Character Table	~			×	×
Container Function	· ·	· ·	<b>v</b>	×	×
Create Kerning Table (Type 1)	Ž	Ž	Ž	×	×
Font Size	~	Ž	~	×	×
Font Type	Ž			×	×
i one i ype	•	~	~		*

Compare List	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7	CoCUPPro 2011	<b>CoCU</b>
Font Weight	~	V	<b>~</b>	×	×
Line Spacing	<b>~</b>	<b>✓</b>	<b>~</b>	×	×
No Linefeed - Fit All Line Heights	~	<b>~</b>	<b>~</b>	×	×
No Linefeed - Reduce Line Height	~	~	~	×	×
Spaces (1/1, 1/2, 1/4, 1/8)	~	<b>~</b>	<b>~</b>	×	×
Subscript	~	~	~	×	×
Superscript	<b>~</b>	<b>~</b>	<b>~</b>	×	×
Tabulators	~	~	~	×	×
Text Export (*.TXT, *.RTF, *.ECT)	<b>~</b>	<b>~</b>	<b>~</b>	×	×
Text Import (*.TXT, *.RTF, *.ECT)	~	~	~	×	×
Text on Circle	<b>~</b>	<b>~</b>	<b>~</b>	×	×
URW BE Fonts	<b>~</b>	~	~	×	×
Word Spacing	~	~	~	×	×
Trace Tool	<b>~</b>	<b>~</b>	<b>~</b>	×	×
Automatic Node Minimization	~	~	~	×	×
Color Matching	<b>~</b>	<b>~</b>	<b>~</b>	×	×
Contour Filter	_	~	~	×	×
Result Preview with Zoom	<b>~</b>	~	_	×	×
Revectorize	_	~	_	×	×
Text Object Optimisation	<b>~</b>	~	<b>~</b>	×	×
Auto Import Plug-Ins	~	~	~	~	~
Adobe Illustrator		~		~	_
AutoCAD	· ·		,	· ·	×
CorelDRAW	· ·	· ·		· ·	Ÿ
Cut Mark Workflow Toolbar	· ·	Ż	,	· ·	,
Freehand	Ż	j	Ż	,	,
Basic Features	· ·	,	,	*	*
Autosave - adjustable in minutes	~	~	-	×	×
Backup File	· ·	~	· •	×	×
Coentect Sensitive Menues	· ·	-		~	Ÿ
Combine Objects	~	~	,	· ·	· ·
Crosslines Cursor	· ·	· ·	· •	×	×
Cut Marks	Ż	j	•	Ÿ	×
Grid with Offset	Ż	j		×	×
Group Objects	ż	ż	Ż	ÿ	Ü
Key Assignment similar to Corel		j		j	
Layer	· ·	· ·	,	,	×
Metrics mm, cm, inch	ż	j	Ż	j	ÿ
Online Help	·	Ż	,	,	,
Origin Moveable	•	Ż	Ż	Ż	•
Page Margins	,	j	,	Ż	,
Raster with Posioning Help	Ż	j	, i	×	×
Remote Maintenance	•	Ž	•	Ç	Ç
Rulers	Ž	Ž	•	Ž	
Send via eMail	Ž	Ž		Ž	×
Size of Working Area scalable	Ž	Ž	•	Ž	- Ç
Undo / Redo	Ž	Ž	· ·	Ž	~
Add-Ons	ž	Ž	•	×	×
Fontmanager	Ž	Ž	Ž	x	â
	•	•	· ·	^	^

Compare List  Activate / Deactivate Fonts	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7	(COCU) Pro	<b>COCU</b>
Add / Duplicate Fonts	<b>V</b>	~	<b>~</b>	X	X
Font Preview	<b>Y</b>	<b>Y</b>	<b>Y</b>	X	X
Font Search by Name / Style	~	· ·	· ·	×	×
Fonts in Databases	<b>Y</b>	<b>Y</b>	<b>Y</b>		
Import Font Databases		· ·	· ·	X	X
Search Font Databases	<b>~</b>	<b>~</b>		X	X
TrueType, Type 1 and BE Fonts		· ·	<b>v</b>	X	X
Window for each Font Type	<b>~</b>	*	•	X	X
PhraseWriter		· ·	· ·	×	X
Create / Edit Text Block	<b>Y</b>	<b>~</b>	<b>~</b>		X
Group Text Blocks	~	<b>V</b>	<b>V</b>	X	X
	~	~	~	X	X
Insert Text Block	~	~	~	×	×
Selection of Variables	~	~	~	×	X
Device Control	×	×	*	*	*
Plot-Manager	<b>~</b>	×	~	<b>~</b>	~
Active and Passive Jobs	~	×	~	~	~
Device Configuration	~	×	~	~	~
Hotfolder Support	~	×	×	~	~
Job History	~	×	~	~	~
Job Preview	~	×	~	~	~
Job Repetition	<b>~</b>	×	~	~	~
Multi Device Configuration	~	×	~	~	~
Multi Interface Support	<b>~</b>	×	<b>~</b>	<b>~</b>	~
Parallel Device Output	~	×	~	~	~
Plot Server Function (TCP/IP)	~	×	~	~	<b>~</b>
Pre-Output Message Window	<b>✓</b>	×	~	~	<b>~</b>
Queue Function	<b>~</b>	×	~	<b>~</b>	<b>~</b>
Spool Function	<b>~</b>	×	~	~	~
Surveil Output Process	<b>~</b>	×	~	<b>~</b>	~
Travel Protocollation	~	×	~	~	~
Driver Type	*	×	*	*	*
Roll Cutters	~	×	~	~	~
Flatbed Cutters	<b>~</b>	×	<b>~</b>	<b>~</b>	×
Multifunctional Cutters	×	×	×	×	×
Engraver	<b>~</b>	×	<b>~</b>	×	×
Laser Engraver	×	×	×	×	×
Any Number of Copies	~	×	~	~	~
Any Number of Outputs	,	×	Ż	Ż	Ż
Auto Outline Pen Metamorphosis	,	×	,	,	,
Color Separated Cutting	· ·	×	,	Ż	j
Cut Object Preselection	,	×	Ż	Ż	,
Display Material Consumption	Ž	x	•	Ž	Ž
Driver Editor	•	x	Ž	Ž	·
Global Weeding Frame	Ž	x	•	Ž	Ž
Optimization of Vinyl Usage	· ·	x	Ž	ž	ž
Output Preview	ž	x	Ž	Ž	Ž
Output to File	ž	×	~	Ž	Ž
Pile	Ž	â	Ž	Ž	Ž

Compare List	Euro Cut 7 Professional	Euro Cut 7 Design	Euro Cut 7	<b>COCUP</b> Pro	<b>GOU!</b>
Segmentation with Overlapping	<b>~</b>	×	<b>~</b>	~	<b>~</b>
Tryout Drive	~	×	~	~	~
Wait after Segment	~	×	<b>~</b>	~	<b>~</b>
Weeding Frame for Single Object	~	×	~	~	~
Weeding Lines horiz. / vert.	~	×	<b>~</b>	~	<b>~</b>
Program Type					
Standalone	~	~	~	*	<b>≪</b>
Multi User Licenses available	~	<b>~</b>	<b>~</b>	~	<b>~</b>
Dongle Protection	<b>✓</b>	×	×	×	×
Code Number Protection	~	~	<b>~</b>	~	~
Price in EUR (net plus VAT)	1.499	249	799	599	299

<sup>1)</sup> CDR only if CorelDRAW is installed

<sup>2)</sup> CDR / CDT only if CorelDRAW is installed

### 3 Quickstart and Installation

### 3.1 Quickstart

#### 3.1.1 How to Install EuroCUT?

# 3.1.1.1 Step 1: Connection

#### Cutter control via USB

Install cutter USB drivers, which were delivered by the cutter manufacturer. Please use the instructions given by cutter manual.

#### Cutter control via COM port (serial)

Make sure, that cutter and serial Windows port are configured identically.

You'll find this port configuration in the system *Control Panel* under: *System/Hardware/Device Manager/Ports/Communications Port*. Select via double click the respective port (e. g. COM1) and activate *Port Settings*.

Default settings are: Bits per second: 9600 or 19200, Data bits: 8, Parity: None, Stop bits: 1, Flow control: Hardware

Check also Resources: COM 1: I/O Range 03F8 and IRQ 4 and COM 2: I/O Range 02F8 and IRQ 3 respectively

# 3.1.1.2 Step 2: Installation

Insert the EuroCUT installation CD. With the *Autorun* function switched on following dialog opens. If the *Autorun* function is deactivated open the Windows Explorer and start the file *install.exe* in the main directory of the CD. Select product EuroCUT Basic 7 and start installation.

#### 3.1.1 How to Install EuroCUT?

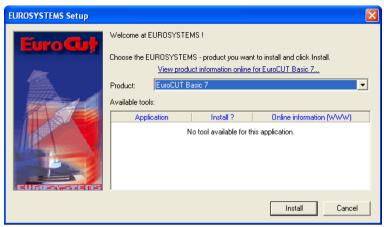


Fig. 3.1-1: Autorun window

Note: Installation process is done again for each selected application.

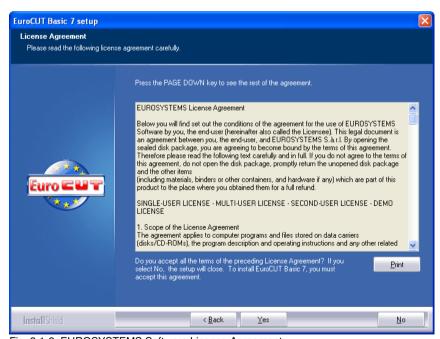


Fig. 3.1-2: EUROSYSTEMS Software License Agreement

In this dialog the installation folder for EuroCUT Basic 7 is chosen. By default the folder C:\Program Files\EUROSYSTEMS\EuroCUT Basic 7 is suggested.

If EuroCUT should be installed to another folder, please click *Browse* button and select the desired destination folder.

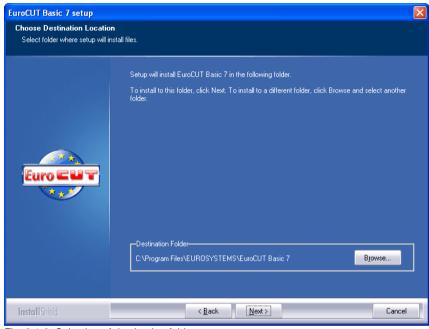


Fig. 3.1-3: Selection of destination folder

Hint: To install additional drivers select custom setup.

#### 3.1.1 How to Install EuroCUT?

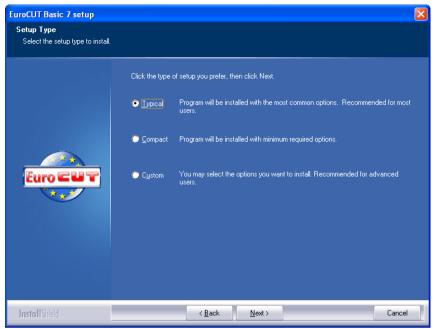


Fig. 3.1-4: Selection of setup type

Default program folder in the start menu is EUROSYSTEMS\EuroCUT Basic 7.



Fig. 3.1-5: Position in start menu

# 3.1.2 Enter License Data (without Dongle)

## 3.1.2.1 Use .ecf file: Recommended, if license data was sent via email.

In the eMail with license data you'll find an attached file with the extension .ecf.

A double click on this file will license your software automatically!

# 3.1.2.2 Manually, if license data is printed on a sticker, which is located in the package (inner left hand side).

On this sticker you'll find information about program version, serial number, user data and the code itself.

Important! All license data must be entered exactly how printed!

#### 3.1.2 Enter License Data (without Dongle)

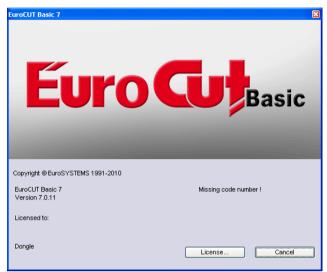


Fig. 3.1-6: Start window with invalid code

By clicking "License..." button following dialog is opened.

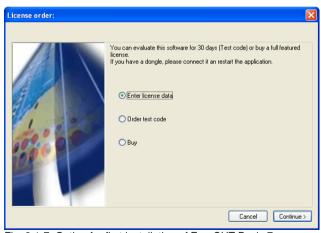


Fig. 3.1-7: Option for first installation of EuroCUT Basic 7

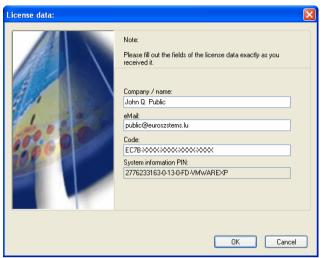


Fig. 3.1-8: These fields have to be filled with license data

# 3.1.3 Enter License Data (with Dongle)

If copy protection is realized using a dongle (frequently in case of upgrades), don't forget to connect the dongle with a port on your PC.

# 3.1.3.1 Manually, if license data is printed on a sticker, which is located in the package (inner left hand side).

On this sticker you'll find information about program version, serial number and the code itself.

Important! All license data must be entered exactly how printed!

#### 3.2 The Cut Marks Toolbar

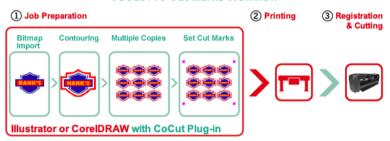
All object functions of the Cut Marks Toolbar act directly on the host program's (CorelDRAW or Illustrator) objects. This extends host program's functionality with this tools so that the whole Print & Cut workflow can be prepared and given out with CorelDRAW or Illustrator. Of course, EuroCUT Basic 7 can be started without a host program. The described tools are also available in the standalone version.

Important note: The functionality described here is only possible with CorelDRAW X3 to X6 and Illustrator CS3 to CS6 and CC! Implementation in older CorelDRAW and Illustrator versions: Pplease refer to 3.3: Autoexport - Scripts

#### 3.2.1 The Cut Marks Workflow

The following graphic illustrates the Print & Cut workflow (Cut Marks Workflow) inside the host program (CoreIDRAW or Illustrator).

#### CoCut Pro Cut Marks Workflow



Starting point of the Cut Marks Workflow is a bitmap, which gets contoured as first step. In the second step multiple copies are generated. In the next step suitable register marks are placed around the copies.

This Job must be printed on a suitable printer and is finished with a cutting plotter (cutter) equipped with an optical sensor. The so called registration - Cut Marks recognition - corrects the prints deviations and the job is cutted. The result of this process are exactly cutted copies in any number and size.

# 3.2.2 The Cut Marks Toolbar in CorelDRAW X3-X6



Fig. 3.2-1: Toolbar in CorelDRAW X3-X5

The buttons 1 to 4 were so arranged from left to right that the Cut Marks Workflow is executed.

# 3.2.3 The File Menu Entries in Illustrator CS3-CS6, CC



Fig. 3.2-2: Illustrator sub menu EuroCUT Basic 7

The buttons 1 to 4 were so arranged from top to bottom that the Cut Marks Workflow is executed

#### 3.2.3.1 Buttons of the Cut Marks Toolbar in CorelDRAW X3-X6

Important note: The following descriptions are valid also for Illustrator CS3 to CS6!

#### 1 The Create Contour Button



Fig. 3.2-3: Create Contour Icon

#### ▶ please refer to 8.13: The Contour (Line) Function

### 2 The Multi Copy Button



Fig. 3.2-4: Multi Copy Icon

#### please refer to 7.6: The Object Parameter Toolbar

#### 3 The Set Jog Marks Button



Fig. 3.2-5: Set Jog Marks Icon

#### ▶ please refer to 4.7.2.2: Jog Marks for Optical Recognition Systems

#### 4 The Cut Button



Fig. 3.2-6: Cut Icon

please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...

3.2.3 The File Menu Entries in Illustrator CS3-CS6. CC

#### 5 The Create Outline Button



Fig. 3.2-7: Create Outline Icon

## ▶ please refer to 8.3: The Outline Function

#### 6 The Create Outline Layer Button



Fig. 3.2-8: Create Outline Layer Icon

After activating this button the object attribute is changed and a spot color for the selected contour, which was **not** generated with the EuroCUT Basic 7 button, is assigned.

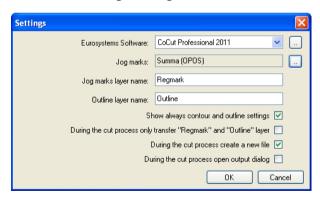
#### 7 The Settings Button



Fig. 3.2-9: Settings Icon

A click on the Settings Button open the Settings window.

# 3.2.3.2 The Settings Dialog



#### Eurosystems Software Field



Fig. 3.2-10: 2 Point Icon

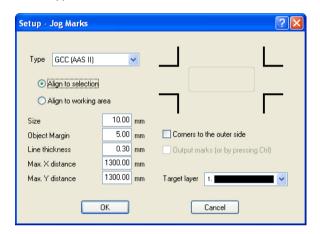
A click on the 2 point button enables the selected program and allows changing of *Settings* parameters.

#### Jog Marks Field



Fig. 3.2-11: 2 Point Icon

A click on the 2 point button opens the *Setup - Jog Marks* dialog. It allows the selection of the appropriate cut marks for the plotter, in case your cutter has an optical sensor and its driver supports this feature.



please refer to 4.7.2: Label Production with Cutters with Optical Sensor

### Jog Marks Layer Name Option

This option enables the assignment of an individual layer name. Then this jog marks layer can be identified at any time and the jog marks can be selected.

#### **Outline Layer Name Option**

This option enables the assignment of an individual layer name. Then this outline layer can be identified at any time and the outline(s) can be selected.

#### Show Always Contour and Outline Settings Option

If this option is enabled then the dialogs which allow the parameter definition are always displayed, when the appropriate button was activated.

#### During the Cut Process only Transfer 'Regmark' and 'Outline' layer Option

If this option is activated then only the objects are transferred to EuroCUT Basic 7 to which this two layers have been assigned: regardless of the current selection!

# During the Cut Process Create a New File Option

If this option is enabled then after pressing the *Cut* button a new window in EuroCUT Basic 7 is opened and all or all selected objects are copied into the new window.

# During the cut process open output dialog Option

If this option is activated then after pressing the Cut button the Output dialog is opened.

# 3.3 Autoexport - Scripts

Autoexport means that data from external programs (CorelDRAW, Illustrator, Freehand or AutoCAD) are imported automatically into EuroCUT - quasi at the push of a button. To do this the scripts are either integrated into the external program's menu structure or toolbar..

#### 3.3.1 Insert EuroCUT Icon in CoreIDRAW Toolbar

## 3.3.1.1 CorelDRAW 10, 11, 12, X3, X4, X5, X6

Indication: CorelDRAW must be installed with the option "Visual Basic for Application".

This option can be installed as follows:

Insert CoreIDRAW 10/11/12/X3/X4/X5/X6 medium into the drive / start setup / select type of installation "*Custom setup*". If already a CoreIDRAW-version is installed on your computer, first select "*user defined setup*" and then "*Custom setup*".

In the dialog that opens now, double click on main applications or one click on the *Plus*-field. Here, double click on *productivity support* and activate the option "*Visual Basic for Application*". After the installation of EuroCUT you have to link the EuroCUT Script with the toolbar.

- Select the menu Tools / Customization
- Select the option Workspace / Customization / Commands in the left option har
- Right next to the option bar, click once on *File* and select *Macros* and drag *Corun...* or *Cocut...* to the toolbar of CorelDRAW 10/11/12/X3/X4/X5/X6.
- Activate the tab Appearance. Here, press the Import-button and select any symbol.

Indication: the symbol disappears at each new start of CorelDRAW 10 and changes to the book-icon (CorelDRAW Bug in the User Interface).

- Select the option *Workspace/Customization/Command Bars* in the left option bar.
- Change the name of the toolbar "New ToolBar 1" to EuroCUT.
- Click on OK.

#### 3.3.1.2 CoreIDRAW 9

- Select the menu Tools
- Select the menu item Options
- Select the option Workspace / Customize / Toolbars
- Double click on Application Scripts
- Select the *Corun9.csc* from the script list
- Select any symbol and drag it while keeping pressed the left mouse button to the CorelDRAW-toolbar
- Press the OK-button

#### 3.3.1.3 CoreIDRAW 8

- Select the menu Tools
- Select the menu item Options
- Select the file card entry Workspace / Customize / Toolbars
- Double click on Application Scripts
- Select the *Corun8.csc* from the script list
- Select any symbol and drag it while keeping pressed the left mouse button to the CorelDRAW-toolbar
- Press the OK-button

#### 3.3.1.4 CoreIDRAW 7

- Select the menu Extras
- Select the menu item Adjust
- Select the file card entry Toolbar
- Double click on Application Scripts
- Select the *Corun7.csc* from the script list
- Select any symbol and drag it while keeping pressed the left mouse button to the CorelDRAW-toolbar.
- Press the OK-button

#### 3.3.1.5 CoreIDRAW 6

- Select the menu Extras
- Select the menu item Adjust
- Select the file card entry Toolbar
- Double click on Script general
- Select the *Corun6.csc* from the script list
- Select any symbol and drag it while keeping pressed the left mouse button to the CorelDRAW-toolbar.
- Press the OK-button

If you now mark one or several objects and click on the thus created icon, the objects are passed on to EuroCUT and can be plotted.

# 3.3.2 EuroCUT Script in Adobe Illustrator 8-10, CS-CS6, CC

EuroCUT is in the file menu underneath the menu item export.

How does the transfer of data from Illustrator 8, 9, 10, CS, CS2, CS3, CS4, CS5, CS6, CC to EuroCUT take place?

Start EuroCUT from the *file* menu. If the objects are marked, only the marked objects are passed on to EuroCUT. If also texts are passed on they will automatically be converted to curves.

Indication: If no objects are marked, EuroCUT is not active!

Indication: Special process color fills are not passed on.

# 3.3.3 EuroCUT Script in Macromedia Freehand

Freehand 8, 9, 10, MX

EuroCUT is in the *Xtras* menu underneath the menu item *Animate* and in the *window* menu / menu item *Xtras* under functions.

How does the transfer of data from Freehand 8, 9, 10, MX to EuroCUT take place?

#### Selected /marked objects

Start the EuroCUT via the *Xtras* menu. If the objects are marked, only the marked objects are passed on to EuroCUT.

#### All objects

Start the EuroCUT via the *Xtras* menu. If no objects are marked, all objects on the desktop are passed on to EuroCUT.

Indication: Process color fills and lens effects are not passed on.

Indication: Freehand 8 possesses a color correction mechanism (as for example CorelDRAW), that influences the display of the colors in Freehand.

Solution: Switch off the function in the file menu / menu item settings / tab color

# 3.3.4 EuroCUT Script in AutoCAD

# 3.3.4.1 Menu File for AutoCAD 2000(i), 2002-2014, 2002LT-2014LT

- In the menu Extras select the menu item adjust menus.
   (Indication: Alternatively you can also open the dialog via the command \_menuload)
- In the dialog that now opens select the tab menu groups and press the browse button.
- The file selection dialog opens. Change the file ending to \*.mnu in this dialog.
- Select the file corun.mnu and close the dialog.
- Now press the *Load* button and confirm the inquiry dialog with ok.
- The EuroCUT menu is now loaded.
- Now change the menu bar dialog in the upper tab. In the menu group select *EuroCUT Plot* and insert it into the desired place in the AutoCAD menu.

#### 3.3.4.2 Menu File for AutoCAD LT 98 And R14

- In the menu Extras select the menu item Adjust/Menus.
- In the dialog that now opens press the browse button.
- The file selection dialog opens. Change the file ending to \*.mnu in this dialog.
- Select the file *corun.mnu* and close the dialog.
- Now press the **Load** button and confirm the inquiry dialog with ok.
- The EuroCUT-menu is now loaded.
- Now change to the *menu bar* dialog in the upper tab. In the menu group select
   *EuroCUT Plot* and insert it into the desired place in the AutoCAD menu.
- In the menu *file* select the menu item *printer installation*.
- In the dialog that now opens press the open button and select the file cocutit98.pc2 (LT98) respectively cocutr14pc2 (R14).
- Close the dialog.
- Start now the print-job by activating the menu item *print* in the *file* menu in order to do following settings: activate the button *Plot in file*, set the *scale factor* to 1:1 and the *unit* to mm.

In the menu is now EuroCUT entry and in the toolbars EuroCUT toolbar was added.

Important: Be careful that at the first output the checkbox "plot to file" is activated. With this procedure, all graph elements are passed on. The change-pen commands are interpreted from the PLT file so that the 8 layers are separable. AutoCAD does not plot with Arcs, which means that all elements are resolved in lines and dots are interpreted as bores.

Indication: If DXF is used, you have to press twice the ENTER button after the selection of the object as the execution of the macro menu is aborted by the object selection. At the passing on via DXF the dimensions and texts are not passed on but it is possible to select and output them. The curves are not converted to lines but the Splines or Arcs in the DXF file are converted to Bezier curves. The layer amount is not limited to 8.

In the startup group of Windows a link to the program **autoimp.exe** is installed during the installation with which the passing on of files to EuroCUT is realized. If autoimp.exe is started an **icon** is shown in the system tray (lower right corner of the screen). Double clicking on the icon ends the program.

Attention: If the icon is switched off the transfer to EuroCUT does not work anymore!

Via Start / All Programs / Startup / Auto Import for EuroCUT it can be started again.

Indication: During the installation you have to pay attention that EuroCUT is always installed for the last used AutoCAD version if several AutoCAD versions are installed on your computer.

# 3.4 Selection of The Device Driver

Please, select first your output device from the list *driver*. In the field *name of device* the identical name for the selected device that is shown in the cutting dialog appears. This name can be changed individually in this field. After the selection of the driver please select - in the area *type of connection* - the *device type* with which the device is connected to the computer.

Tip: If the driver you search for is not in the list you can try another driver from the same manufacturer.

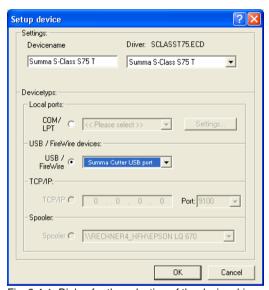


Fig. 3.4-1: Dialog for the selection of the device driver

Detailed information for the setting of the *local interface* is here: please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...

3.4 Selection of The Device Driver

# 4 How to work with EuroCUT

# 4.1 Desktop and Working Sheet

# 4.1.1 I. Desktop

The so-called Desktop means the whole visible program window including **Toolbars**, **Working Sheet** and **Desktop** background.

Note: On the background can be placed any desired number of objects. The size of the background is limited only by the resources of your computer. Thus the layout can be done basically in 1:1 scale.

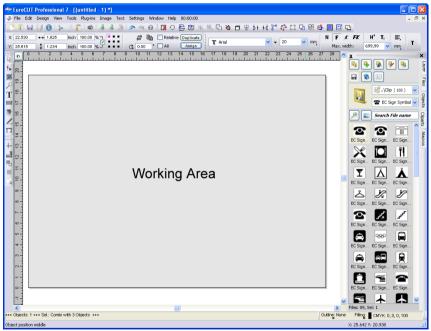


Fig. 4.1-1: Desktop with working sheet (here: gray), Background (here: white), Toolbars, Sidebar, Rulers, Statusbar

# 4.1.2 II. Working Area

The so-called **Working Area** is a sub area of the EuroCUT desktop. The working sheet is - as a rule - the same format that is given out later on your device. Besides the known DIN formats arbitrary formats can be applied e. g. different sign sizes.

#### 4.1.2 II. Working Area

Note: The working area is used primarily for guidance. The format of the working area has no influence on the output on a connected device. The output preview window displays what is given out.

▶ please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...

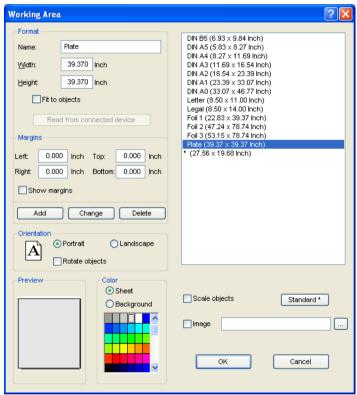


Fig. 4.1-2: Working Sheet Setup

#### 4.1.2.1 Format

#### Name

In this field the *name* of the new format is entered resp. that of the selected format

#### Width

Hereby, the width of a format is assigned.

#### Height

Hereby, the *height* of a format is assigned.

#### Rescale to Objects Option

This option fits the working sheet to the objects which are located on the desktop background.

#### Read Out Connected Device Button

A connected device can - if the read out command can be processed by the devices' controller - define the size of the working sheet.

### 4.1.2.2 Margins

#### Left, Right, Top, Bottom

In this 4 field the distance from the margins to the sheet edge is defined.

Note: Also negative values are allowed.

### Display Leaf Margins

This option shows margins as dotted aid lines above the working sheet.

# 4.1.2.3 Alignment

#### **Portrait**

This option defines, if the format is displayed as portrait.

#### Landscape

This option defines if the format is displayed as landscape.

#### Rotate Objects Option

This option defines, if the objects which are located on the working sheet or desktop background, are also rotated when the alignment is changed.

#### **4.1.2.4 Preview**

In this area Working Sheet, Background Color, Background Image, Proportion and Alignment of the working sheet is displayed.

#### 4.1.2.5 Color

#### Working Sheet

This option defines the color of the working sheet.

#### Background

This option defines the color of the desktop background.

#### 4.1.2.6 List of Formats

#### Rotate Objects Option

This option scales, decreases or increases - all objects on the desktop background proportional to the values of the changed format of the working sheet.

#### Standard\* Button

The *Standard* button marks the selected format in the list of formats and saves the selection. With each new job this format is preselected.

#### Image Option

- Button
The button opens a window, in order to search or insert the desired image.

This option shows the selected bitmap on the working sheet.

4.2 Overview Hotkeys

# **4.2 Overview Hotkeys**

Key	F1	F2	F3	F4	F5	F6	F7
Function	help	zoom in	zoom out	show all	undo	redo	display
		arbitrary		objects			interruptible
Key	Α	В	С	F	G	Н	K
Function	axial change	show material in	clipart	mill	change sel.	guidelines	contour line
		output-preview	toolbar	hatch fill	size		
Key	U	٧	W	Х	Υ	DELETE	SPACE
Function	inverse order	vectorize	welding	mirror	mirror	delete object	change betw.
	of layer	trace		horizontally	vertically		arrow and node
							tool
Key	В	С	Н	ı	J	K	
SHIFT	whole	Clipart-	guidelines	rulers	set	combine	
0	working area	Manager	visible		adjusting		
					markers		
Key	1	2	3	4	5	6	7
CTRL	standard	layer	setup	tools	text editor	node editing	object para-
01112	toolbar	toolbar	toolbar	toolbar	toolbar	toolbar	meter toolbar
Key	F	G	Н	ı	J	К	L
CTRL	crosshairs	group	define guidelines	import file	settings	text to	load file
0						curves	
Key	U	V	W	Х	Z		
CTRL	completely	insert from	refresh window	cut into	undo		
01112	backwards	clipboard		clipboard	1 step		
Key	F8	F9	F10	F11	F12	ESC	right
itoy			1.10				mouse
Function	show text	contour mode	object info	save directly	-	close output	activate context
			-			dialog	menu
Key	_	М	0	Р	R	S	Т
Function	-	measure	outline	help for	arrange	output	enter text
. anotion				positioning	objects		
Key	_	>	<	+	-		
Function	-	rotation clockwise	rotation	zoom in	zoom out		
i diletion			counterclockwise				
Key	L	V	Z	F4	F7	F10	left mouse
SHIFT	break	revectorize	text in rows	show sel.	undo / redo	properties	restrain
311111	combination			objects	on / off		hor. or vert.
Key	8	9	Α	В	С	D	Е
CTRL	object info	element info	mark all	break	copy from	duplicate	export file
CIRL	status bar	status bar		grouping	clipboard		
Key	N	0	Р	Q	R	S	Т
CTRL	file new	on top	print file	end EuroCUT	raster	save file	edit text
Key	R		<b>T</b>	Y			************
L EV	п	S	1	1	l		
	round	save as	text hox	always on ton			
SHIFT+ CTRL	round	save as	text box	always on top			

# 4.3 Functional Principle of The EuroCUT Software

# 4.3.1 Tool Assignment Via Layer

Tools which are provided from an output device are pre-defined in the device driver. The tool selection is done with the output dialog of the *Mode / Tool* list field.

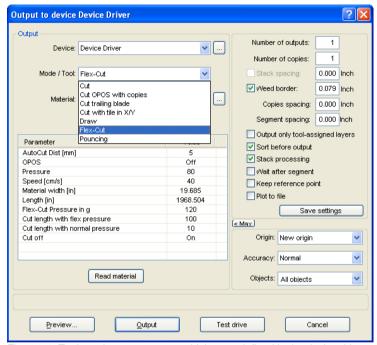


Fig. 4.3-1: Tools and toos parameter which were defined in the device driver

# 4.3.1.1 Define Layer Assignment

What tool is located in which layer - that is necessary to define the order of execution - will be assigned in the *layer settings* window. A click with the **right mouse button** on the to edit layer opens the *layer settings* window. Tool assignment is not possible here.

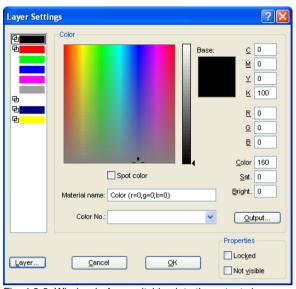
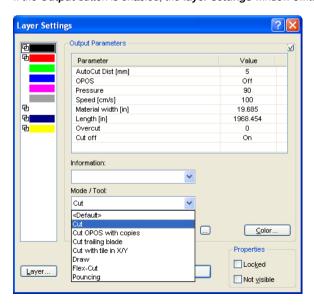


Fig. 4.3-2: Window before switching into the output view

# 4.3.1.1.1 The Output Button

If the *Output* button is enabled, the *layer settings* window switches in the following view:



#### 4.3.1 Tool Assignment Via Layer

Now, all from the respective driver provided tool modes are listed. When you select a tool, then the editable parameters and values appear in the list in the upper area of the *output parameter* window. Values can now be edited. A *doubleclick* in the desired field allows editing of its value. Repeat this operation for each layer and mode which is scheduled for output.

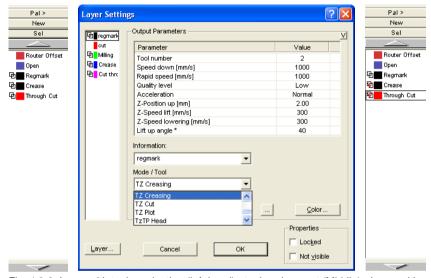


Fig. 4.3-3: Layer with tool nomination (left-hand) - tool assignment (Middle) - Layer with assigned tool (right-hand)

Note: When the red hook is visible, a tool assignment had been done. An additional control is possible via a tool tip in the layer box by placing the mouse cursor on the layer under investigation and is waiting for some time.

Depending on the output device, different tools and output modes are available. In the example below, for example, tools of a flatbed cutter are been used. Here it is important to determine the correct order in which the tools should work.



Fig. 4.3-4: Tool tip control for the "Cut Through Layer"

# 4.3.1.2 How the Tool Sequence Is Determined?

In principle, it should be noted that the processing of the layer is done top down and the logical sequence of different tools, is applied, so that for example, drawing is active ahead the cut tool. This sequence can be reordered individually.

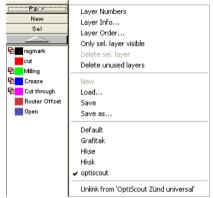


Fig. 4.3-5: Layer sequence which should be reordered

The change order function is enabled via the *layer order* menu item. In the *move layer* area you'll find the buttons to change the layer order.

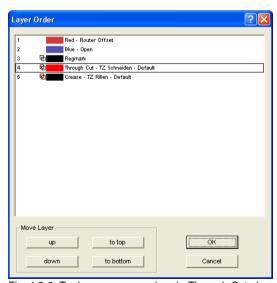


Fig. 4.3-6: Tool sequence reordered - Through Cut above Crease

#### 4.4 The EuroCUT Layer dialog

**Conclusion:** The tool assignment allows first, the definition of tools, second, the parameters for each tool, third, the selection of the color (layer) in which the to be processed objects lie and in the fourth place, the sequence in which the operation should be processed. EuroCUT Basic 7 gives you the flexibility you need in dealing with different output scenarios and workflows.

# 4.4 The EuroCUT Layer dialog

In the layer-settings dialog the parameters necessary for the output are set and attributed to an object, a color respective a layer. The dialog opens by a right mouse click on the EuroCUT layer-toolbar in the main window.

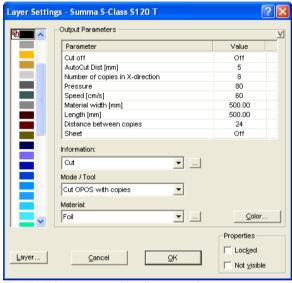


Fig. 4.4-1: Layer setup with adjustment of output parameters

In the *Information* field a name for the layer can be entered. This name is shown later in all dialogs in which the colors of the objects are needed.

In the *Mode / Tool* field the output tool can be selected from a list. The tools shown here depend on the used output driver.

In the *Material* field already saved material-configuration can be called up. The material-configuration can be created, saved or deleted with the button right of the selection box.

Indication: By clicking with the left mouse button on another color the settings are saved and the values of another layer can be edited.

# 4.5 Import

With this command the graphics that have *not* been saved in the EuroCUT-job-format are transfered to the working surface.

The functionality of this dialog box corresponds to the **open file** command. Differences are only due to the possibility to change the size of the data to be imported by means of the parameter **X-** and **Y-factor**. The desired file is chosen respectively specified via the **name of file**, **type of file** and **directories** (search in).

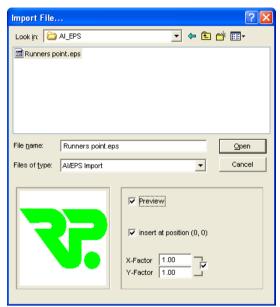


Fig. 4.5-1: Import window with preview

With the preview window in the import dialog all following formats can be displayed.

```
*.ai/eps, *.pcx, *.jtp, *.tif, *.bmp, *.wmf, *.emf, *.dxf, *.gif, *.hpgl, *.gtp, *.ik
```

Indication: With text files (\*.txt) the preview window is switched off.

# 4.5.1 Import Presettings

For many import operations, **constraints** can be defined to be taken into account **before**, **during** or **after** importing the data. Constraints can effect the DXF or HPGL import or all import operations.

Also for export constraints are definable in this window. Thus, a special option on job files can be activated, for example, the PDF export. The **constraints** are extensively recorded

#### 4.5.1 Import Presettings

in the following article. Description please refer to 5.7.1.6: The Filter Setup

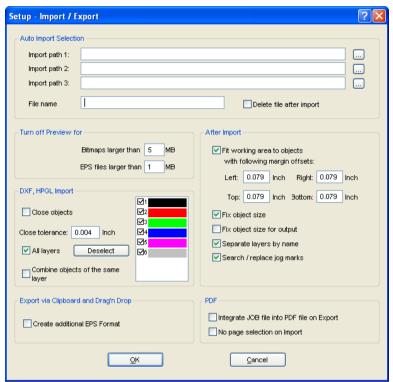


Fig. 4.5-2: Determination of constraints with import of data

# 4.5.2 PDF Import

# 4.5.2.1 Additional Options

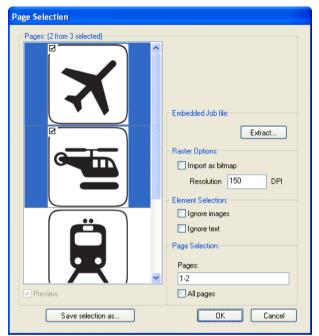


Fig. 4.5-3: Options concerning import of data

#### Integrated Job File

#### The **Extract** Button



Enabling the *Extract* ... button ensures, that the import function loads the integrated job file on the desktop, while extracting the PDF file.

Note: A prerequisite for this is that when you export the appropriate option in the preferences (see above) was made.

#### **Raster Options**

#### Import as Bitmap Option

If the *Import as Bitmap* option is enabled, then all vectors will be rastered into a bitmap before the import.

#### 4.5.2 PDF Import

#### Resolution

The value in dpi

#### **Element Selection**

#### Ignore Images Option

If the *Ignore Images* option is enabled, then no images will be imported.

#### Ignore Text Option

If the *Ignore Text* option is enabled, then no texts will be imported.

#### Page Selection

In the **input field** the page number can be entered, which should be imported.

#### All Pages Option

If the *All Pages* option is enabled, then all pages of the document will be imported.

#### Search in

In the row Search in the path can be set that shall be searched.

#### File name

If the file name is know it can be entered into this field

#### Type of file

Here, you have to choose the format of the file to be imported in order to activate the corresponding import filter

#### Preview

The activation of this option draws a preview of the file content to the left preview window

#### Insert at Position (0,0)

This option inserts the objects at the 0 (zero) position of the EuroCUT-working surface.

#### X Factor, Y Factor

With these two factors the data can be scaled (increased or decreased) during the import. The scale can be proportional or unproportional.

# 4.6 Export

If you want to use a job-file also in other programs the data must be made available in another format than the EuroCUT-job-format. This process is called *"export"* 

Indication: Exporting is done with the highest quality and lowest compression.

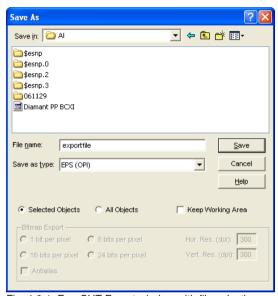


Fig. 4.6-1: EuroCUT Export window with file selection

#### Save

With the icons next to the *Save-field* you choose the path in which the export-file shall be saved.

#### File name

In this field you enter the name of the export-file.

#### Type of file

Here, you select in which other format the data on the desktop is to be written.

Following export-filters are available in EuroCUT: \*.eps (opi), \*.cmx (Corel6-X6), \*.plt (HPGL), \*: jpg, .pcx, \*.tif, \*.bmp.

Indication: If objects are selected only those are exported, otherwise all of them.

4.6 Export

#### Selected objects

If this option is activated only the marked objects are written in the export-file.

#### All objects

If this option is activated all objects are written in the export-file.

#### Maintain worksheet

With this option the contour of the worksheet is written as object in the export-file.

#### Bitmap-Export



Fig. 4.6-2: Shade and resolution at Bitmap-export

#### Shade

The number in front of "Bit per pixel" indicates the exponent of the shade.

Example: 8 bits per pixel = 28 = 256 colors

#### Resolution

This value defines the amount of pixels per inch. The higher the value the finer becomes the resolution. The value dpi 300 for example is sufficient for the offset printing.

Indication: Higher values are often not suggestive as the size of the file increases with higher dpi.

#### **Antialias**

The export of a bitmap can also be done with antialiasing short: Antialias, which is a jaggies smoothing or edge smoothing.

## 4.6.1 PDF Export

## 4.6.1.1 Additional Options



## 4.6.1.2 Encrypt Document Option

Enabling the *Encrypt Document* option allows input of an individual password.

#### **Password**

In the **input field** any password for the document can be filed.

Note: Please make sure that a secure password is used. It should be at least 8 characters long and made of numbers, letters, capital letters and special characters.

## 4.6.1.3 Set Access Rights Option

Enabling Set Access Rights option allows you to enter an individual password.

#### **Password**

In the **input field** any password for the following access rights of the document can be filed.

Note: Please make sure that a secure password is used. It should be at least 8 characters long and made of numbers, letters, capital letters and special characters.

PS: The EuroCUT PDF export includes a double-stage password protection. The

#### 4.6.1 PDF Export

first stage refers to the entire document and the second stage to a specific access rights of the document.

## 4.6.1.4 Access Rights

#### Printing not allowed Option

When this option is enabled, printing of the document - without knowing the password - is not possible.

#### Content cannot be extracted Option

When this option is enabled, extracting of contents - **without knowing the password** - is not possible.

## Do not allow "Change Contents" Option

When this option is enabled, editing of contents - without knowing the password - is not possible.

## 4.7 Typical Applications

## 4.7.1 Contour vs Outline vs Contour Line

Often, there is confusion among EuroCUT Basic 7 users, because the differences between this terms are not clear and there can be seen no difference on the EuroCUT working sheet, if the so-called full surface mode is enabled. Not until then the so-called contour mode - switch on or off using F9 key - differences can be seen. Obviously completely different functions are meant.

In the following the terms are examined for their similarities and differences.

#### 4.7.1.1 1. Contour

#### Definition:

Contour is a property, an attribute of a vector object or a type face, comparable with a color fill. Color and width can be defined individually. This contour is given out on a laser or ink jet printer. The tool for the definition of a contour is the pen  $\[ \nabla \]$ .

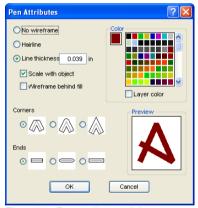


Fig. 4.7-1: Pen attributes dialog

# **Contour Contour**

Fig. 4.7-2: Full surface mode



Fig. 4.7-3: Contour mode

Attention: A contour is not! given out on a cutter, unless the "Convert contours" function was executed before data transfer to the output module.

#### 4.7.1 Contour vs Outline vs Contour Line



Fig. 4.7-4: Dialog for conversion of contours into cuttable objects

If the option *Convert contours* is enabled, a vector combination in the thickness of the contour is generated. This combination is put in a layer with the same color.

Additionally the following dialog appears with a pre-selection of the correct welding method (here: Weld by Color).

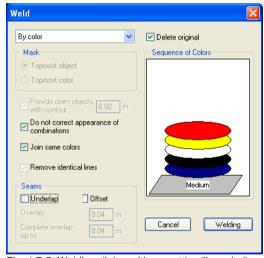


Fig. 4.7-5: Welding dialog with presetting "by color"

Tip: For testing can be switched into the contour mode in order to control which objects will be given out.

#### 4.7.1.2 2. Outline

#### Definition

Outline is a vector contour around another vector object oder a type face. In differenc to the term *contour* the generated contour is a real vector which can be outputted. Another

difference is, that interior parts are contoured as well with a so-called *Inline*. Example: Letters like a, e where the interior parts are also contoured (see fig. below)

Note: The Outline function is linked with the welding function, so that if contours are overlapping each other, an error-free output to vinyl gets possible.

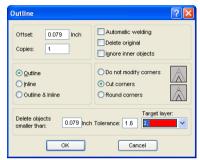


Fig. 4.7-6: Outline dialog





Fig. 4.7-8: Contour mode

## 4.7.1.3 3. Contour Line

#### Definition

By a contour line is often referred in connection with the term: "print & cut". In "Print & Cut" bitmaps mostly logos - graphics without vectors - are contoured with a vector line, in order to produce decals, label, sticker on a cutter with OPOS sensor. The contour line is the line that is cut around each sticker. It is like the pen contour an outline around the entire object.

Note: In this case the thickness of an object cannot be defined; as default a so-called hairline (0.01 mm) is generated.

#### 4.7.1 Contour vs Outline vs Contour Line

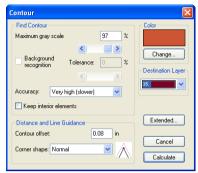


Fig. 4.7-9: Contour line dialog

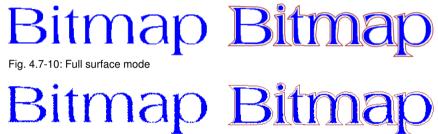


Fig. 4.7-11: Contour mode

Conclusion: The above examples should made clear that it is important to keep apart the notions. Although, there cannot be seen any difference on the scree when in the full surface mode, different tools and functions are involved. This example also shows how flexible the tools of EuroCUT Basic 7 are.

## 4.7.2 Label Production with Cutters with Optical Sensor

EuroCUT Basic 7 is predestined for the so-called "Print & Cut" production of labels or stickers on self-adhesive material. The term "print & Cut" means, that on the medium gets printed first and then the labels are cut outlined with a cutting plotter. The cutter therefor should be equipped with an optical sensor, which recognizes so-called register marks or jog marks, so that print inaccuracies can be compensated. For the "Print & Cut" process it doesn't matter with which method the material was printed - screen print or digital inkjet print.

**Definition:** OPOS - Acronym for **O**ptical **PO**sitioning **S**ystem

## 4.7.2.1 1. Step: Job Preparation

The job is prepared with EuroCUT Basic 7. All tools which are needed for the production of labels are included. With the CoRUN export function out of the host programs Corel#DRAW, Freehand, AutoCAD and Illustrator external data can be imported and processed in EuroCUT.



Fig. 4.7-12: Job preparation

Using the special functions 1. Contour Line, 2. Clones, 3. Multi Copies, and 4. Set Jog Marks a job is prepared for printing. Printing can be done directly using EuroCUT Basic 7, if for example PjanntoRIP or EuroVPM as a print program is installed as well. If another RIP than those specified is in use, you must use the EPS (OPI) export in order to prepare the job data for printing.

Tip: For the generation of identical copies, the clone tools should be used. This ensures a small amount of data and a high processing speed.

Thus the cutter can provide the print job with cut outline, manufacturer-specific jog marks can be used and printed additionally! Setting of the jog marks can be done with the **Settings / Common Settings / Register Marks** menu in EuroCUT.

**Limits:** EuroCUT Basic 7 has no resp. only rudimentary image processing tools. The image processing must be done in a host program such as Photoshop. Afterwards, the image data are imported into EuroCUT and processed.

## 4.7.2.2 Jog Marks for Optical Recognition Systems

## 4.7.2.2.1 Field of Application: Contour Cutting (Print & Cut):

Wherever printed materials must be cut or milled with contours, the usage of jog marks is indispensable, in order to produce with the required accuracy. Beyond that, inaccuracies which occur during the print process, must be compensated. Preset ist done in the Settings / Common Settings / Register Marks menu. The jog marks are set using the tools menu with the Set Jog Marks submenu item.

Note: The jog marks function can be used with all cutters with optical sensors or with flatbed cutters or milling machines equipped with camera systems for mark recognition like OptiScout.



Fig. 4.7-13: Settings menu in EuroCUT with jog mark selection

#### 4.7.2.2.2 Definition

Jog marks and video marks are used synonymously for marks related to optical detection of marks. Register marks describe a tool, that is used for the assembly of colored signs. Print and cut marks describe marks, that are used commonly in printing and desktop publishing.

Note: Jog marks are usually associated with an optical sensor; video marks with camera usage.

## 4.7.2.2.3 Jog Marks

#### Type

In the *type* list field is selected for which cutter producer resp. for which device jog marks should be generated.

Important note: Only the options are active, that are supported by the selected device!

#### Align at Selection

If the *align at selection* option is enabled, then the jog marks will be aligned relatively to the selected objects.

#### Align at Sheet Margin

If the *align at sheet margins* otpion is enabled, then the jog marks will be aligned relatively to the leaf margin (work sheet).

#### Size

The **size** option defines the size of the jog marks.

Note: Maximal and minimal size are depending on device producer.

#### Distance to Object

The *distance to object* object defines, how near the job marks should be positioned at the objects.

#### Line Thickness

The *line thickness* option defines, how thick the lines of the jog marks should be.

Note: The maximal and minimal line thickness which could be recognized depends on the used cutting system.

#### max. X-Distance

The *max. X-distance* option defines, how far the maximum distance of the jog marks to the objects may be in X-axis direction.

#### max. Y-Distance

The *max. Y-distance* option defines, how far the maximum distance of the jog marks to the objects may be in Y-axis direction.

#### External Lying Corners

The *external lying corners* option defines, when external corners are taken into account for the calculation of the distance - viewed from the object.

#### Output Marks as Well

The *output marks as well* option defines, if the jog marks are taken into account while output i. e. printed, cut, or milled.

#### Target Layer

The target layer defines in which layer the jog marks are put.

Note: Therewith also indirectly is assigned with which tool the jog marks are processed, if the tool assignment was done via the layer.

Every cutter producer uses unique mark shapes and numbers for the jog marks which can be detected from their optical sensor.



Fig. 4.7-14: Selection of different jog marks (depending on cutter manufacturer)

After preselecting the producer-specific jog marks, this jog marks can be set around the job, so that in the 2nd step they will be part of the printing job. Hotkey for this function in EuroCUT is **SHIFT+J**.



Fig. 4.7-15: Tool menu for setting of jog marks

## 4.7.2.3 2. Step: The Print Process

Print processing is either done in screen print or digital inkjet print with solvent ink. The RIP does the rastering, the linearization and the density correction. Additionally control parameter like heater temperature, resolution, etc. are managed. Modern solvent printer print on un-coated materials which often do not have to be laminated. All users which do not have an own printer, can delegate the print process to an external provider.

## 4.7.2.4 3. Step: The Cutting Process

Currently, all premium cutter have an optical sensor, so that with this devices a serial production of label, stickers, or decals is possible. The cutter processes in doing so the contour line - not to be confused with Outline - which was generated in the job prepartion around all copies. Fig. 4.7-19 shows the magenta contour lines which will be cut.



Fig. 4.7-16: Cutting head with sensor and tangential knife

The cutter described above are able to process sheets or rolls. EuroCUT's plotter driver support both functions. Fig. 4.7-17 and Fig. 4.7-18 show the driver parameter for the cutting with sensor for the processing of identical job copies using rolls or sheets (Fig. 4.7-18).

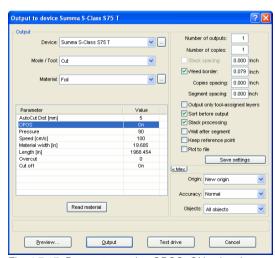


Fig. 4.7-17: Parameter setting OPOS=ON using the example of Summa S-Class

Note: The parameter "OPOS" is set automatically on "ON" if the appropriate marks

#### 4.7.2 Label Production with Cutters with Optical Sensor

are used. When processing identical copies of jobs on a roll using jog marks, the mode "OPOS cutting with copies" must be used (Fig. 4.7-18). Then additionally the number of copies in X direction can be set and as well as the mark distance between the copies in mm.

Output to device Summa S-Class S75 T Output

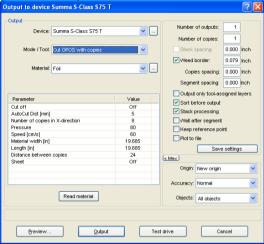


Fig. 4.7-18: Parameter setting with identical Job copies from roll (also possible with sheets, if the parameter "Sheet=On" was set)

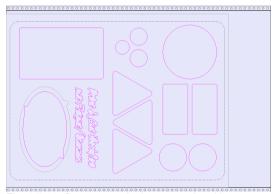


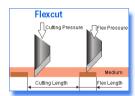
Fig. 4.7-19: Cut contours in the cut preview (the gray contour below left, is required for "Flex-Cut")

The result of this process are readymade labels in individual number and size. To get the labels carwashresistant, they must be treated with a liquid lacquer.

## 4.7.3 Flex-Cut, Half-Cut - Punch Function

## 4.7.3.1 EuroCUT Driver Options Using a Roll Plotter

#### Definition



Flex-Cut - short for: Flex(ible)-Cut; Term which is used from Summa (Plotter manufacturer). Mimaki speaks of "Half-Cut".

Flex-Cut: Flexible cutting: Flexible, because with 2 cutting pressures and variable cutting lengths are parameterized. There is a cutting pressure value for the cutting (cut-through) of the material plus medium, and a second cutting pressure value for the so-called kiss-cut, in which only the material itself is cut and not the medium below.

#### **Application Field**

**Application field** is the production of decals of foil or cardboard (only limited possible) like labels. This application field is normally a domain of flat bed cutters. But even with the latest-generation of roll cutter such a production can be built. This function can be realized both with an optical sensor, as well - even faster and more accurate - with a camera.

## **Suitability of Roll Cutters**

Basically, the cutter must offer this option. Summa and Mimaki are supporting this function in their professional cutter series. If a cutter is suitable for a special workflow, depends in first place on the material, and secondarily on the size of the copies and into third place on the possibilities of cutting software. EuroCUT has all functions, which are required for **sensor-based systems** (OPOS, OPAAL, ...) As a professional software solution for driving camera-based systems should be mentioned here **OptiScout** *Roll Cutter Edition* from EUROSYSTEMS.

#### Limits

Limits are mainly those where the material e.g. heavy cardboard can not adequately be transported from a roll plotter or materials, in which a cutting pressure of 600g is not enough to cut through them. This field of applications remains reserved to flatbed cutters.

## 4.7.3.2 Step by Step Instruction

#### 1. Step: Assignment of The Cut Mode in The Layer Toolbar

#### Preparation:

The job is prepared with EuroCUT Basic 7 (**please refer to 4.7.2: Label Production with Cutters with Optical Sensor**).

Here is the abstract:

#### 4.7.3 Flex-Cut. Half-Cut - Punch Function

The is prepared for printing with the use of the following functions: 1. Contour function, 2. Cloning, 3. Multi copies, and 4. Set Jog Marks. Printing can be started directly from EuroCUT Basic 7, if PjanntoRIP, EuroVPM or PosterPrint as print programs were installed. If another then the mentioned RIPs is used, the EPS (OPI) export may be used, in order to preprocess the job data.

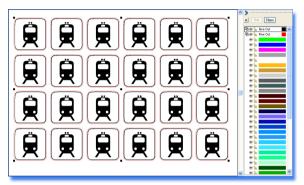


Fig. 4.7-20: Job ready for output - Layer toolbar wit tool selection

#### 2. Step: Setup Kiss-Cut Parameter

In the layer settings an appropriate cutting mode must be selected (see blue marking). The basic setting of the tool has to be preset in the list of output parameter. The black layer was selected for objects, which should be processed in the so-called kiss-cut mode. The red hook shows that a tool assignment was done.

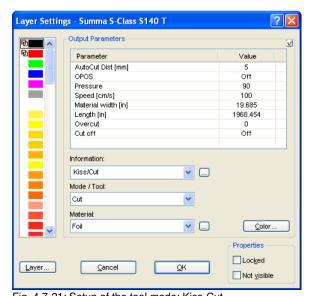


Fig. 4.7-21: Setup of the tool mode: Kiss-Cut

#### 3. Step: Set Flex-Cut Parameter

In the layer settings the Flex-Cut cutting mode must be selected (see blue marking). The basic setting of the tool must be preset in the list of the oupt parameter. The magenta layer was selected fpr objects, which should be processed in the Flex-Cut mode - here: magenta external contour.

Note: Here the basic setting of cutting length with flex pressure and normal pressure may be done. The cutting length determines the length of the bridges that need to remain standing so that the decals do not fall out of the carrier material.

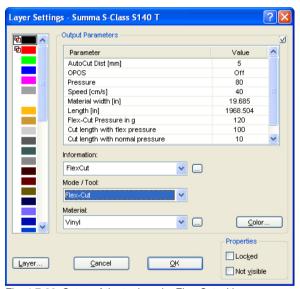


Fig. 4.7-22: Setup of the tool mode: Flex-Cut with pressure and cutting length

#### 4. Step: Set Driver Parameter in The Cutting Dialog

In the cutting dialog the mode Flex-Cut must be selected. It is particularly pay attention to the blue shaded parameters in Fig. 4.7-23 . These parameters are only visible, if the appropriate cutting mode was selected (here: Flex-Cut).

Note: The in the cutting dialog visible Flex-Cut graphic is not! included. It should only make it clear what the parameters mean.

#### 4.7.3 Flex-Cut, Half-Cut - Punch Function

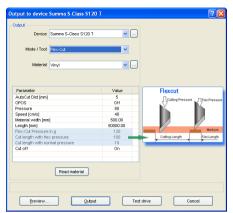


Fig. 4.7-23: Setup of the Flex-Cut parameters (Common settings)

## 5. Step: Output on The Cutter

After pressing the output button the job is cut, with these values. The result of this output are perforated, removable decals.

## 4.7.4.1 Device Setting - Interface Setup (Local Device)

#### The EuroCUT output

With this command you activate the module for *cutting*, *milling*, *creasing* and *drawing* of your data.

You activate this function via the sutton in the *tools* toolbar or via the *file* menu, menu entry *output...* 





Fig. 4.7-24: The output button

When *first* opening this dialog another dialog will be opened before in which the *driver of* the device as well as the *connection* has to be defined.



Fig. 4.7-25: Driver and selection of the connection

#### General

Under the part of the dialog named *General* you select the *driver of the device*.

In the right list all device *drivers* are listed that are available in EuroCUT. In the left list an individual name for the driver can be distributed. This name will be used in the output dialogs of EuroCUT.

#### Enable as server

Requirements are at least 2 licenses of EuroCUT.

If the option *enable as server* is activated the output device will be marked as *plot server* and can be used by another *Plot Manager* for the output.

The characteristic features of an output device are that a driver for the processing of the data has to be distributed to this output device. On the computer on which the Plot Manager is running the job data for the output are transformed into device data by means of a driver. The output of the device data can be done in several ways:

#### Types of connection

#### Local interfaces

**Local interfaces** are the interfaces (COM1, COM2, ..., LPT1, LPT2, ...) that are directly on your computer.

The activation of the **settings** button opens a dialog for the configuration of the interface. These settings that are done here apply for the whole system.

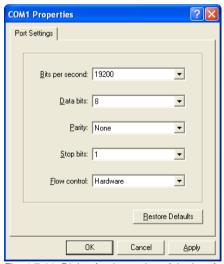


Fig. 4.7-26: Dialog for the setting of the interface parameters

Indication: When steering serially you have to pay attention that all settings on the side of the computer as well as on the side of the output device correspond. Otherwise there is no or faulty communication between them.

#### **USB / Firewire Devices**

Here, all momentarily connected USB / Firewire devices are listed.

#### TCP / IP

Here, you have to enter the TCP / IP address and the port number to which shall be output.

#### Spooler

Here, you can select a Windows printer driver.

When opening the *output* dialog again it will be opened *directly* with the previously set device driver.

## 4.7.4.2 Device Setting (Network Device)

When selecting the menu item *create network device* ... following dialog will be opened:

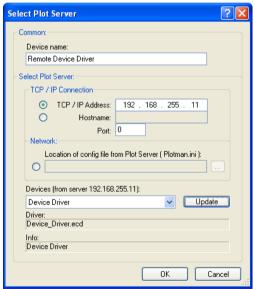


Fig. 4.7-27: Dialog for the configuration of a plot server

A *network device* enables the output of EuroCUT jobs on a Plot Manager that runs on *another* computer. Contrary to a "normal device" the data are not locally transformed into device data but transferred unchanged to the plot server for the further processing.

#### Device name

In the entry line enter the name of the device.

#### Server selection

In the area named **server selection** enter the **TCP/IP address** if you use a TCP / IP connection or the **name of the computer** that is used.

#### Network

If a connection shall be done via a **network** the configuration file of the plot server, the **plotman.ini**, must be selected.

#### Devices (of server)

If the *actualize* button is pressed the *devices* of the server are read.

Indication: The device of the server can only be read if the server was selected as only then, the devices of the server are available.

#### Driver

In the field *driver* the device driver is entered that the server uses for *this* device.

Indication: This driver must also be created locally, which means as local device.

## 4.7.4.3 Start of The Output from The EuroCUT Working Surface



Fig. 4.7-28: Pre-processing line weight and color gradient

If a EuroCUT job contains objects with the attributes *contour/line weight* or *color gradient* the previous dialog appears. Here, the object attributes can be transformed into vectors so that they are taken into consideration at the output. After clicking on the *OK* button the object attributes are transformed into curves.

## 4.7.4.3.1 Output to device

There are 2 displays of the output to the device dialog: The *min*.(imized) and the *max*.(imized) display that can be activated with the so named button.

## < Min. display (Standard)

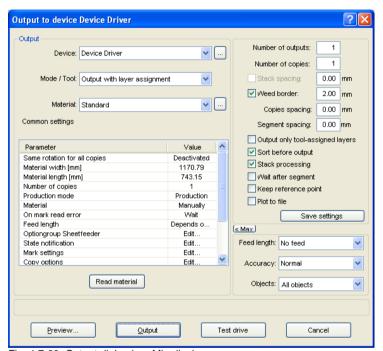


Fig. 4.7-29: Output dialog in < Min display

#### < Max. display

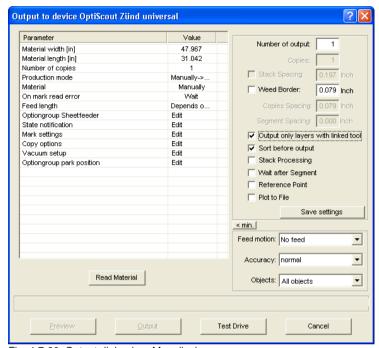


Fig. 4.7-30: Output dialog in > Max display

#### Output

In the area named output of the *output* dialog are all selection fields or parameters that are directly in contact with the output device.

#### Device

In the field *device* the previously defined output device is shown.

If the button is pressed further menu entries are available:

Add local device ... Connect to Plot Manager .... Change ... Delete

Fig. 4.7-31: Device pop up menu

#### Add local device

With this option further *local devices* for the output can be defined.

#### **Connect to Plot Manager**

With this option devices for the output and that are in the network can be defined.

## Change

With this option modifications as for example another interface can be defined.

#### Delete

With this option a device connection can be canceled or deleted.

#### Mode / Tool

In the field *mode / tool* you select if you want to cut, mill, crease, draw with your device. The functions that are available here depend on the active driver.

#### Material

In the field *material* you select the material that shall be cut. This field is linked to a database that has to be filled which means that the different data for different foils are entered. For example the settings of print, speed and width on normal foil can be different to flock or metal foil. These values can be defined individually as they depend on the material and the device that are used.

Pressing the button opens the following pop up menu:



Fig. 4.7-32: Pop up menu of the material ... button

#### Add

Activating the *add* menu item writes a new data record to the material database.

#### Save material data

If the menu item **save material data** is selected the previously entered or changed values are written in the database.

#### Mode / Tool defaults

If the menu item *mode / tool default* is selected the values from the database for this tool are taken over.

#### Material defaults

If the menu item *material default* is selected the values from the database for this material are taken over.

#### 4.7.4.3.2 General Settings

The area *General settings* allows the access to the parameters of the device and driver. The area is divided in *parameter* and *value*. The width of the display can be changed by moving the vertical line between the areas with the mouse. Whenever value is written under "edit" a double-click opens the corresponding window for the setup of the group parameter.

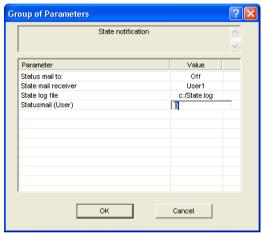


Fig. 4.7-33: Example for an opened parameter group

#### Number of outputs

The value in the field *number of outputs* indicates how often the repetition of the job-output with all set device-parameters shall be carried out.

#### Number of copies

In the field *number of copies* you define how often the *selected* objects shall be cut. After the cutting this value is automatically set back to 1.

#### Stack spacing

The value in the field **stack spacing** defines if the copies shall be stacked vertically and which space has to be kept between the copies. Pre-condition for the activation of this option is that the selected object can be cut more than one time on top of each other!

Indication: In the stacking preview the first object is shown "normally". Each further object of the stack is shown dashed in blue.

#### Weeding border

With the option **weeding border** it is defined if and with which space a rectangle is cut around the plot that facilitates the weeding of the foil. In the **output preview** the frame - if activated - is shown dashed in blue.

#### Copies spacing

The value in the field *copies spacing* defines the space between the copies that were entered in the field *number of copies*.

#### Segment spacing

The *segment spacing* defines the horizontal space between the single segments. Segments always occur if the job has to be sectioned which means divided.

#### Sort before output

If the option **sort before output** is activated all objects in the working surface are sorted 1. in head-direction and 2. in transport direction. If the command **sort with simulation...**-is used, its last sort-setting is used.

#### Stack processing

If the option **stack processing** is activated all jobs in the queue are processed one after the other without interruption.

#### Wait after segment

Sectioning / Segmentation: If a job is too big for the output EuroCUT segments the job automatically in so many parts (segments) that are necessary for the complete output of the job.

If the option *wait after segment* is active the output is interrupted after each segment and the material can be newly adjusted if necessary.

#### Keep reference point

Via the option *keep reference point* the zero point (0/0) of the cutter can be moved. If this option is not active EuroCUT selects automatically the physical zero point as starting point for the cutting.

If the option *keep reference point* is active the physical zero point is moved about the offset coordinate of the reference point. The coordinates of the reference point correspond to the position of the down left corner of the object to be cut on the EuroCUT working surface.

#### Plot to file

If the option *plot to file* is active all output data are directed to a file you have to define and written on the hard drive.

#### Save settings button

By activating the *save settings* button all values that have previously been entered in the *output* dialog are taken over and assigned to the currently active output device.

#### Feed/origin

Depending on the selected driver the name of the field is either *feed* or *origin*.

#### Friction feed cutter

With *origin* the options are *new origin* or *don't set*. If the option *new origin* is selected the device goes into X-direction at a fix set value behind the last cut object and this position is then the new origin. If *don't set* is activated the physical zero point is the new origin after the output.

#### Flatbed cutter

With *feed* the options are *feed* or *no feed*. If the option *feed* is activated the material feed is carried out with the sectioning and with the output from the roll if the flatbed cutter has an automatic material feed.

#### Accuracy

The field *accuracy* offers the following parameters: *very low, low, normal, high* and *very high*. As default, the value *normal* is pre-defined.

The accuracy defines of how many vector parts an object should consist. This is only relevant with objects whose size range in the 10th millimeter. Other object sizes are calculated *automatically* by EuroCUT and the optimum of nodal points for the later output defined.

#### **Objects**

The field **objects** allows the selection of the objects to be output. Besides the modes **all objects** and **selected objects** EuroCUT also allows the cutting of **color sequences** or of **single color layers**. The two last named are explained more in detail in the chapter "**color separation when cutting**".



Fig. 4.7-34: List field objects with selection modes.

#### Info Line

In the *Info Line* information relating to the output process is displayed additionally, e. g. "Job will be sectioned".

#### **Preview**

The *preview* button opens the *output* preview.

#### Output

The *output* button transfers the data directly to the *Plot Manager* and to the connected device.

#### Read material

The *read material* button delivers back to all connected devices the height of the area to be plotted if an accordant command is intended in the firmware for the device. Devices that do not offer this option no value respective zero is delivered back.

#### Test drive

If the *test drive* button is activated the connected devices drives along the Weeding frame with the tool head lifted. This also happens if the option "weeding frame" was not activated.

## 4.7.4.3.3 Color separation when cutting

Each layer color used in the draft appears again in the *objects* list with the number that clearly defines each layer color. In addition, in this list field *two horizontal color bars* appear. After having transferred the data of a color layer, in the info area of the Windows status bar the *Plot Manager* icon () appears.

Double clicking on this icon activates the Plot Manager *job control*. If the mouse cursor is positioned on the icon and the right mouse button is pressed, a pop up menu appears in which the Plot Manager can be closed or the program *version* can be shown. In the *layer selection* the color layers that have not been processed yet occur in the order in which they had been selected. The order in the stack can be changed at any time.

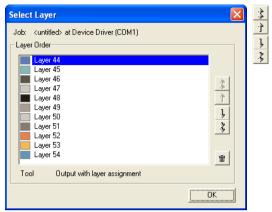


Fig. 4.7-35: Definition of the order in which the single layers shall be processed by up / down buttons

The order is defined via the *up / down* buttons. Layer colors that are not necessary are deleted from the list with the button.

Tip: For the color separated cutting use the **register marks** from the **draw** tool. Register marks are cut at the same place on the foil independent from the color used.

## 4.7.4.4 The Output Preview

The *output preview* is automatically started if you press the *preview* button in the *output* dialog.

Closing the *output* preview and returning to the working surface of EuroCUT



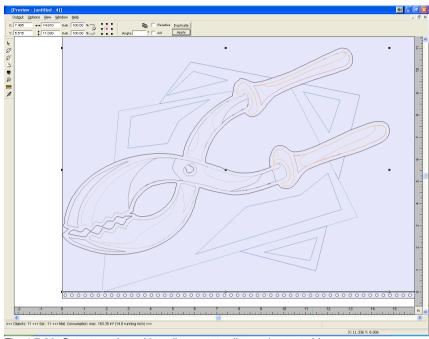


Fig. 4.7-36: Output preview with toolbars, status line and output objects

In the status line of the cutting preview the following information is shown: *contour*, *filling*, *width* and *height*, *group* or *combination*, the *max. foil consumption* in square meters and running meter (rnm) as well as selected *object features*. If the *output* menu is activated the data are transferred to the output device.

Indication: If the job to be cut is left, underneath or above the material- or table preview and the output -menu is activated you will automatically be reminded that the objects to be cut are out of range of the output.

#### Detailed description:

- please refer to 7.9: The Preview Tools Toolbar
- ▶ please refer to 7.10: The Preview Object Parameters Toolbar

#### Foil optimization

The material consumption can be reduced by using the module *foil optimization*.

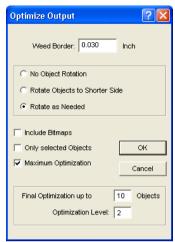


Fig. 4.7-37: Parameter dialog for the material optimization

The *foil optimization* takes care that all objects are arranged in a way that they take the least space on the material.

Indication: Groups and combinations are each regarded as an optimization object. If this is not desired the grouping must be interrupted and the combination cancelled.

Following options are available:

#### Weed border distance

In this field the desired distance between the optimization objects, the so called **weed border distance** can be set.

#### Rotate objects to shorter side

All objects are rotated so that the shorter side is downwards.

#### Rotate as needed

During the optimization all objects are rotated so that they can be arranged saving the most space.

#### Include bitmaps

If this option is activated, bitmaps and groups that contain bitmaps are also optimized.

#### Only selected objects

Only the selected objects are considered. With this option you can for example optimize according to layers (colors).

## Maximum optimization

If this option is activated two more fields are shown in the foil optimization dialog. The option *maximum optimization* calculates all possible combinations the can arise from the fields *end optimization up to maximum ... objects* and *permutation depth*. The calculation can take much time depending on the size of the here set values as all possible combinations that arise from the two values are calculated and compared. Therefore, you should usually not set more than 20-30 objects with a permutation depth of max. 5.

Indication: An optimization always leads to the rotation of one or several objects.

## 4.7.4.4.1 Weeding lines

**Weeding lines** serve for the better procession of large jobs. Material length or width of several meters are difficult to handle, therefore, you can insert weeding lines during the foil cutting that divide the job into smaller parts that are more easy to handle.

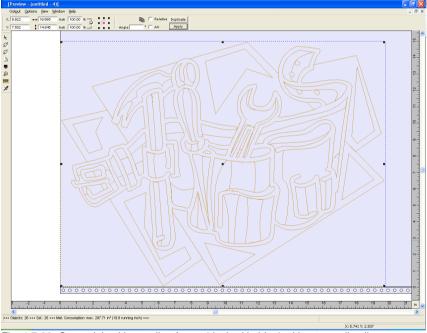


Fig. 4.7-38: Output job with weeding frame (dashed in blue) without weeding lines

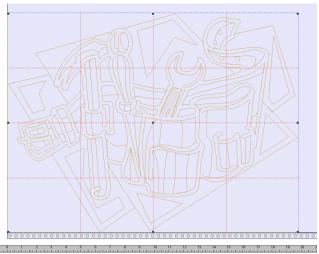


Fig. 4.7-39: Example with 3 horizontal and 3 vertical weeding lines (dashed in red)

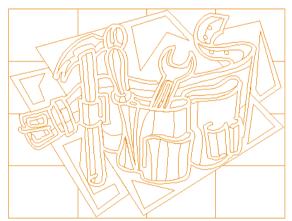


Fig. 4.7-40: Result of the output with weeding lines - objects not! cut

In the *output preview* there are 3 possibilities to insert horizontal and vertical weeding lines.

Indication: Weeding lines can only be inserted if the option weeding frame has been activated in the output dialog.

## 1. Manually

Position the mouse cursor on the weeding frame *dashed in blue* around the objects. The mouse cursor changes into a double-headed arrow. Now draw a horizontal or vertical

weeding line to the position where it should be segmented. Repeat the process until all necessary weeding lines are inserted.

#### 2. Via the menu options

Open the menu *options* and activate the menu item *horizontal weeding line* or *vertical weeding line*.

The first weeding line is inserted in the middle of the objects to be cut. The second call up of the function bisects the two halves in two more halves and so on.

#### 3. Via the shortcuts h or v

An "h" or "v" directly entered via the keyboard generates the respective weeding lines - as described in 2.

Tip: Single objects can be provided additionally with a separate weeding frame via the right mouse menu.

## 4.7.4.4.2 Job Sectioning

Sectioning is the division of a job in so many parts (sections) that are necessary for the complete output of the job.

If the job to be output is bigger than the set or the available output width (*output* dialog, field *width of material*) of the output device in the information area of the *output* dialog the indication ...iob will be sectioned is shown.

Indication: The terms sectioning and segmentation are used as synonyms.

The activation of the *output* menu then opens the following dialog **before** the transfer to the device:

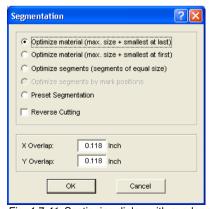


Fig. 4.7-41: Sectioning dialog with overlapping of 3 mm

#### Optimize material (max. size + smallest at last)

**Optimize ... smallest at last)** causes EuroCUT to create segments in the maximum permitted size. The size of the last segment usually differs from the others

#### Optimize material (max. size + smallest at first)

Only active with flatbed cutters. If the last segment was also cut as last the plate could not be processed until the end. Therefore, the remainder is cut as first so that the plate lies on the table until the end.

#### Segment optimization (segments of equal size)

If the option **segment optimization** is activated always segments of the same size are created.

## Optimize segments by mark positions

This option is activated as default with EuroCUT if *video markers* exist in the Job. The above dialog is skipped and the preview of the dynamic segments is shown. The reason of this optimization is that always at least 3 video markers are necessary. Depending on the location of the video markers EuroCUT "searches" up to 30% next to the segment line if there is a video marker. If yes, the respective segment is adjusted *dynamically*.

#### Preset segmentation

The last used setting is automatically saved. When loading the job again this sectioning can be accessed.

#### Reverse cutting

The option *reverse cutting* indicates that the objects are cut as "negative" for example for the use as template for the screen printing.

#### X-overlap and Y-overlap

Segmentation with overlapping - In the fields *X-* and *Y-Overlap* you can define how much the segments shall overlap. The vectors are enlarged accordingly at the cutting points.

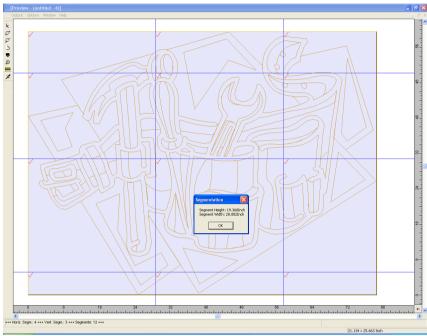


Fig. 4.7-42: Foil optimization in the sectioning preview with 8 segments and information on segment sizes

## Selection and deselection of the segments

Selection and deselection of the segments is done by clicking into the segment. The red checkmark vindicates which segment is active and being output.

#### Changing the suggested sectioning

You can change the sectioning by clicking on the blue section lines and move them to the desired position with the mouse. If necessary EuroCUT inserts automatically new sections.

In the status line of the segmentation preview the size of the job to be cut in X- and Y-direction and the number of segments are shown.

## 4.7.5 The Layout View Mode

The *Layout View* Mode is switched on or off using the *View* Menu.



#### 4.7.5.1 Definition:

On all 4 corners of the working surface, the word "Layout" will appear. The containers are shown as dashed red line with the name "text container" or "image-container".

## NOTE: The Layout View Mode is not to be confused with the contour or the full surface mode (F9).

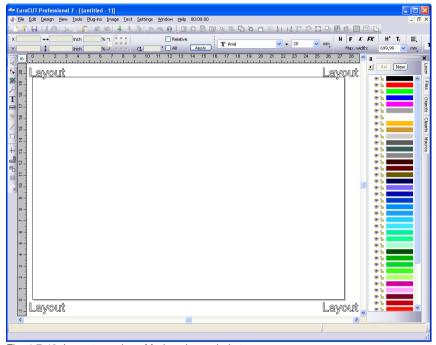


Fig. 4.7-43: Layout anzeigen Modus eingeschaltet

#### 4.7.5.2 Definition Container

## 4.7.5.2.1 What Is A Container?

A *Container* can receive *bitmaps* or *texts*. There are 2 types of containers: 1. Image containers (bitmaps) and 2. Text containers. With the *Draw*- or *Text* tool a frame is mounted, to gather the later content. The framework determines properties and dimensions of the content. The container is displayed in the so-called *Show Layout* mode - as a red dotted line. The mode is switched on and off using the F8 key on the the keyboard.

#### 4.7.5.2.1.1 Benefits

A container can be filled with differents contents using a macro. The replacement contents can be entered and edited in EuroCUT or externally imported from a \*.CSV file. The content adapts to predetermined characteristics and dimensions. It can be defined, for example, whether in texts that are longer than the frame, the cap height is adjusted or

whether the text block is compressed. The *Replace* macro automatically replaces the contents, line by line.

The benefit thus lies firstly in the fact that the layout and behavior of objects in the container can be predetermined, and secondly that through the automatic replacement a significant increase in productivity can be achieved - Keyword: Serial production.

#### 4.7.5.2.1.2 Limits

The limits are that bitmaps and texts, but *not vector objects* can be imported into the container.

### 4.7.5.2.1.3 Compatible Formats

- for Image container: \*.BMP, \*.PCX, \*.JPG, \*.TIF, \*.GIF, \*.PNG
- for *Text* container: EuroCUT own file format and using the text import function in the textbox \*.ECT, \*.RTF, \*.TXT
- for external data sets / databases: \*.CSV

### 4.7.5.2.2 Excursus:

### 4.7.5.2.2.1 The CSV Format (Comma Separated Values)

One character - often the comma - is used for separating records (columns). Rows are separeted by newlines. Depending on the software involved semicolon, colon, tab, space or other separating characters are possible.

The CSV file format is often used to transfer simple structured data between different computer programs - here: database tables. The column names are defined in the first record - the so-called head, record.

# 4.7.5.3 Overview Container Types

	Image Container	Text Container
Creation	Draw tool of the Tools toolbar (closed object is required), i. e. the container's contour is drawn using one of the Draw tools	Text tool of the Tools toolbar, i. e. write a text or mount a frame with the Text tool
	The Container property will be set automatically when in Show Layout mode (F8)	The Container property will be set automatically when in Show Layout mode (F8)
	In the Contour- or Full Surface mode a container is created using the Change to Container function in the Object or Context menu.	In the Contour- or Full Surface mode a container is created using the Change to Container function in the Object or Context menu.
Deletion	Cancel Container State function in the Design or Context menu or Reset Container attribute in the Objects / Attributes tab of the sidebar	Cancel Container State function in the Design or Context menu or Reset Container Attribute in the Objects / Attributes tab of the sidebar
Representation (in the F8 Show Layout mode)	Red dotted line with text "Image Container"	Red dotted line with text "Text Container"
Set Parameter / Boundary Conditions	Enable Container Settings function in the Context menu or Double click on "Image Container"	Enable Textbox function in the Text editor toolbar or via Context menu or Double click on "Text container"
Change Name	Name field in the Objects tab or Name field in the Setup Image Container dialog	Name field in the Objects tab or Name field in the Settings tab of the Textbox Settings Text Container dialog
View	F8 key or Enable Show Layout in the View Menu	F8 key or Enable Show Layout in the View Menu

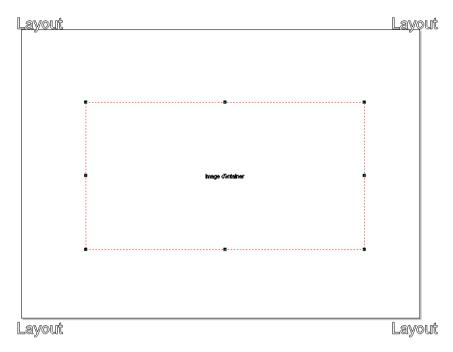
# 4.7.5.4 Working With Containers

### 4.7.5.4.1 How Do I Draw A Container?

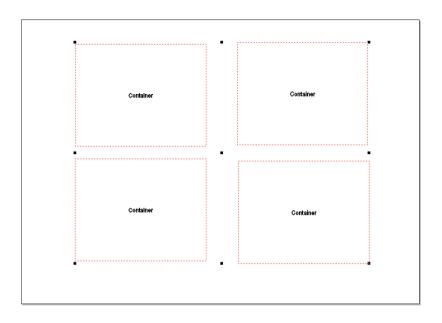
You can use the same tools as for the drawing of vectors: the *Draw*-Tool and the *Text*-Tool **T**. A red-dashed frame is the mark of a container. The default names are "Image Container" or "Text Container, depending on with which tool was drawn. With the text tool, a frame is drawn or text is entered at the cursor position. Double-clicking on the

container opens the respective settings dialog.

# 4.7.5.4.1.1 Display in the Show Layout Mode



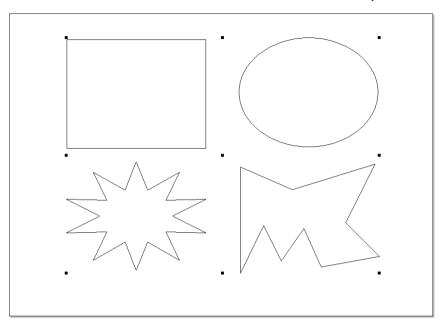
Layout



Layout

Fig. 4.7-44: Display of one Image Container and four Containerns in the Show Layout Mode (F8)

# 4.7.5.4.1.2 Display in the Contour resp. Full Surface Mode



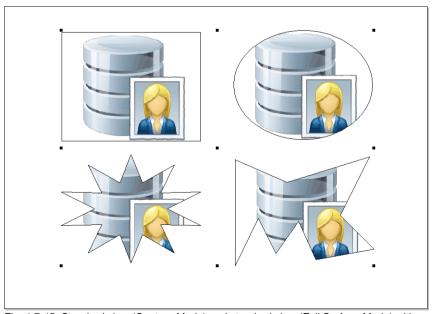


Fig. 4.7-45: Standard view (Contour Mode) and standard view (Full Surface Mode) with default fills

### 4.7.5.4.1.3 Container Settings Image

A doubleclick on an *Image Container* opens the following dialog, in which can be defined how the inserted bitmap should be treated.



#### 4.7.5.4.1.4 Parameter

#### Name

Here an individual name for the image container can be defined. Default name is: *Image Container* 

### Insert images proportionally Option

If the *Insert images proportionally option* is enabled, then the bitmap, which is to be imported, will be enlarged or scaled-down into the frame, while maintaining the proportions.

#### Fit Option

If the *Fit* option is enabled, then the to import bitmap will be adjusted into the frame.

### Scale with objects option

If the *Scale with objects* option is enabled, the the content of the container will scaled also, that means if the frame gets enlarged or reduced then the content is scaled too.

### Hor.(zontal) Alignment

The Horitzontal Alignment can be left, middle or right.

#### Vert.(ical) Alignment

The *Vertical Alignment* can be top, middle or bottom.

#### 4.7.5.4.1.5 Preview

The Preview shows, how the contents behave in relation to the container.

### 4.7.5.4.1.6 Cancel Container Status Option

This menu item *Cancel Container Status* cancels the object status "Container". The object attribute in the *objects* tab is disabled.

#### 4.7.5.4.1.7 Context Menu - Container Relevant Entries

#### **Hide Content**

This menu intem hides the content of the image container, when in full surface mode.

#### **Show Content**

This menu intem shows the content of the image container, when in full surface mode.

#### Remove Content

This menu intem removes the content of the image container.

Note: Same function as: Fill: None.

#### Container Setup

This menu intem opens the **Setup Image Container** dialog...

### **Cancel Container State**

This menu intem disables the container attribute of the selected object.

Note: This is the same function like disabling the container attribute in the objects and attributes tab.

### **Change To Container**

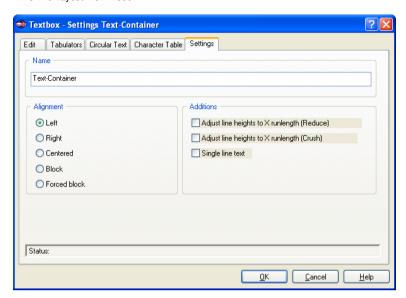
This menu item transforms a text or vector object into a container object. The container object is only visible in the **show layout** mode.

Note: This menu item is only visible, when you are not in the show layout mode.

### 4.7.5.4.1.8 Settings Text Container

A doubleclick on a text container opens the following dialog in which is defined, how texts will be handled.

#### 4.7.5 The Layout View Mode



#### Name

In the text field a name for a text block can be defined. By default, the name "text". The name is shown in the *object's* tab list of the sidebar and in the *object names* tab.

### Alignment

Here the *alignment* of text blocks is pre-defined; these options correlate with the items in the *text* toolbar.

#### Left

If the *left* option is enabled, then the marked text block will be justified left.

### Right

If the *right* option is enabled, then the marked text block will be justified right.

#### Centered

If the *centered* option is enabled, then the marked text block will be justified centered.

### Block

If the **block** option is enabled, then the marked text block will be justified as block.

### Forced Block

If the *forced block* option is enabled, then the marked text block will be justified as forced block, which means that all lines of text - even the last one - are adjusted on the column width or width of the work sheet.

#### Additions

### Adjust line heights to X runlength (Reduce)

If this option is enabled, then when the X runlength is changing, the text block will be scaled-down proportionally.

### Adjust line heights to X runlength (Crush)

If this option is enabled, then when the X runlength is changing, the text block will be compressed, which means that the character distance will be reduced.

### Single line text

If this option is enabled, then is prevented, that a line break is executed at the end of the line.

## 4.7.6 Printing



Fig. 4.7-46: The print button in the standard toolbar

### 4.7.6.1 Without RIP Software

The following chapters explain in detail the single functions of the EuroCUT print dialog.

Open the EuroCUT *print...* dialog by selecting the menu item *print* in the *file* menu, via the keyboard hotkey CTRL+P or by pressing the button in the toolbox.

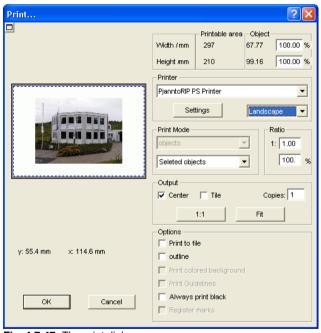


Fig. 4.7-47: The print dialog

In the down right part of the dialog you find the option **tile** and the **adapt** button and the **1:1** button under *output*. Depending on which option you have activated the appearance of the preview of the **print** -dialog changes.

Indication: If the print -dialog is opened the adapt button is automatically active because we do not assume formats that exceed the maximum output-size of the device to be accessed as standard for the printing of objects or graphics.

#### The adapt mode

The *adapt*-mode corresponds to the printable area. The values for the printable area are shown in the field *print area* which is in the upper right part of the print dialog.

#### The preview window in the adapt mode

The preview window offers the possibility to check your job before printing. The edges of the window are *magnetic* which means that if an object is approaching the edge of the sheet the object stays at the edge of the window. Thus, a faster positioning of the objects in the corners or at the edges of the sheets is obtained.

Tip: If the magnetization of the edges shall be switched off, keep the SHIFT button pressed while positioning your objects.

The *x-* and *y-*coordinates that are shown underneath the preview window express the location of the left upper edge of the object on the working surface.

## Mouse-functions in the preview window (adapt-mode)

Clicking once with the *right* mouse button or activating the *preview* button increases the preview window to the maximum size of display.



Fig. 4.7-48: The print preview button



Fig. 4.7-49: Print preview in the complete picture mode

Indication: The size of display depends on the set screen resolution (800\*600, 1024\*768, ...). Clicking again with the right mouse button resets the original status.

Indication: If the left mouse button is pressed and kept pressed, a dashed black frame appears around the objects to be printed. This frame covers all objects that are on the working surface and corresponds to the printing area.

Printable area and object

The fields **Printable area** and **object** are in the upper right part of the **print** dialog.

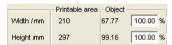


Fig. 4.7-50: Section field printing area and object

#### Printable area

In this field, the specified printing area with height and width values is shown.

#### Object

In this field the object/s to be printed with height and width values is/are are shown.

Indication: The fields for the percental enlargement of the objects are not active in the adapt-mode.

One field below on the right side of the **print** dialog is the field **printer**.



Fig. 4.7-51: Printer selection and Setup

If you open the list you will get a list of all printers that are installed on your system. Select the printer that you want to use. In order to do more settings for the printing activate the *setup* button. The dialog that now opens corresponds to the menu item properties of the respective printer file menu.

Indication: The print dialog that is opened by pressing the setup button depends on the loaded printer driver and is therefore not further explained.

Right next to the setup-button the orientation of the sheet (portrait / landscape) can be set.

### What is printed?

In the area named print mode are two combo-boxes in which you can define what shall be printed. In the first list you can choose between the options *objects*, *objects with worksheet*, *job-info*.

### **Objects**

All objects on the worksheet are printed.

### Objects with worksheet

All objects and the worksheet (black frame) are printed. Underneath the black frame the company's name, the dimensions of the working surface and the proportion in which it shell be output are also automatically printed.

#### Job-info

If this option is activated all information that have been entered in the *job-info* are output as well as all objects in the below right area of the sheet are printed downsized.

### All objects

All objects that are on the working surface are printed.

### Selected objects

Only objects are printed that have been marked on the working surface.

#### Ratio

Here, you have the possibility to enter the printing proportion as numeric or percentage values.

Indication: Both fields are coequal which means that if a numeric value is entered the corresponding percentage value is entered automatically in the dedicated field and vice versa.



Fig. 4.7-52: Field for the entry of the size proportion

#### Examples for the indications of proportion with the corresponding percentages:

```
Proportion 1:1 corresponds to 100.00 %
Proportion 1:2 corresponds to 50.00 %
Proportion 1:3 corresponds to 33.33 %
Proportion 1:4 corresponds to 25.00 %
```

#### Centered

If this option is activated all objects on the working surface are centered.

#### 4.7.6 Printing

#### Tiling

If this option is chosen the *print* -dialog appears in the *tile* mode.

#### Number of copies

In this field the number (max. 9999) of the exemplars to be printed can be defined. The buttons *adapt* and *tile* enable switching between the two modi with the same name.

#### 1:1

If this button is activated all objects on the working surface are displayed in their *original size* in the preview window and output.

#### Adapt

If this button is activated all objects on the working surface are downsized so that they can be shown completely in the preview window.

#### Options

#### Output to file - Print to file

If this option activated, print data is redirected to a file.

#### Contour mode

With this option activated all objects are printed like shown in contour mode - without filling.

### Also print colored worksheet

When selecting this option the background color defined for the working surface is also printed.

### Print subsidiary lines

If the job to be printed contains subsidiary lines they are also printed.

### Always print black

This option becomes automatically active if in the first list *all objects* and in the second list *color separated printing* (after the layer order) or *print single colors* (after single layers) was selected.

Indication: If you want to print the objects on the working surface in color the option always print black must be deactivated.

### Register-/ Jog-Marks

This option becomes automatically active if in the first list **all objects** and in the second list **color separated printing** (after layer order) or **print single colors** (after single layers) was selected.

Indication: If you do not want to also print register and jog marks this option must be deactivated.

#### 4.7.6.1.1 The Tile Mode

If you switch from the *adapt mode* to the *tile mode* the preview window appears as follows:

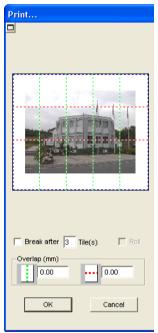


Fig. 4.7-53: The preview window in tile-mode

In the *tile* mode all tiles are shown. A tile is that part of the object that can be output on the device to be accessed.

The option *pause after* indicates after which tile (enter amount of tile) the output shall be interrupted. The fields *overlapping (mm)* serve for the entry of the desired *horizontal* and *vertical overlapping* of the objects to be printed.

When printing to roll (option *Roll*), whole lanes can be printed without having spaces

#### 4.7.6 Printing

between the single tiles.

Indication: Only the print of a whole lane can be interrupted and not the printing of a single tile. The entry of an overlapping in feed direction (print direction) has no influence on the roll which can also be seen at the display of the size of the tile.

After the tiling the dialog is not closed automatically as it is an advantage to directly compare the print and the preview. In addition, thus you can directly repeat the print of a specific tile.

### Mouse function in the preview window (tile mode)

One click with the right mouse button on the tile preview increases the tile display. This can also be done by clicking on the button in the upper left area of the window. Clicking once again with the right mouse button resets the original status.

If you *double click* with the left mouse button on a tile this one will be deactivated which means it will not be printed.

Double clicking with the left mouse button while pressing the SHIFT button leads to the inversion of the tiles which means that the tiles that have been deactivated before become now active (printed) and the tiles that have been active become deactivated (not printed).

The objects within the preview window can be shifted by means of the mouse. The window edges are magnetic which means that when the object is approaching the edge of the sheet the object remains clinged. When pressing the SHIFT button the magnetization is released.

#### Example for the printing in the *tile* mode

The following example explains the single functions, shortcuts,... in the *tile* mode in detail.

The *tile* mode offers the possibility to print in any size which means each graphic, independent of the size can be printed on the connected output device. For the print of your graphic you *do not* need a printer with which DIN A2-, A1-, A0- or even large size can be output.

#### How?

The graphic to be printed is divided in so many segments (tiles) that are necessary to be able to output the graphic on the connected output device. The amount of necessary tiles depends on the size of the graphic to be output and the pre-defined output format (DIN A3, A2, ...). The setting of the output format is done via the **set** button EuroCUT **print** dialog and depends on the connected output device.

Load any graphic in EuroCUT and open the *print* dialog, either via the *file* menu by selecting the menu item *print...*, via the keyboard with the key combination CTRL+P or via the button in the *standard* toolbar.

The EuroCUT *print* dialog is opened in the *adapt* mode. Activate the *tile* mode by activating the thus named button.

The *print* dialog appears as follows:

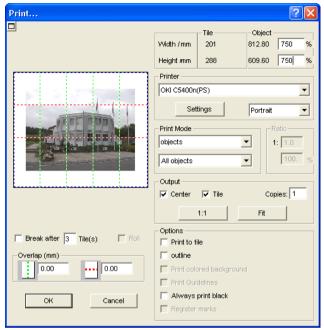


Fig. 4.7-54: The print dialog in the tile mode

In the upper right corner of the dialog you find the two fields tile and object.

The field *tile* corresponds to the field *print area* in the *adapt* mode. The other fields in the right part of the print dialog are the same as in the *adapt* mode.

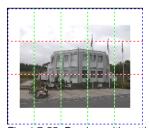


Fig. 4.7-55: Preview with settings in the tile mode

### Activated and deactivated tiles

An active tile is a tile that is **not** marked with a red "X". Deactivated tiles on the other hand are marked with a red "X".

#### 4.7.6 Printing

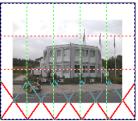


Fig. 4.7-56: Bottom row: Tiles deactivated

The deactivation or activation of a tile is done by **double clicking** with the left mouse button which means when double clicking on an active tile it becomes deactivated. Another double click on the same tile activates it again.

In the previous figure you can see that the lower row of tiles is marked with a red "X". These tiles were deactivated and will not be printed.

In the *tile* mode you do not only have the possibility to activate / deactivate single tiles.

Tip: Keep the CTRL button pressed while double clicking with the left mouse button on the desired tile and all tiles where the mouse cursor is are deactivated.

### 4.7.6.2 With Piannto RIP software



Fig. 4.7-57: The Pjannto RIP button in the standard toolbar

Indication: Pjannto RIP is a professional PostScript-RIP that is not a part of EuroCUT. If a license was purchased from Pjannto RIP and the software is installed on the same computer the Pjannto RIP button is automatically embedded in the standard toolbar of EuroCUT and the file menu enlarged with the entry Pjannto RIP....

### 5 Reference Part

The menu items in chronological order:

### 5.1 The File Menu

## 5.1.1 The New... Command

With the *New* command a new job is opened.



# 5.1.2 The New from Template Command

This command is for saving jobs as template (file extension JTP). These templates can be loaded again via *file / open* or *file / new.* As JOB name "untitled" is shown.

## 5.1.3 The Last Version Command

When loading a job a safety copy named AUTOSAVE.BAK is created in the EuroCUT directory.

With this command the version of the job that was available before the loading of the job can be restored.

# 5.1.4 The Open... Command

With this command the files that were stored on your hard drive or another data carrier in the EuroCUT JOB file format are brought onto the current screen / desktop. You can further edit this file. Jobs can be deleted after a safety query.



### 5.1.5 The Save Command

With this command you save the current job. If the respective job has already been stored before, the given file name and the directory are kept. The older version of the job is overwritten so that the old version can not be restored any more.



If you have created a new job that has not been saved before, the program, if you have clicked the **save** command in the **file** menu, goes automatically to the command **save** as....

First, the *job info* dialog is opened where you can enter more information about the job. Then, the real dialog for saving your job is opened and you are asked to enter the file name and select the directory.

### 5.1.6 The Save as... Command

With this command you save a new job under a file name chosen by you in a directory to be selected. This command is also for changing the file name and / or directory of already existing files. If for example you want to save a job that is build up on an older one without losing the old version then you select the command *save as ...* and you can save the new job under another name in a new directory if you wish to.

SHIFT+ CTRL+S

The command *save as...* is also to be selected if you want to save the current job onto another data carrier. To do so, select the appropriate disk drive.

### 5.1.7 The Save all Command

With this command you save all open EuroCUT jobs. If among them, there is a newly created job it can be saved under a file name chosen by you in a directory to be selected.

## 5.1.8 The Send by Email... Command

This command opens the standard email client and links the current job as attachment to the email. The job must be saved before.

### 5.1.9 The Online Service... Command

With this command the web site of EUROSYSTEMS S.à.r.l. (www.eurosystems.lu) is opened.

# 5.1.10 The Import... Command

With this command files are imported into EuroCUT. Known file formats are shown in a list.



# 5.1.11 The Export... Command

If you want to use a job also in another program the job file must be converted into a suitable format which means exported.



### 5.1.12 The Send to RIP... Command

With this command the PostScript RIP is started, if it was installed and activated (licensed) before.

Note: This menu entry is only visible, if an EUROSYSTEMS RIP had been installed and activated (licensed) before. Then the RIP-Setup in EuroCUT Basic 7 must be processed: please refer to 5.7.1.7:

#### The RIP... Setup

### 5.1.13 The Print... Command

With this command you print the current file in any size (tiles) on the standard printer.

CTRL+P

# 5.1.14 The Output... Command

With this command you call the output module (Plot Manager) for cutting. drawing or milling.



### 5 1 15 The Scan. Command

This function activates your scanner via a so-called TWAIN interface. If your TRI IN scanner possesses such an interface (program) you can directly access it via this menu entry.

If for your scanner this software is not available then insert the scanner software via the menu tools / insert program into the menu structure.

### 5.1.16 The Choose Scanner... Command

This command allows you to select a scanner.

### 5.1.17 The Quit Command

With this you terminate EuroCUT and return to the Windows desktop. If you TRI +0 have not saved the job that is currently being edited, you will be asked if you want to do so.



# 5.1.18 The Job History

The **Job History** function facilitates the loading of the 4 last jobs without having to pass via the directory tree. At the end of the menu list of the file menu the names of the 4 last edited jobs appear. Click with the mouse button on the desired job name. Then, the selected file will be loaded on the working surface.

### 5.2 The Fdit Menu

### 5.2.1 The Undo Command

With this command it is possible to undo the last done operations and functions. The default setting is 5 steps. This default value can be changed via the *settings* menu, menu entry *standard settings* / *miscellaneous* and here *undo levels*. The maximum value is 100 steps.



Indication: This setting can only be changed with a new file (file menu, menu item new)!

### 5.2.2 The Undo Stack... Command

This command opens a window with the last used commands. Most intermediate states are previewed. By clicking on the respective command this state is restored.



Note: This menu entry is only displayed, if restorable commands are used.

### 5.2.3 The Redo Command

This command is the reverse command to undo. It restores the status that was there **before** the undoing.



### 5.2.4 The Redo Stack... Command

This command opens a window with the last commands, which were made SHIFT+F6 undone. Most intermediate states are previewed. By clicking on the respective command this state is restored.

Note: This menu entry is only displayed, when commands were undone.

### 5.2.5 The Cut Command

With this command objects are copied to the Windows clipboard and deleted CTRL+X from the working surface. Via the clipboard objects can be inserted at another place or in another program.

Indication: For the transport of your data you can also use the export command. This is always necessary if your data shall be transferred to another computer.

## 5.2.6 The Copy Command

With this command marked objects are copied to the clipboard without deleting them from the working surface.



### 5.2.7 The Paste Command

This command inserts graphics and objects from the clipboard to your job. The mouse cursor changes to a right angle in which *insert* is written.



Now point the tip of the right angle to the point on your working surface where the graphic or the object shall be inserted.

## 5.2.8 The Paste Special... Command

Via this menu item "pictures" can be imported from the clipboard to FuroCUT.

Indication: If in EuroCUT objects are copied this menu item is not active.

## 5.2.9 The Select All Command

With this command all objects of the active job which means all objects on the working surface and also outside the working surface are marked. The selected objects can then be grouped, combined or moved.



#### 5.2.10 The Reverse Selection Command

With this command all non-selected objects are selected. Already selected objects will be unselected.

## 5.2.11 The Job Info... Command

With the job info you have the possibility to save additional information with every job. You can print this information and use them for invoicing or as accompanying working sheet.

Next to this information as for example *order number* and *company address* the job-info also gives information about the used material. In the *memo*-field additional comments in note form can be stored.

# 5.2.12 The Color Layer... Command

This command starts the *layer settings* dialog in which objects are colored, foil colors are defined, device tools are assigned, objects of the same color are selected and layers can be made invisible or blocked.



# 5.2.13 The Prepare to Cut... Command

With this command an object with defined line weight or filling can be made ready-to-cut.

#### Contour

The line weight defined before is contoured.

### Color graduation

The color graduation defined before is divided into the defined number of steps and each step is provided with an outline.

#### Both

The defined line weight and the defined color gradient (number of steps) are outlined.

# 5.2.14 The Multi Copy... Command

This command serves the generation of any number of object copies (duplicates) on the working sheet. Number, Offset and more can be set in a dialog.

Detailed description: Please refer to 7.6: The Object Parameter Toolbar

# 5.3 The Design Menu

#### 5.3.1 The Rotate Axis Command

This command rotates the marked objects at 90° counter-clockwise. This option is always necessary if you want to adjust your objects fast to the rolling direction of the foil without having to go via the *rotate* function.



## 5.3.2 The Rotate Axis With Page Command

This command rotates the marked objects with page at 90° counter-clockwise.



### 5.3.3 The Horizontal Mirror Command

The selected object is mirrored at its horizontal through its center point. If several objects are marked, the center point of the virtual checkbox whose edge is limited by the 8 black dots with the corresponding horizontal is taken as axis of reflection. If no objects are marked all objects are mirrored.



### 5.3.4 The Vertical Mirror Command

The selected object is mirrored at the vertical through its center point. If several objects are selected the center point of the checkbox with its corresponding vertical is used as axis of reflection. If no objects are marked all objects are mirrored.



### 5.3.5 The *Delete* Command

Pressing the DEL key executes the *delete* command. In order to delete particular objects from your graphic they must be marked.



### 5.3.6 The Mirror on the X Axis Command

All selected objects will be mirrored at the visible X-coordinate axis.



#### 5.3.7 The Mirror on the Y Axis Command

All selected objects will be mirrored at the visible Y-coordinate axis.



# 5.3.8 The *Duplicate* Command

In order to use this command the object to be duplicated must be marked before. Now click with your left mouse button on the *duplicate* command or activate it via the hotkey. The marked objects are now doubled.



#### 5.3.8 The Duplicate Command

The positioning is done according to the values that you have entered in the **settings** menu, menu item **standard settings** / **miscellaneous**.

Indication: You can also duplicate an object by first marking it, moving it with the left mouse button kept pressed and then press the right mouse button once at the position where the duplicate shall be created. The displacing values are entered automatically with this procedure.

### 5.3.9 The Clone Command

If you clone an object you create a copy linked to the object. Modifications at the original (the initial object) are automatically done at the clone (the copy).

If a clone is modified in its size or form, an other "original" is created.

## 5.3.10 The *Group* Command

This command allows combining several objects to a group in order to edit them together. This can be wise if for example you want to move several objects without changing their position to each other. To do this, first mark all objects that you want to move together, select the *group* command and then move the newly created group to the desired place. Now, it is not possible any more to change the single objects that form the group independently from each other.

CTRL+G

In order to make this possible again the grouping must be broken with the **break group** command.

Indication: Grouped objects cannot be treated with the node editing tool. The grouping must be broken before. In order to differentiate between the grouped and ungrouped objects they are shown dashed in blue.

# 5.3.11 The Break Group Command

This command is used to divide a group of objects again into single object. Each object can then be edited individually.

CTRL+B

### 5.3.12 The Combine Command

This command combines like the grouping several objects to one. The difference to the *group* command is that the selected objects are not regarded as single isolated objects lying next to another anymore.

SHIFT+K

Let us explain this fact with an example.

You have created two squares with different sizes, the smaller one lying completely within the bigger one. In order to obtain that in the

full-color-mode the area of the smaller square is transparent you combine the two squares after having marked them before. The size of the bigger square is now interpreted as outer edge and the smaller one as inner edge. The area between the two edges is filled with the color selected in the layer box. In the middle, a hole with the size of the smaller square remains.

### 5.3.13 The Break Combination Command

With this command you cancel a combination. Now, the program treats the combination objects as single objects again.



### 5.3.14 The Fill Function

With this function vector objects and text blocks can be filled.

#### None

All fillings respective filling bitmaps of the marked object are removed. Only the contour of the objects remains in the previously defined layer color.

#### The Color graduation... command

This command opens a dialog with which the appearance of the color gradient fillings of closed curves, text objects or combinations can be defined.

#### The **Bitmap...** command

Pressing this button opens a dialog with which objects can be filled with bitmaps.

For editing the filling bitmaps several functions are available.

#### The Laver color... command

This command removes all fillings and shows the object in the layer color in which it was created.

### The *Transparency...* command

This instruction allows the setting of the transparency from 0 to 100% using either the slider or entering an integer percent value.

### 5.3.15 The Contour Function

Via this function objects can be provided with pen attributes (width of pen, color....), hairlines can be created and pen attributes removed.

#### The none command

This command removes all pen attributes of the marked object and shows it in the color in which it was created.

### The *hairline* command

This command allocates a hairline to the marked object in the momentarily active layer color.

#### 5.3.15 The Contour Function

#### The attributes... function

Via the pen attribute dialog the contour pen of curves, combinations or text objects can be designed. Contour pens are shown while drawing the object contour in the full face mode.

#### The layer color command

This command assigns selected *laver color* to object contour.

Indication: The pen attributes have no influence on the display of the objects in the contour mode (F9). Here, the contours of the objects are drawn with a simple contour line in the layer color.

#### 5.3.16 The Draw Command

In this menu the tools with which you can create graphic objects are summarized. All tools can be activated via the toolbox or the menu item draw in the *object* menu.

### **5.3.16.1 Rectangle**

You have switched to the rectangle-mode and move the mouse cursor on the desktop to any corner of the desired rectangle.

Press the left mouse button and keep it pressed while moving the mouse cursor to the diagonally opposite corner. If you let got the mouse button the rectangle appears.

Indication: If you keep pressed the SHIFT key while drawing a rectangle the first selected point is the center point of the rectangle. If you keep pressed the CTRL key while drawing the rectangle the movement of the mouse automatically draws a square. Pressing simultaneously the SHIFT and CTRL kex draws a centered square. For drawing the object the status of the keys (pressed or not pressed) is important when letting go the mouse button.

### 5.3.16.2 Circle

With this command you activate the mode for drawing the ellipses and circles. In this mode you open up a box in which the ellipse is adapted. So, first select a corner point of the box to be opened up with the mouse.

Indication: The first drawn point is no point of the ellipse. Only if you press the SHIFT key the starting point becomes the center point of the ellipse.

Pressing the CTRL key only allows the drawing of a circle. Pressing simultaneously both keys results in the drawing of a centered circle.

#### 5.3.16.3 Line - 4 Modes

#### 5.3.16.3.1 The Line Mode

This command activates the mode for the drawing of lines. The mouse cursor has now the shape of a cross with a line shown on the down right.

For the drawing of lines two modes are available:

#### 1. "Closed" Lines

You can create closed lines by keeping pressed the left mouse button when drawing the line. You terminate a line by letting go the left mouse button. If the mouse cursor is beyond an ending point of a line it will be highlighted and the mouse cursor changes its form. If you click now once with the left mouse button on this point, this point will be initialized.

Now you can continue to draw with one of the following four modi: *draw, curve, digi mode, freehand.* 

#### 2. "Open" Lines

You can create open lines by clicking once with the left mouse button before drawing. Then, you create the line according to your wishes. If you now click once again with the left mouse button the subline is finished and a new one can be attached. This mode is terminated by *double-clicking* with the left mouse button.

Indication: If you keep pressed the SHIFT key while moving the mouse cursor the drawing of the straight line is limited horizontally and vertically. If while drawing you keep pressed the CTRL key the angle of the drawn straight line is limited to 15° steps. The straight line now moves at 15°, 30°, 45°, ... to the edges of your working surface.

#### 5.3.16.3.2 The Circular Arc Mode

You activate the circular arc mode by pressing the right mouse button in the line mode and select there the respective menu item.

When drawing in the circular measure after placing the second curve point the curve calculated from the first, second and current cursor point is drawn. One click with the left mouse button places the curve.

If the mouse cursor is above an endpoint of a circular arc it will be highlighted and the mouse cursor changes its form. If you click now once with the left mouse button on this point, this point will be initialized. Now you can continue to draw with one of the following four modi: *draw, curve, digi-mode, freehand.* 

## 5.3.16.3.3 The Digitize Mode

With this command you activate the mode for post-digitizing bitmap templates.

Switching between the modi line, curves, digi-mode or freehand via the

#### 5.3.16 The Draw Command

right mouse menu, the arrow keys of your keyboard or the toolbox facilitates the post-processing enormously.

Assignment of the arrow keys:

Left --> Line mode Right --> Circular Arc mode

Up --> **Freehand** mode Down --> **Digitize** mode

If open objects have been drawn they can be closed via the right mouse menu and there the menu item close. Indication: with this option all marked objects can be closed independent of the distance between the starting point of the first drawn and the endpoint of the last drawn object.

Another possibility to close open objects that have been drawn is the following:

Draw an open object. Move the endpoint of the last drawn object with the mouse near the starting point of the first drawn object. You can see that the mouse cursor changed its appearance. If you let got the mouse at that point the object will be closed.

If the mouse cursor is above an endpoint of a digi-curve/line it will be highlighted and the mouse cursor changes its form. If you click now once with the left mouse button on this point, this point will be initialized. Now you can continue to draw with one of the following four modi: *draw, curve, digi mode, freehand*.

### 5.3.16.3.4 The Freehand Mode

With this command you activate the mode for the drawing of arbitrary lines, curves or objects. Keep pressed the left mouse button and create the object of your choice. Let go the left mouse button to terminate the object. If the mouse cursor is above an endpoint of a digi-curve/line it will be highlighted and the mouse cursor changes its form. If you click now once with the left mouse button on this point, this point will be initialized.

Now you can continue to draw with one of the following four modi: *draw*, *curve*, *digi-mode*, *freehand*.

# 5.3.16.4 Register Mark

With this option you can place register marks as administer help in your graphic. This function enables the accurate mounting of the color separated cutting job. To do so, activate this command and click the register marks to the desired positions. Register marks are cut along layer neutral (color neutral).

If open objects where drawn, they can be closed via right mouse button with menu item Close.

# 5.3.17 The Align... Command

With this function marked objects are aligned. You can align the objects horizontally or vertically. The objects are arranged in that way that they are either centered or aligned at the desired side.



In addition, the objects can be aligned with the same distance so that a steady appearance is obtained. It is also possible to center all objects horizontally or vertically on the working surface.

Indication: This option can only be activated if you have marked at least 2 objects.

### 5.3.18 The Sort With Simulation... Command

This command opens the object sort function with which the output order CTRL+F10 and direction of rotation of the objects can be defined. The sort can be done dependent or independent of layers. Also, the preferential direction of the sort can be defined.



In a preview the output of the object is simulated graphically; here, the traverse path of the tool head can be sketched. The simulation can be repeated unlimited without changing the original objects.

# 5.3.19 The Sort Manually... Command

This command enables a manual object sortation. For every single output CTRL+F11 object the order and direction of rotation can be defined. This can be done for every layer. In the preview window the objects are clicked to the desired order with the mouse cursor. Alternatively, the objects can also be sorted by clicking in the object list. The sorted objects are shown dashed in blue.



## 5.3.20 The Clockwise Command

This command sets the direction of rotation of the marked objects to clockwise.



Indication: This function is only relevant in connection with a connected milling or engraving device.

### 5.3.21 The Counterclockwise Command

This command sets the direction of rotation of the marked objects to counter-clockwise.



Indication: This command is like the previous only relevant in combination with milling applications.

### 5.3.22 The Close Contour Command

With this command open objects can be closed. You can see in the status line if an object represents an open track or not. To close it you mark the object and use that command.



# 5.3.23 The Open Contour Command

With this command closed objects can be opened.



Indication: The menu item open contour corresponds to the separate function in the node tool.

# 5.3.24 The Round Corners... Command

The *round corners* command rounds down nodal points with a freely defined radius.



The rounding can be done inwards or outwards. The rounding can also affect the whole object or just single nodes.

Indication: This function can also be used for the rounding of font characters.

#### 5.3.25 The Reduce Nodes Command

This command eliminates nodes of an object that are unnecessary or lying on top of each other. With straight lines, nodes that lie on the straight line and between the endpoints of the straight line are removed automatically. The reduction of nodes decreases the complexity of objects.

# 5.3.26 The Add to Clipart Group Command

The command inserts a marked object in the momentarily active clipart group of the clipart tab.

# 5.3.27 The Change to Container... Command

This instruction transforms a text object or a bitmap in a so-called *container*. According to the container type the appropriate setup dialog is displayed.

Note: After the transformation the design menu entry switches to the following command: Cancel container state.

Detailed decription container: Detailed decription Container

### 5.3.28 The Cancel Container State Command

This instruction transforms a container back into a text object or a bitmap.

Note: After the transformation the design menu entry switches to the following command: Change to container....

Detailed description container: Detailed description Container

## 5.3.29 The Container Setup... Command

This instruction opens the *setup* dialog for image containers or the textbox with the *setup* tab for text containers.

Note: The settings for text containers can also be set using the textbox entry in the context menu.

Detailed description container: Detailed description container: Detailed description container

# 5.3.30 The Weeding Border Command

This command generates a so-called weeding border or frame around one or more selected objects. A weeding border facilitates weeding of the vinyl from the carrier.

### 5.4 The View Menu

### 5.4.1 The Zoom In Command

If you select this function the mouse cursor changes into a lens with a plus inside. You can now select an area that shall be zoomed by keeping pressed the left mouse button. The selected area will then be shown increased to the maximum in the program window.



Indication: A beep of the computer loudspeaker informs you that the maximum zoom is reached.

### 5.4.2 The Zoom Out Command

This function decreases the working surface gradually. If it had been zoomed repeatedly before, the single zoom steps are carried out backwards.



## 5.4.3 The Full Page Command

Select the function so that the whole available working surface is shown.



## 5.4.4 The Show All Command

This function changes the display of the vector drawing in this way that all objects can be seen in the program window. The section is chosen in that way that it is the biggest possible display of the graphic showing all objects.



Indication: If you keep pressed the SHIFT key while doing this command only the marked objects are zoomed to maximum.

# 5.4.5 The Show Selected Objects Command

If this command is activated only the objects marked on the working surface are displayed as big as possible.



### 5.4.6 The To Front Command

If you have arranged several objects on top of each other the following commands enable you to modify the location of the objects to each other. With the *to front* command the marked object is set on the top place above the others



### 5.4.7 The To Back Command

With this command you set the marked object underneath respective behind CTRL+U all other objects.

### 5.4.8 The Forward One Command

This command sets the marked objects further front in the display.

PgUp

### 5.4.9 The Back One Command

With this command you set the marked object further down and thus further back in the display.



### 5.4.10 The Reverse Order Command

The order of the objects in the stack is reversed. What was lying on top then lies at the bottom and vice versa. This also applies for all objects in-between.



# 5.4.11 The Change Order Command

With this command you can change the order of the objects in the display interactively by clicking the objects one after the other in the desired order.



# 5.4.12 The Show Layout Command

If this command is activated the text is replaced by a rectangle with a cross in the middle. Pressing once again the menu item shows the text again.



Indication: This option proves of value especially when processing many text objects. The refreshment of the screen goes much faster thereby.

▶ please refer to 4.7.5: The Layout View Mode

### 5.4.13 The Contour View Command

This command switches the display of the working surface to the contour mode which means that only the contours of the objects are shown.



### 5.4.14 The Enhanced View Command

With this command you can obtain the best possible display of the objects SHIFT+F9 (smoothened contours).

Indication: It slows down the speed of processing and should therefore only be used for the last check or presentation.

# 5.4.15 The Always on top Command

The EuroCUT window remains always in the foreground.

CTRL+Y

Indication: This menu item is only active if the EuroCUT window is in the window mode.

### 5.4.16 The Refresh Screen Command

With this function the content of the visible window is build up again without CTRL+W changing the size or the selected section.

Indication: Use this command if objects on the screen are visible that cannot be accessed by the arrow tool or if display errors of another kind occur.

# 5.5 The Tools Menu

# 5.5.1 The Vectorizing... Function

If this function is activated you arrive at the vectorization program integrated in EuroCUT with which you can convert scanned bitmaps into vectors.



Indication: Bitmaps cannot be cut as they consist only of single pixels that have been recognized by the optic of the scanner. For cutting, milling, grooving ... such pixel graphics must first be converted to vector graphics.

Detailed: please refer to 8.12: The *Tracing* Tool (Vectorization)

# 5.5.2 The *Revectorizing* Function

This option can accelerate the vectorization process enormously. It is always wise if you want to find out the best parameters for the vectorization. The different results should be laid in different color layers to make it easier to remove the unsuitable results later on. When repeating, the interne bitmap created for the vectorization process is used and not the original bitmap that lies on the working surface.



Indication: If the original bitmap was modified in the meantime the vectorization command has to be used.

## 5.5.3 The Contour Line... Function

With the *contour line* function the outer edge of arbitrary many objects is calculated and provided with a contour. Contrary to the outline with this tool also bitmaps can be contoured. In addition, not every single object is contoured but it is tried to find only one contour that comprises all selected objects. Therefore, this function is especially suitable for the creation of intersection lines around labels. The objects of the label can be arranged arbitrarily. Afterwards, with the tool described here the contour of the label in the desired distance is calculated. The thus created contour can be used later for cutting the printed label.



Detailed: ▶ please refer to 4.7.1: Contour vs Outline vs Contour Line

## 5.5.4 The PhotoCut... Function

The function creates vectors from bitmaps. PhotoCut calculates from Windows Bitmap files (\*.BMP, \*.PCX, \*.TIF) grids or patterns that can be output with a cutting plotter or a similar device. The picture is divided into logical pixels and the average gray value calculated for each of these logical

pixels. So, a picture is created that has less pixels than the original. Out of this picture horizontal or vertical stripes, circles, squares, ... are created whose width is proportional to the gray value at the respective position.

## please refer to 8.16: The PhotoCUT Function

# 5.5.5 The Insert Program... Command

With this command you can insert an external program - external meaning no EUROSYSTEMS program - in the menu structure of EuroCUT. The advantage of this possibility is that you do not have to leave the surface for starting other programs.

# 5.5.6 The Edit Program List... Command

With this command existing program entries can be modified or deleted.

Indication: The menu command only refers to the programs inserted additionally to the menu structure.

# 5.5.7 The Set Jog Marks Command

This command automatically sets jog marks around the selected objects. Type, size and position relative to the selected objects are pre-set in **settings** / **standard settings** / **register** / **jog marks** menu.

SHIFT+J

Indication: The markers do not lie in a layer, are always displayed in black, keep their scaling and size and are grouped when being created.

▶ please refer to 5.7.1.5: The Register / Jog Marks... Setup

# 5.5.8 The Search / Replace Video Marks Command

With this command *circle objects* in an import file - with an in the Register-/Jog Marks menu entry defined size - are searched and replaced by video marks.

Note: This option can also be set as a standard via the Settings / Standard Settings / Filter menu entry.

#### 5.5.9 The Measure Command

With the function measure an arbitrary track can be measured, scaled, rotated and dimensioned. If you have activated this command the mouse cursor changes into a reticle. It is then set at the starting point of the track to be measured and the mouse button pressed and kept pressed. Then, the mouse cursor is moved to the end of the track to be measured and the left mouse button let go. With the SHIFT key pressed you only measure



horizontal and vertical distances. Now, the result of the measurement is shown in a dialog field and can be modified.

Indication: The modification of the size is applied proportionally to all selected objects. When rotating bitmaps the area of the bitmap increases but not the objects displayed in the bitmap.

# 5.5.10 The Optimize Material... Function

The optimization takes care that all objects are arranged in a way that they take the least space on the output. By rotation or no rotation of objects it is taken care of that the waste of material can be reduced.

# 5.5.11 The Outline... Function

This function creates a contour with a distance around a vector object to be freely selected and is mostly used for contouring text objects. The color of the target layer can be pre-selected. *Inline*, the reverse function creates a contour lying inwards. "*Outline & Inline*" combined creates a closed contour in the pre-selected strength.

**0** 

Indication: Contrary to the contour with combined objects simultaneously an inner contour is created. This function is not to be confused with a contour pen that only is a drawing attribute and no vector object.

# 5.5.12 The Welding Command

The merge functions *manually, automatically, trimming, open trimming, fill, by color, full area* and *screen printing* take care that overlaying object parts what would cut the foil are eliminated and connected.



please refer to 8.8: The Welding Tool

## 5.6 The Text Menu

# 5.6.1 The Add Text Command

If this command is activated the mouse cursor changes into a capital "T" and the text entry can be done.



The same can be obtained by positioning the mouse cursor at that point of the working surface where later the text shall appear and once press the left mouse button.

## 5.6.2 The Edit Text Command

With this command the text cursor is set at the beginning of a selected text block. The text block can now be changed.



Note: This function can also be enabled using the text tool. The text cursor appears at the position that was clicked on with the tip of the text cursor arrow.

#### 5.6.3 The Textbox... Command

This command opens the EuroCUT textbox. ▶ please refer to 8.2: The Textbox Dialog



## 5.6.4 The Convert Text to Curves Command

EuroCUT uses so-called vector or outline fonts (not to be mistaken with the CTRL+K outline function). These writings can be increased and rotated continuously. The single letters are thereby defined as sequence of vectors.



Indication: If this menu command is carried out, the text converts to a graphic object causing that the writing attributes of the text editor cannot be used anymore.

## 5.6.5 The Convert Text to Lines Command

If you have composed a text with more than one line in the text editor then you can, after having placed the text on the working surface, split the text block into single text lines. The single text lines then can be edited individually, provided with new writing attributes or displaced on the working surface.



# 5.6.6 The Fontmanager Command

Fontmanager for URW BE, TrueType, OpenType and Adobe Type 1 Fonts

If this menu item is activated, the Fontmanager is started.

**▶** please refer to 10.2: Fontmanager

# 5.7 The Settings Menu

# 5.7.1 The Standard Settings Menu

# 5.7.1.1 The Miscellaneous... Setup

The following **defaults** can be set:



## 5.7.1.1.0.1 Duplicate Objects

#### X offset

Indicates the value that remains between the original and the duplicate (in X-orientation) after the creation of a duplicate.

#### Y offset

Indicates the value that remains between the original and the duplicate (in Y-orientation) after the creation of a duplicate.

## With dyn(amic) adaptation

This option takes care of the switching on or off of a function that automatically enters and uses the duplication values as X- or Y- orientation when duplicating with the right mouse button.

#### 5.7.1.1.0.2 Move Objects

#### X increment

Indicates the value how much the marked objects are moved or displaced when pressing the arrow keys on the keyboard.

#### Y increment

Indicates the value in Y-orientation how much the marked objects are moved or displaced when pressing the arrow keys on the keyboard.

Indication: If you keep pressed the SHIFT key during the movement, the value of the displacement is reduced to a tenth part. If you keep pressed the SHIFT + CTRL key the displacement is a hundredth of the set step size.

#### 5.7.1.1.0.3 Job

#### Autosave interval

The *autosave interval* indicates the duration when your job data are automatically saved on the hard drive. This backup file is always in the EuroCUT main directory. Its name is always *autosave.job*.

### Max. number of jobs in history

The value indicates how many last opened jobs are listed at the end of the *file* menu.

#### Don't ask for save on exit

This option suppresses the save prompt, when the program is closed.

## Prompt "overwrite file?" when saving

This option takes care that it is checked before saving if the current file shall be overwritten.

#### Ask for "convert contour pen / color graduation?" before output

This option switches on or off the query that checks before the transfer to the Plot Manager if the line weight and/or color gradient shall be changed.

# Display job icons in Windows Explorer

This option generates a minimized job content thumabnail in front of the file name. This facilitates the file search.

#### Max. undo levels

Refers to the undo function in the edit menu.

#### Indication: This option can only be set if no job is loaded.

## No undo / redo for bitmaps larger than ... MB

For bitmaps that are bigger than the value set in this field the undo/redo-function is automatically **switched off** which means that the operations on this bitmap cannot be made undone.

Advantage: saving of time.

Reason: The expenditure of time (computational expenditure) for bitmaps from a specific size onwards becomes too big as for every undo / redo step a copy of the original (initial state) must be created.

The value that is entered in this field should be between 5-10% of the RAM available in the computer.

#### Delete undos before printing (max. memory utilization)

The *delete undos before printing* option deletes all undos done so far.

# 5.7.1.2 The Job Info... Setup

In this dialog, optional to the fields that are available for the user in the job info, **further** user-defined fields can be created that are shown in the dialog-boxes for loading and deleting files as long as they contain information.

The request job info automatically button indicates if, when saving a new job, the job info form is called-up automatically.

# 5.7.1.3 The Mouse... Setup

## CTRL+right mouse button assigned with

Here, you can define the assignment of the right mouse button. To do this, open the selection list and select the command that shall be carried out when clicking once with the right mouse button.

#### Delay at mouse click

This option increases the marksmanship when selecting objects. The default value is 100; the unit is millisecond. The higher this selected value the longer it takes until the object follows the mouse cursor. An accidental displacement of the objects is thus decreased.

Note: Users that are not so sure with the handling of the mouse should increase this value.

#### Mouse Wheel

These options ease the navigation on the EuroCUT desktop with computer mice, which a equipped with a mid-wheel button.

#### Zoom

This option - starting from the cursor position - increases or decreases the working area when turning the mouse wheel: according to the direction of rotation.

## Scroll vert.(ical)

This option - starting from the cursor position - moves the working area horizontally (Wheel + CTRL key) or vertically when turning the mouse wheel. According to the direction of rotation the movement is done to the left, top or bottom or to the right, top or bottom.

Note: The SHIFT key toggles between Zoom and Scroll mode!

#### Scroll window automatically

This option is switched on by default and takes care that whenever an object is moved above the edge of the working surface with the mouse, the working surface automatically is moved, scrolled.

# 5.7.1.4 The Output Devices... Setup

This category of the basic settings allows the definition of important parameters for the output on the output device. The default settings correlate with the information in the output dialog before the output of the job data to the connected device.

## **Current output device**

Here, the momentarily connected *output devices* are listed, the *driver* name and the *connection* -interface as well as the *mode* and the *material* from the material database are shown.

The ... button enables the new creation, modification and deletion of the respective pre-setting.

#### Port

Indicates with which computer interface the output device is connected.

### **Default Settings**

#### Keep reference point

This option takes care that no new origin is set after the output of a job. The successional output is done at the same coordinates as the previous.

#### Stack processing

This option enables an uninterruptible output without an interaction of the Plot Manager.

## Wait after segment

Waiting after segment indicates if the cutter shall remain at this position after the output of a cut segment. This option is typically needed with flatbed devices without integrated automatic foil transportation.

Segment thus indicates the maximum addressable area that can be processed in one piece.

After the segment the foil is forwarded by hand to the correct position.

#### Sort before output

Sort means that all inner objects are processed before the outer objects and that a sortation is done in x-axis-orientation. This switch takes care that the

#### 5.7.1 The Standard Settings Menu

foil is moved as little as possible in order to maintain the repeat accuracy as high as possible. This option is especially necessary with cutters with friction roll drive or when milling.

The output speed is slightly reduced with this setting.

#### Plot to file

This option does not lead the output of the data to the connected device but opens a dialog in which the path and the name of an output file can be given that will be saved to the hard disk.

#### Read out automatically

This option can be activated if a device is connected and "online" and a read out command for this device exists in the driver.

## Output only tool-assigned layers

This option takes care that only objects are output where a tool assignment to a layer was done.

## please refer to 4.3.1: Tool Assignment Via Layer

## Weeding border

This option defines if and with which distance a weeding frame is cut around the output objects. This option facilitates the weeding of foil.

#### Overlap

It defines the overlapping of two segments. This value takes for example care of the compensation for the shrinking that occurs with foils.

### Copy spacing

Copy distance defines the distance of copies on the output medium.

#### Segment spacing

Segment distance defines the distance between single segments of a job.

## Stack spacing

Stack distance defines if copies shall be stacked vertically. Requirement for the activation of this option is that the selected object can be output more than once on top of each other.

Indication: In the output-preview the first object is shown "normally". Each further object of the stack is shown with a black square filled with an X.

### No tooltips

This option takes care that no tooltips that were entered in the device driver are shown in the output dialog.

# 5.7.1.5 The Register / Jog Marks... Setup

Via this menu item the size, the position with regard to the selected object and the kind of register / jog and video marks can be determined.

Indication: The register / jog marks function serves for the determination of marks that are needed for the contour cutting.

#### ▶ please refer to 4.7.2.2: Jog Marks for Optical Recognition Systems

## 5.7.1.6 The Filter Setup

#### Auto import selection

This setup allows to define the search paths for the import as well as to select the file name for the automatic import of files (F12) and if the file is to be deleted after the import.

The Autoimport works as follows:

If EuroCUT is loaded and an EPS file is saved in one of the given search paths under the defined name (for example EuroCUT), then it activates automatically EuroCUT and this file will then be loaded directly to the working surface.

For the import of data from CorelDRAW, Illustrator, AutoCAD and Freehand an automatic export named CoRUN is implemented.

## please refer to 3.3: Autoexport - Scripts

## Turn off preview for

Here, the size that the bitmap-files (TIF, JPG, BMP, PCX, ...) and/or EPS files may have so that they are shown in the import-preview can be defined.

Reason: When unintentionally selecting a huge file, unnecessary waiting times can occur.

#### **DXF, HPGL Import**

# Close objects

If activated, the vector objects whose distance from start and end point are within the closing tolerance are closed respective connected automatically when importing.

#### 5.7.1 The Standard Settings Menu

### Close tolerance

In an entry field the value for the maximum distance from the start and endpoint up to where the objects are closed respective connected is to be entered

#### All lavers

If this option is activated all layers are considered when automatically closing otherwise only the ones in the adjoining list.

### Combine objects from same layer

If this option is activated all closed objects in the same layer are combined during the DXF-/HPGL-import.

# Export via clipboard and drag'n drop

#### Create additional EPS format

If this option is activated an additional EPS-format of the selected objects is created when exporting via clipboard or drag'n drop.

### After import

## Fit working area to objects with following margin offsets

If this option is activated the working area is adjusted to the imported objects when importing.

When working with EuroCUT all distances between copies are calculated by means of the paper size.

#### Fix object size

If this option is activated all imported objects are provided with the object attribute "fixed object size". Thus the size modification is deactivated.

#### Fix object size for output

If this option is activated all imported objects are provided with the object attribute "fixed object size for output". If this option is active no size compensation takes place during the output. The objects are only positioned and rotated after the reading of the marks.

#### Separate layers by names

If this option is activated, for each color that has a not yet existing layer name a new layer is created. Thereby, same layer names are put in one layer.

#### At PDF Export

## Integrate JOB file into PDF file on eport

If this option is activated, the job file from the current window is embedded into the PDF file while PDF export.

Indication: The job file can be loaded at import separately.

## No page selection on Import

If this option is activated, the page selection when importing a PDF file is suppressed - the page selection dialog will be skipped.

please refer to 4.5: Import

# 5.7.1.7 The RIP... Setup

#### Standard RIP

Two particular RIPs are meant as extensions to EuroCUT Basic 7: **EuroVPM** and **Pjannto RIP.** 

## EuroVPM Option

This option must be enabled from the EuroVPM licensee. Using the ... button, goes to the folder containing the EuroVPM.exe file.

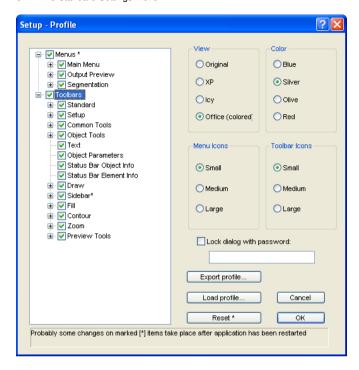
## Pjannto RIP Option

This option must be enabled from the Pjannto RIP licensee. In EuroCUT no more settings have to be done.

# 5.7.1.8 The Profile... Setup

The **Profile...** setup serves the customization of the desktop. The user or administrator can adapt the EuroCUT interface to fit his needs or restrict it to its necessary amount. The so defined user profile can be exported or be transferred - provided with a password protection - onto other licensed client computers.

#### 5.7.1 The Standard Settings Menu



## 5.7.1.8.1 Presentation

The following options are possible: *Original, XP, Icy, Office (colored)*. Changes are executed directly.

#### 5.7.1.8.2 Color

The following options are possible: **Blue, Siver, Olive, and Red**. Changes are executed directly.

#### 5.7.1.8.3 Menu Icons

Possible sizes are: **Small, Medium and Large**. A preview in the left hand area of the dialog shows, what effect the changes have.

# 5.7.1.8.4 Toolbar Icons

Possible sizes are: **Small, Medium and Large**. A preview in the left hand area of the dialog shows, what effect the changes have.

# 5.7.1.8.5 Lock Dialog with Following Password Option

If here a password is assigned, this password is queried while the activation of the *Profile Menu Item*. Changing the view is only possible with the known password.

## 5.7.1.8.6 Export Profile Button

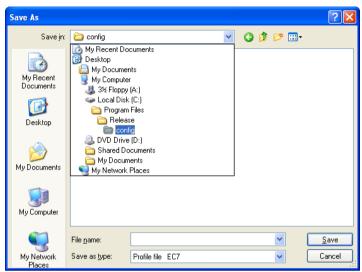


Fig. 5.7-1: Save profile dialog with default path

Enabling of the *Export Profile* button allows saving of customize EuroCUT profiles. The used file extension is \*.EC7. As default \*.EC7 files are saved in the folder, where the program data are located.

Note: If all menus or the settings menu were accidentally disabled, then access on the profile resp. profile file is possible using the sytem menu. The system menu is enabled with a click on the program logo, which you'll find left from the program name in the program bar.



Fig. 5.7-2: System menu with Profile... sub menu

#### 5.7.1.8.7 Status Area

In the status area messages and infos are displayed that explain the program's operation.

## 5.7.2 The Color Palette Command

With this command new color palettes can be created, loaded or saved.

#### **Layer Numbers**

If this option is active layer numbers are shown in the layer-toolbar.

## Laver Info...

Opens the dialog for the setup of the layer toolbar. Here, you can define which information is shown if the mouse cursor is positioned above a layer color.

Possible information is: color-number, *RGB values, CMYK values, material name, mode/tool, material* and *amount objects.* In addition, the *amount of visible layers* and the *width of the window* can be set.

An "I"-button opens a window with shortcuts of the *laver* toolbar.

## Layer Order...

This option opens a dialog for the modification of the layer order respective the output order.

## Only Sel. Layer Visible

If this option is activated only the objects lying in the selected layer are shown on the working surface.

#### Delete Sel. Layer

Deletes the selected layer from the layer list.

#### **Delete Unused Layers**

This option removes all unused layers, all layers without objects and without device connection.

## **New Palette**

All color layers that have layer numbers bigger than 6 are removed. You use this command if you want to define a new color palette individually. The selection of the layer color is done by just selecting the desired color with your mouse cursor and then activating the *OK* button.

#### 5.7.2 The Color Palette Command

#### Load Palette...

The previously defined palettes can be loaded.

#### Save Palette

With this command you save a newly defined or a modified standard palette on your hard disk. If this new or modified palette is saved as default palette it will be used at every new start of EuroCUT.

#### Save Palette As...

This command allows the new allocation of a palette name.

#### Default

This command loads the color palette that is delivered as standard with EuroCUT. It is a Mactac foil color chart that was defined as default palette by means of the color fan.

## **Palette History**

This function facilitates the loading of the last 4 color palettes without the detour via the file directory tree. At the end of the menu list of the color palette menu the names of the last 4 edited color palettes appear. Click with the mouse cursor on the desired palette name and thus open the selected palette.

## 5.7.3 The Control Panel... Command

This command activates the Windows control panel in order to make possibly necessary modifications to the system parameters of Windows. This especially refers to the installation of printers, drivers and the configuration of serial interfaces (COM).

# 5.7.4 The Working Area... Command

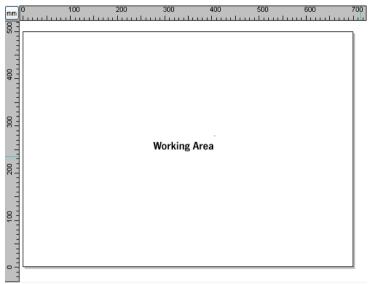


Fig. 5.7-3: Working area with shadows and rulers

Here, you can newly define the size and color of your working area. The working area is displayed as a paper frame with a gray shade on the right and bottom next to the frame (see figure above). The color of the working area is freely definable; this guarantees an optimal layout control on the screen.

Pre-defined are for example DIN-A-sizes. Besides the fix defined measures you can define any number of user-defined working area. One can be defined as *standard*. It will then be pre-set at every "file new".

This option is a very helpful function for everybody who has e. g. a milling or an engraving machine as the new entry in each case of the usable area can be omitted.

Indication: A double click on the shade right next and below the working area also opens this dialog.

## 5.7.5 The Rulers... Function

With this function you define the positions where the rulers shall be placed. Due to lack of space the display of the rulers can be abandoned. With diametric display each 5th step is drawn longer and with non-diametric each 2nd and each 4th once again.



# 5.7.6 The Unit of Measurement Function

This instruction switches the measuring unit to the preferred unit (mm, cm or inch).

Indication: The metric can also be changed directly via a button that is in the angle of both rulers.

## 5.7.7 The Grid... Function

This option shows either the grid itself or only the crosspoints of the gridlines CTRL+R (raster) on the working surface. This function facilitates the orientation and positioning of objects on the working surface.

The distance of the gridlines and the offset in X-/Y-orientation can be freely defined. Reference point thereby is the left down corner of the working surface. This point represents the 0/0-position to which the offset is added up.

A positioning assistance with "magnetic" influence takes care of the accurate justification of the objects.

### 5.7.8 The Undo / Redo Command

With this instruction the *undo* / *redo* function can be switched on or off.



Advantages when undo / redo switched off:

With big or many objects the node processing is faster. The testing phase (initial state -> edition -> temporary final state) with several processing steps can be made undone as follows:

1. Switch off undo/redo, 2. edit objects and 3. switch on undo / redo

The selection of the *undo* function in the *edit* menu reestablishes the state before point 1.

## 5.7.9 The Cross-Hair Command

If you activate this option the cursor becomes a cross that reaches across the whole width and length of the EuroCUT desktop. As soon as you move the mouse cursor beyond the desktop (for example in order to select a tool), it becomes an arrow again.



## 5.7.10 The Guidelines... Function

Guidelines (subsidiary lines) are blue dashed orientation lines that you can use as support for the construction - also skewed guidelines. In addition, they facilitate the positioning of graphic objects and text blocks on the working surface.



Indication: If the positioning support is activated the subsidiary lines have a "magnetic" effect on the objects coming close-by and allow the most accurate positioning.

# 5.7.11 The Snap Mode Function

The snap mode facilitates the creation of objects at the subsidiary lines. This option activates the "magnetic" effect on graphic objects and text blocks.



## 5.7.12 The Lock Guidelines Command

With this option you can block all subsidiary lines so that they cannot be marked or displaced anymore. Only by clicking once again on this menu instruction the subsidiary lines are unlocked and can be displaced again.



## 5.7.13 The Guidelines Visible Command

With this option you can make all subsidiary lines invisible. Only by clicking SHIFT+H once again on this menu instruction the subsidiary lines become visible again.

# 5.7.14 The Choose Language... Command

This instruction opens a dialog with which the display language of EuroCUT can be selected.

# 5.8 The Window Menu

## 5.8.1 The New Window Command

Activating this instruction opens a new EuroCUT window.

# 5.8.2 The Tile Horizontally Command

The activation of this instruction places all open windows diminished - one above the other - horizontally.

# 5.8.3 The Tile Vertically Command

The activation of this instruction positions all opened windows diminished - side by side - vertically.

## 5.8.4 The Cascade Command

The confirmation of this instruction displays all windows diminished and cascaded (diagonally displaced).

## 5.8.5 The Close Command

Clicking this instruction closes the momentarily active window after prior safety query.

## 5.8.6 The Close All Command

Clicking this instruction closes all open windows after prior safety query.

## 5.8.7 The Standard Command

This command switches the *tool*-toolbar on the desktop or makes it disappear.

CTRL+1

## 5 8 8 The Sidebar Command

This instruction switches the so-called *Sidebar* on or off. The *Sidebar* contains several tabs (e. g. layer) and is normally displayed at the right border.

CTRL+2

# 5.8.9 The Setup Command

This instruction switches the **setup** toolbar on the desktop or makes it disappear.

CTRL+3

# 5.8.10 The Common Tools Command

This instruction switches the *common tools* toolbar on the desktop or makes it disappear.

CTRL+4

## 5.8.11 The Text Command

This instruction switches the Text toolbar on the desktop or makes it disappear.

CTRL+5

# 5.8.12 The Object Tools Command

This instruction switches the *object tools* toolbar on the desktop or makes it CTRL+6 disappear.

# 5.8.13 The Object Parameters Command

This instruction switches the *object parameters* toolbar on the desktop or makes it disappear.

CTRL+7

# 5.8.14 The Status Bar Object Info Command

This instruction switches the **status bar object info** toolbar on the desktop or makes it disappear.

CTRL+8

## 5.8.15 The Status Bar Element Info Command

This instruction switches the *status bar element info* on the desktop or makes it disappear.

CTRL+9

## 5.8.16 The Active Windows List

At the below part of the *window* menu instruction list all active jobs are listed.

Indication: If more than 9 jobs are active it will be indicated by the menu item: further windows.

# 5.8.17 The Further Windows... Command

This instruction is only visible if more than 9 windows are active. A window with a list of all active windows is opened. A click switches to the wanted window.

# 5.9 The Help Menu

# 5.9.1 The About ... Command

The selection of this menu entry opens an info window in which various information is shown. On the left part of the dialog among others the *serial number, version number, free disk space, co-processor,* or *type of processor* are shown. On the right down part of the dialog is a scroll window in which all the application files of the respective application version are listed. This file list can be printed via the *print* button.

Indication: If there should be problems with your EuroCUT version you can fix them the fastest, if this list is made available to our support staff.

# 5.9.2 The Help... Command

This option starts the **EuroCUT help**.



# 5.9.3 The Object Info... Command

The activation of this instruction opens an info window that contains information about the objects on the desktop. These are among others the number of objects, number of selections, vector objects, text blocks, all groups and combinations or all bitmaps.



The **selection** button opens the **object manager**.

# 5.9.4 The Install Autoimport Plug-Ins... Command

Enabling this command opens the *Corun Installer* window, that lists for which programs plug-ins are available. Programs which were automatically found are marked already. Select the *target* program for the intended data exchange in the *Eurosystems Software* list field.

Pressing the *Install* button starts the installation.

# 5.9.5 The Online Support Command

The activation of this menu item establishes a direct internet connection to the support page of the EUROSYSTEMS S.à.r.l. - <a href="www.eurosystems.lu">www.eurosystems.lu</a>.

# 5.9.6 The Remote Support... Command

Via remote control the content of the screen of a computer can be transferred in realtime to another computer. Thus it is possible that two users who are at different places look at the same desktop. While you are on

#### 5.9.6 The Remote Support... Command

the telephone with our consultant (support) you can show each other documents or applications even if you are far apart from each other in reality. The direction of transmission respective line of vision can be changed with a mouse click. Thus you can choose if you want to look together at your screen or at the screen of your consultant. In order to be able to use the remote support you need an active internet connection.

# 5.9.7 The Live Update Command

This instruction activates a software update via internet.

Indication: Requirement is an active internet connection on the computer where the software is installed.

## 5.10 Context Menu Left Mouse Button

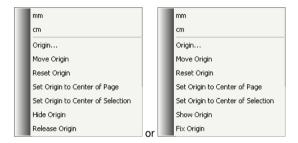
## 5.10.1 Context Menu Ruler

## 5.10.1.1 The *Unit* Button



A click on the **Unit button** activates one of the following context menus:

Note: Which of the two is enabled, depends on whether objects are selected on the working area and what zero point setting is active.



## 5.10.1.1.1 Origin...

This command opens the following dialog, with which the coordinates of the zero point can be set manually:



## 5.10.1.1.2 New Position

#### X Field + Measuring Unit

In the *X field*, the absolute coordinate of the zero point on the X-axis can be specified.

Note: The unit depends on the setting of the ruler.

5.10.1 Context Menu Ruler

### Y Field + Measuring Unit

In the Y field, the absolute coordinate of the zero point on the Y-axis can be specified.

Note: The unit depends on the setting of the ruler.

### **Display as Cross-Option**

If this option is activated, the origin point is represented by a dashed coordinate cross.

## 5.10.1.1.3 Move Origin

This command serves to move the ruler origin to any position on the desktop.

## 5.10.1.1.4 Reset Origin

This command serves to move the origin point into the lower left corner of the working area.

# 5.10.1.1.5 Set Origin to Center of Page

This command serves to move the origin point to the center of the working area (center of page).

# 5.10.1.1.6 Set Origin to Center of Selection

This command serves to mirror or place objects at the coordinate axis.

Note: This command is only visible if one or more objects are selected on the working area.

## 5.10.1.1.7 Hide Origin

This command serves to switch the ruler zero point to invisible.

## 5.10.1.1.8 Release Origin

This command serves to release the fixation of the ruler origin in order to move it with the mouse.

## 5.10.1.1.9 Show Origin

This command serves to switch the ruler zero point to visible.

Note: Only visible, if the Display as Cross-Option is active (see above).

# 5.10.1.1.10 Fix Origin

This command serves to anchor the ruler zero point at a definite point.

# 5.11 Context Menus Right Mouse Button

## 5.11.1 Reference List of All Context Menu Commands

Context menus are called context menus as its structure adapts and changes depending on number and type of the selected objects (context). Context menus are always activated via the *right* mouse button. They serve for the fast access to important functions and tools, also to those that cannot be activated via the main menus.

Following menu entries displayed **bold** can appear in a context menu by clicking with the right mouse button.

Draw modes "line, curve, digitize mode, freehand"

- in the mode "line": arc, digi mode, freehand
- in the mode "curve": line, digi mode, freehand
- in the mode "freehand drawing": line, arc, digi mode
- in the mode "digitize": line, arc, freehand

In addition, if the object has more than 3 nodes: - close

#### Clones

- Select clone original
- Select clone objects

In the output preview:

- Material optimization (if no demo and more than 1 object)
- Change axis, hor. mirror, vert. mirror, recalculate (when segmenting), segment size (when segmenting), horizontal weeding lines (if weeding frame), vertical weeding lines (if weeding frame), weed border (if no copies)

If objects are not locked: - **ungroup** (if selection contains group), - **group** (if more than 1 object selected and no clone is selected)

Node editing if no locked objects are selected:

Insert (if node selected), - delete (if node selected) - break (if 1 node selected and another one is behind), - join (if 2 nodes selected (start/start or start/end or end/end)) - line (if curve node selected), curve (if line node selected), - new starting point (if 1 node selected and object closed)

If more than 1 node selected: - sharpen edge, - round, - join with line, - join with curve

If 2 nodes are selected within an object or a combination: - hor. object alignment, - vert. object alignment, - reduce nodes

If less than 2 nodes selected: - reduce nodes, - round..., - set origin to sel. node

#### Hatch module is installed:

If it was clicked within a closed object on selected or between 2 selected nodes: - **start tool path inside**, - **start tool path outside** 

Il 1 node selected & another is behind: - insert bridge (xy mm)

If more than 1 node selected: - create regmark at sel. nodes

If properties exist (job not protected by password):- properties

If plugin-version: - contour line

At application versions with text editor:

If not clicked on object, PhraseWriter exists and no node editing mode: - **text components** 

If text object selected or text in selected group or combination: and if sel. text can be edited (no attribute "not edible"):- **edit text**, - **textbox**, - **circular text...** 

If sel. text not locked: - cancel circular text (if text with circle set), - text to curves, - text to lines (if text has several lines), - remove text attributes (if existing)

If ONE not locked bitmap is selected: - reduce colors, - posterize, - vectorize, - revectorize (if possible), - contour

If ONE not locked closed vector-, combination- or text-object with bitmap-filling is selected: - remove mask

or one of these object types lies above a bitmap: - mask bitmap, - cut region

If clone-original selected: - **select clone objects** otherwise if ONE clone selected: - **select clone original** 

If no rulers, not clicked on an object and not in the output-preview: - guidelines...

If guidelines are fixed: - release guidelines otherwise - fix guidelines

If guidelines are hidden: - show guidelines otherwise - hide guidelines, - delete all guidelines, - insert guidelines to center of page, - origin..., - move origin, - reset origin, - set origin to center of page

If origin is displayed: - origin otherwise - show origin

If origin is fixed: - release origin otherwise - fix origin

#### 5.11.1 Reference List of All Context Menu Commands

If not clicked on object: - refresh screen, - import, - insert, - job-info, - job-calculation, - dimensions on selection, - hor. dimension, - vert. dimension, - hor. and vert. dimensions, - left border distance, - bottom border distance, - left and bottom border distance

If undo-buffer not empty: - Undo: < last action>

If redo-buffer not empty: - Redo: < last action>

If objects exist: - copy, - cut, - reverse selection

If export filter and exportable objects exist: - export

If Pjannto RIP is installed: - Pjannto RIP...

If PosterPrint is installed: - Posterprint-RIP...

If Posterjet is installed: - Posterjet...

If not locked objects exist: - add print marks

If nesting-DLL exists and sel. objects nested: - Nesting...

If group(s) selected: - ungroup

If more than one object and no clone-original selected: - group

If combination(s) were selected: - break combination

If combination has interior elements: - delete inner parts of combination

If more than one object and no bitmap or clone-original selected: - combine

If regmarks exist and if ONE mark and another object were selected: - **center regmark onto object** 

If several objects were selected: - search and replace regmarks

If only ONE object was selected: - search and replace regmarks due to sel. size

If objects selected but no group and no locked and not only ONE bitmap: - fill, - none, - color graduation..., - bitmap..., - layer color

If Ini-entry "defaults" / "transparency" on 1: - transparency...

If more than one object or an object with filling was selected: - **outline**, - **none**, - **hairline**, - **attributes...**, - **layer color** 

If more than one object or an object with wire frame was selected: - **layer color** or at least one not blocked object selected and Ini-entry "defaults" / "transparency" on 1:-transparency...

If exportable objects are selected and the clipart window is opened: - add to clipart category

# 5.11.2 Context Menu on Empty Working Area

text components... <Ctrl-M> Refresh Screen Import... Working Area...

Fig. 5.11-1: This menu appears if no objects lie on the desktop

## **Text components**

This instruction opens the Text components dialog.

## Refresh screen

This instruction refreshes the main window.

#### Import...

This menu entry opens the *import* dialog for the import of external file formats.

#### Insert

This menu entry inserts contents from the Windows clipboard to the EuroCUT working area.

## Working area

This menu entry opens the dialog for the pre-setting of the parameters of the working area.

## 5.11.3 Context Menu Text Block

Via the context menu of the right mouse button you have a fast access to the most important text edition functions.

#### 5.11.3 Context Menu Text Block



Fig. 5.11-2: The right mouse button context menu with text blocks

#### **Textbox**

The so called **textbox** comprises all text functions.

Detailed description: Please refer to 8.2: The Textbox Dialog.

## Align

The option *align* opens a menu with the following sub-functions.

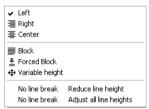


Fig. 5.11-3: Text alignment-submenu of the context menu

Via the *alignment*-function you determine how your text shall be aligned. Each text line can be aligned differently. Mark your text line and select the wanted line alignment from the list.

Attention: only possible in the textbox!

Detailed description: **please refer to 7.3: The** *Text Editor* **Toolbar**.

#### Case sensitive

ц <sub>н</sub> Uppercase	Ctrl+Shift+U
♯ <sub>h</sub> Lowercase	Ctrl+Shift+L
ኳቹ Invers uppercase & lowercase letters	Ctrl+Shift+Y
FRH Capital	Ctrl+Shift+K

Fig. 5.11-4: Uppercase / lowercase submenu of the context menu

### Uppercase / lowercase

Mark the letter(s) that shall be written in "CAPITAL" or "small" letters by keeping pressed the left mouse button and draw it above the wanted area. Now open the right mouse menu by clicking once the right mouse button and select the function that shall be used on the marked text.

You can reverse the operation by activating the menu item *reverse uppercase* / *lowercase*.

## Small capitals

Small capitals in the typography are capital letters in x height. X-height means the height of the lowercases, especially the height of the small x. Open the right mouse menu by once pressing the right mouse button and select the menu item *Capital*. The marked text will be changed to small capitals.

#### Load text block

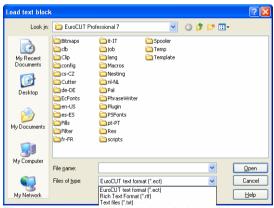


Fig. 5.11-5: Load text block dialog window with import format list

#### Save text block as

#### 5.11.3 Context Menu Text Block

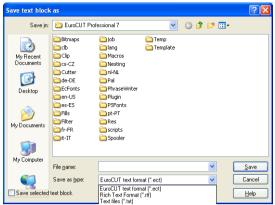


Fig. 5.11-6: Save text block as dialog window with export format list

#### Text database

This menu entry is without function.

## Line spacing



Fig. 5.11-7: Dialog for the setting of the line spacing

The *line spacing* indicates the distance between the two base lines. It can be given in millimeters, centimeters, inch, dots or percent.

Indication: The %-setting is the indication referring to the cap height. The value always refers from the current (where the text cursor is) to the previous line and there from the base line to the base line.

If more than 2 lines are marked the set line spacing is applied to all marked lines. If the distance between line 1 and 2 shall be different to the one between line 2 and 3, first line 1 and 2 must be marked and the respective line spacing must be set. Then, line 2 and line 3 must be marked and again the wanted line spacing must be entered.

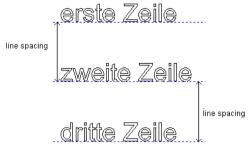


Fig. 5.11-8: Example for line spacings - here same line spacings

### Word spacing



Fig. 5.11-9: Dialog for the setting of the word spacing

With this value you define the distance between two adjacent *words* in millimeters, centimeters, inch, dots or percent from the *normal-space*. If the distance between word 1 and 2 shall be different to the one between 2 and 3, word 1 and 2 must first be marked and the respective spacing entered. Then word 2 and 3 must be marked and again the wanted word spacing must be set.

Indication: If more than 2 words are marked, the set word spacing is applied to all marked words.



Fig. 5.11-10: Example for word spacings

### Character spacing

Fig. 5.11-11: Dialog for the setting of character spacing

The *character spacing* determines how far the single characters of your text are from each other.

Indication: 100% corresponds to the defined Kerning-values.

#### 5 11 3 Context Menu Text Block

Values below 100% *compress* the text and decrease the tracking of the text. Values above 100% *stretch* the text and increase the tracking of the text. In addition to the %-indication the indication can also be done in millimeter, centimeter, inch or dots.



Fig. 5.11-12: Example for the character spacing

#### Angle of rotation



Fig. 5.11-13: Dialog for the setting of rotation angles of text characters

The *angle of rotation* determines how much the marked text shall be rotated. Values between 0° and 360° can be entered.

Indication: If the text cursor is within the range of the rotated letters, words or characters, it will be continued to be written with this rotation angle.



Fig. 5.11-14: Example for rotated letters

If letters are rotated, depending on the Kerning of the font type, unaesthetic transitions can occur which then can be adjusted via the function *character spacing*.

In the previous illustration you can see that after the rotation the rotated text collides with the "o". Mark the "o" and the rotated text and change the *character spacing* of the marked text in that way that the overlappings are eliminated.

### Moving character

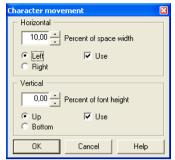


Fig. 5.11-15: Dialog for the setting of the movement parameters with text characters

In this dialog the incrementation of the character movement, horizontal and vertical, can be set.

### How are characters, words or whole lines within a text block moved interactively?

If the text cursor is *in a line* and the CTRL-button is pressed and kept pressed, the line can be moved upwards or downwards by pressing the respective arrow keys.

If the text cursor is *before the first letter in a line* and the CTRL-button is pressed and kept pressed, the line can be moved to the left or right by pressing the respective arrow keys.

If the text cursor is in a line and the CTRL-button is pressed and kept pressed, the part of the line which is *behind the cursor* can be moved to the left or right by pressing the respective arrow keys.

If the text is marked, the CTRL-button is pressed and kept pressed, the *marked text* can be moved to the direction in which the arrow is pointing by pressing the arrow keys.

#### Delete text attributes

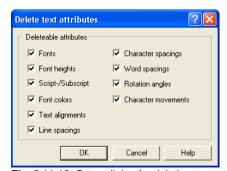


Fig. 5.11-16: Setup dialog for deleting text attributes

With this dialog font attributes that were inserted via the text tools can be deleted again.

Indication: This dialog can be called up for any text block.

# 5.11.4 Context Menus Node Editing

#### Systematics of the menu structure:

If no locked objects are selected: - **insert** (if node selected), - **delete** (if node selected) - **break** (if 1 node selected and another one is behind), - **join** (if 2 nodes selected (start/start or start/end or end/end)) - **line** (if curves-node selected), - **curve** (if line-node selected), - **new starting point** (if 1 node selected and object closed)

If more than 1 node was selected: - **sharpen edges**, - **round edges**, - **join with line**, - **join with curve** 

If 2 nodes within an object or a combination are selected: - hor. object alignment, - vert. object alignment, - reduce nodes

If less than 2 nodes are selected: - reduce nodes, - round..., set origin to sel. node

### The menus in the graphical display

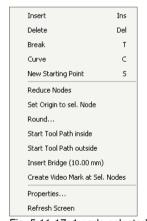


Fig. 5.11-17: 1 node selected

### Start tool path inside or start tool path outside

A start tool path is used in the milling, graving and laser processing. The immersion point of the tool is moved from the original starting point from inwards or outwards. The advantage is that at the later output object no "immersion traces" are visible. Depending on the turning direction and arrangement of the object the start tool path is set inwards or outwards. The parameters for the start tool paths are set in the *tools*-menu.

# Create regmark at sel. nodes

This option takes care that a regmark is created at the selected node.

Insert	Ins			
Delete	Del			
Curve	C			
Sharpen Edge	Ctrl-S			
Round Edge	Ctrl-R			
Join with Line	Ctrl-G			
Join with Curve	Ctrl-K			
Hor. Object Alignment	Ctrl-H			
Vert. Object Alignment	Ctrl-V			
Reduce Nodes				
Round				
create regmark at sel. nodes				
Properties				
Refresh Screen				

Fig. 5.11-18: 2 nodes selected

# Sharpen edge



This function combines two nodes with two "smooth" lines. Nodes that lie between the two marked nodes are deleted!

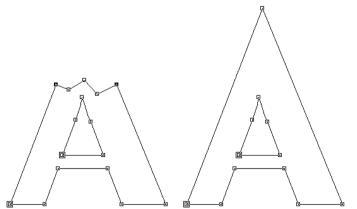


Fig. 5.11-19: Example for sharpen edge - filled with black the marked nodes

Indication: If one of the selected nodes lies at an edge the original angle is kept.

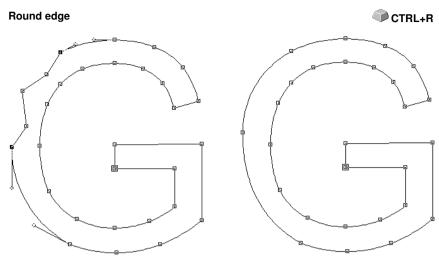


Fig. 5.11-20: Example for round edge - filled in black the marked nodes

In the above illustration you can see that the "G" in the outer left area must be revised. To do this, the nodes above and below the "error" are marked. If now the *round edge*-function is activated the nodes that lie between the marked nodes are deleted and the two dots are connected with a curve.

### Join with line



The two selected nodes are connected with a line. Nodes that lie between the marked nodes are deleted.

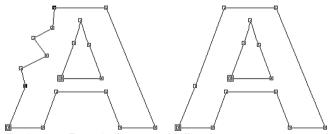


Fig. 5.11-21: Example Connect with line

#### Join with curve



The two selected nodes are connected with a curve. Nodes that lie between the marked nodes are deleted.

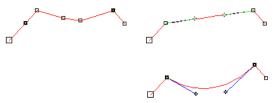


Fig. 5.11-22: Example connect with curve

# Hor. and vert. object alignment



The object in which the nodes are selected are aligned at the horizontal respective vertical.

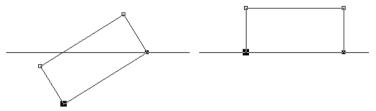


Fig. 5.11-23: Example for aligning object horizontally relative to the selected (filled with black) nodes

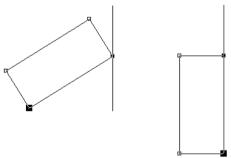


Fig. 5.11-24: Example for aligning object vertically relative to the selected (filled with black) nodes

### Reduce nodes ...



The parameter reduce nodes dialog appears in which following settings can be done:

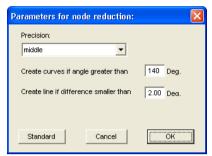


Fig. 5.11-25: Dialog for the settings of the accuracy of the node reduction

#### Precision

This value influences the conversion of lines to Bezier-curves. The higher the discrepancy the less curve instructions are needed in order to clone the initial line of curves.

### Create curves when angle greater than ... °

If at a node the angle of the lines is smaller than this limiting value the line of curves is interrupted at this node.

# Create line if difference smaller than ... $^{\circ}$

If a curve is created who's bending lies within the tolerance value it is converted to a line.

#### Node selection



#### Interactively round edges respectively sharpen edges

If you click with the mouse on a line of curves with the CTRL-button pressed on one, the node will be inserted at this position. This node serves for marking the rounding position. If the second node is selected you can sharpen, round or any other node edition function can be carried out.

# **6 Reference Part Output Preview**

# 6.1 The Output Menu

# 6.1.1 The Output Command

Starts the *output* on the connected device with the settings of the *output to device* dialog.

# 6.2 The Options Menu

### 6.2.1 The Save As... Command

The *save as...* command in the *output* preview ... saves the job with all changes that were done in the preview. When returning to the working surface all these settings would be lost, therefore, the job can here be saved under another name.



please refer to 5.1.6: The Save as... Command

### 6.2.2 The Rotate Axis Command

This command rotates the marked objects at 90° counter-clockwise.

please refer to 5.3.1: The Rotate Axis Command



### 6.2.3 The Horizontal Mirror Command

The selected object is mirrored at the horizontal through its center-point.

▶ please refer to 5.3.3: The *Horizontal Mirror* Command



### 6.2.4 The Vertical Mirror Command

The selected object is mirrored at the vertical through its center-point.

please refer to 5.3.4: The Vertical Mirror Command



# 6.2.5 The Optimization... Command

The foil optimization takes care that all objects are arranged in a way that they take the least space on the foil. By rotation or no rotation of objects it is taken care of, that the material waste can be decreased.

- please refer to 5.5.10: The Optimize Material... Function
- please refer to 4.7.4: Cutting Milling Creasing Drawing ...

### 6.2.6 The Sort With Simulation... Command

This command opens the **sort objects** function with which the output order and the direction of rotation can be defined. The sortation can de done dependent or independent on layer. Also, the preferred direction of the sortation can be defined.

CTRL+F10

In a preview window the output of the objects is simulated graphically; here, the traverse paths of the tool head can also be drafted. The simulation can be done unlimited without changing the original objects.

please refer to 5.3.18: The Sort With Simulation... Command

In detail: Please refer to 8.6: The Sort With Simulation... Tool

### 6.2.7 The Recalculate Command

The *recalculate* command enables the modification of the output-parameters or of the driver settings without leaving the output routine.



This command switches back from the *output* preview to the *output* dialog.

### 6.2.8 The Initial View Command

Puts back the output preview to the status before having pressed the **preview** button in the output dialog. All changes are made undone.



# 6.2.9 The Horizontal Weeding Lines Command

Weeding lines serve for the better processing of big jobs. Material lengths of several meters in length or width are difficult to handle, therefore you can insert weeding lines during the foil cutting that divide the job into smaller parts that are easier to handle.



The *horizontal weeding lines* are set with the hotkey "h" or drawn with the arrow from the weeding frame dashed in blue.

**▶** please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...

# 6.2.10 The Vertical Weeding Lines Command

Weeding lines serve for the better processing of big jobs. Material lengths of several meters in length or width are difficult to handle, therefore you can insert weeding lines during the foil cutting that divide the job into smaller



parts that are easier to handle.

The *vertical weeding lines* are set with the hot key "v" or drawn with the arrow from the weeding frame dashed in blue.

please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...

### 6.2.11 The Test Drive Command

If the *test drive* command is activated the connected device goes with lifted tool head along the weeding frame. This also happens if the option "weeding frame" was not activated.

Compare *test drive* button in the *output* dialog ▶ <u>please refer to 4.7.4: Cutting - Milling - Creasing - Drawing ...</u>

### 6.3 The View Menu

### 6.3.1 The Material Width Command

When activating this command the section is adjusted to the values for the *material width* defined in the driver or set in the *output* dialog.



# 6.3.2 The All Objects Command

This function changes the display in that way that all objects can be seen on the screen. The section is selected so that it is the biggest possible display showing all objects.



If, while activating this command the SHIFT key is pressed, only the marked objects are zoomed to maximum.

# 6.3.3 The Selected Objects Command

If this command is activated only the *selected objects* from the *output* preview are displayed as large as possible.



### 6.3.4 The Total Area Command

If this menu item is activated the preview of the whole material surface is shown.



The size of the shown surface depends on the so called frame size (foil height x foil width) of the output device to be accessed.

If in the *output* dialog a driver for a friction feed cutter was selected, in the preview always a material length of 30m (32,81 yd) is shown.

If in the cutting dialog a driver for a flatbed cutter was selected, the maximum width of the flatbed cutter is shown as material length.

### 6.4 The Window Menu

### 6.4.1 The New Window Command

Activating this instruction opens a new EuroCUT window.

# 6.4.2 The Tile Horizontally Command

The activation of this instruction places all open windows diminished - one above the other - horizontally.

# 6.4.3 The Tile Vertically Command

The activation of this instruction positions all opened windows diminished - side by side - vertically.

### 6.4.4 The Cascade Command

The confirmation of this instruction displays all windows diminished and cascaded (diagonally displaced).

### 6.4.5 The Close Command

Clicking this instruction closes the momentarily active window after prior safety query.

### 6.4.6 The Close All Command

Clicking this instruction closes all open windows after prior safety query.

### 6.4.7 The Common Tools Command

This instruction swithes the *Common Tools* toolbar on or off.

CTRL+4

# 6.4.8 The Object Parameters Command

This instruction switches the object parameters toolbar on the desktop or makes it disappear.

STRG+7

# 6.4.9 The Status Bar Object Info Command

This instruction switches the **status bar object info** toolbar on the desktop or makes it disappear.



### 6.4.10 The Status Bar Element Info Command

This instruction switches the status bar element-info on the desktop or makes it disappear.



### 6.4.11 The Active Windows List

At the below part of the *window* menu instruction list all active jobs are listed.

Indication: If more than 9 jobs are active it will be indicated by the menu item: further windows.

### 6.4.12 The Further Windows... Command

This instruction is only visible if more than 9 windows are active. A window with a list of all active windows is opened. A click switches to the wanted window.

# 6.5 The Help Menu

# 6.5.1 The About ... Command

The selection of this menu entry opens an info window in which various information is shown. On the left part of the dialog among others the *serial number, version number, free disk space, co-processor,* or *type of processor* are shown. On the right down part of the dialog is a scroll window in which all the application files of the respective application version are listed. This file list can be printed via the *print* button.

Indication: If there should be problems with your EuroCUT version you can fix them the fastest, if this list is made available to our support staff.

# 6.5.2 The Help... Command

This option starts the EuroCUT help.



# 6.5.3 The Install Autoimport Plug-Ins... Command

Enabling this command opens the *Corun Installer* window, that lists for which programs plug-ins are available. Programs which were automatically found are marked already. Select the *target* program for the intended data exchange in the *Eurosystems Software* list field.

Pressing the *Install* button starts the installation.

# 6.5.4 The Online Support Command

The activation of this menu item establishes a direct internet connection to the support page of the EUROSYSTEMS S.à.r.l. - <a href="https://www.eurosystems.lu">www.eurosystems.lu</a>.

# 6.5.5 The Remote Support... Command

Via remote control the content of the screen of a computer can be transferred in realtime to another computer. Thus it is possible that two users who are at different places look at the same desktop. While you are on the telephone with our consultant (support) you can show each other documents or applications even if you are far apart from each other in reality. The direction of transmission respective line of vision can be changed with a mouse click. Thus you can choose if you want to look together at your screen or at the screen of your consultant. In order to be able to use the remote support you need an active internet connection.

# 6.5.6 The Live Update Command

This instruction activates the update of the software via the internet.

Indication: Requirement is an active internet connection on the computer where the software is installed.

# 6.6 Context Menu of The Right Mouse Button

# **6.6.1 Context Menu Output Preview**

Material Optimization Change axis Hor, Mirror Vert, Mirror Weed border Group

Fig. 6.6-1: Context menu of the output preview with weeding frame function

### Weed border

This function creates a weeding frame around the *selected* objects in the output preview unlike the weed border option.

All other menu entries can be activated via the main menu.

6.6.1 Context Menu Output Preview

# 7 Toolbars

### 7.1 The Standard Toolbar

The **standard** toolbar is switched on or off via the *window* menu.





Fig. 7.1-1: Freely placeable toolbar - Collection of standard tools



Fig. 7.1-2: Fixed standard toolbar

#### **BUTTONS FROM 1 TO 15**

- 1. Create New window
- 2. Open job
- 3. Save iob
- 4. Save all
- 5. Edit job info
- 6. Cut to Clipboard
- 7. Copy to Clipboard
- 8. Paste from Clipboard

- 9. Print objects
- 10. Import file
- 11. Export objects
- 12. Scan image
- 13. Undo
- 14. Redo
- 15. Help

# 7.2 The Setup Toolbar

The *setup* toolbar is switched on or off via the *window*-menu.





Fig. 7.2-1: Freely placeable setup toolbar



Fig. 7.2-2: Fixed setup toolbar

#### **BUTTONS FROM 1 TO 5**

- 1. Cross-hair on / off
- 2. Rulers on / off
- 3. Contour view on / off
- 4. Grid on / off
- 5. Setup working area

Indication: Alternatively the working area also can be defined by double clicking on shades of the working area!

## 7.3 The Text Editor Toolbar

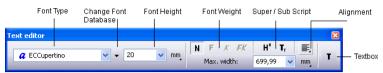


Fig. 7.3-1: The text toolbar

### Font Type

Here, you select the font by means of the name. You first mark the text by sweeping above the wanted part of the text with the left mouse button kept pressed or by moving the text cursor above the wanted part of the text with the arrow keys with the SHIFT key pressed. If the whole text shall be marked simply press the shortcut **CTRL+A**.

Indication: A double click in the text input line (cursor field) marks the whole text block.

### **Change Font Database**

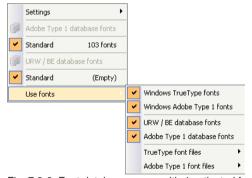


Fig. 7.3-2: Font database usage with 4 activated font formats

All in the Fontmanager activated font databases are listed here. The following 4 font formats are implemented:

- Windows TrueType fonts That are all TrueType fonts, which are activated in Windows.
- Windows Adobe Type 1 fonts That are all Type 1 fonts, which are activated in Windows.
- 3. **Standard (Adobe Type 1)** That are all Type 1 fonts, which are activated in Fontmanager's standard database.
- 4. *URW / BE Font database* That are all Ikarus BE fonts, which are activated in Fontmanager's BE database.

Indication: All font formats, which are activated here (check = yes) are displayed in the EuroCUT Basic 7 font selection list and can be used.

#### **Font Size**

In the input box *font size* you enter the height of capital letters (cap height). Directly next to it you determine the measuring unit to be used. Here, following units are available: *millimeter, centimeter, inch* and *points.* 

### Space (1/1, 1/2, 1/4, 1/8)

Key	_	CTRL	SHIFT	SHIFT+CTRL
SPACE	1/1	1/2 em	1/4 em	1/8 em
	em			

### **Font Weight**

The font weight of a font is selected via one of the four buttons. You can select between normal. **bold**. *italic* or *bold-italic*.

Indication: There are font types that have less than 4 weights. The buttons then are displayed in gray and cannot be activated.

### Subscript

A subscript text is a text that is displayed a little bit lower than the rest of the text in a row. Subscript characters are often used in scientific formulas.

Example: y2, the 2 shall be subscript: Result: y2

#### Superscript

A superscript text is a text that is displayed a little bit higher than the rest of the text in a row. Also superscript characters are often used in scientific formulas.

Example: x to the 2, the 2 shall be superscript: Result: x<sup>2</sup>

### Alignment

Via the alignment-function you determine how your text shall be aligned. Each row can be aligned differently. Mark your text row and select from the list the wanted row alignment.

Indication: When forcing justification each row is to be terminated with the ENTER key. The character spacing will be increased so that the maximum length of each row is reached.

Attention: With the option justification the single rows must not be terminated with the ENTER key. Here, the word spacing is adjusted in that way that the text alignment will be justified left and right.

### **Adjust Height of Caps**

The *adjust height of caps* option takes the maximum length and increases or decreases the font size accordingly. The cap height is not shown numerically after the modification any more. But it can be checked with the *measure*-tool.

After the activation of the *T* button in the tool toolbar, via the *text* menu and here the menu item *enter text* or the shortcut *T* a mouse pointer appears in the form of a capital "T" on the screen. If now the ENTER key is pressed the text input can be made. The exact position of the text is determined by you by positioning the tip of the mouse cursor on the spot where the text shall be inserted.

### No Line Feed - Reduce Line Height

If this option is activated no line feed is initiated that results from the maximum length but when excessing the maximum length the row height is decreased. This is especially useful with the serial number-function.

### No Line Feed - Fit All Line Heights

If this option is activated no line feed is initiated the results from the maximum length but when excessing the maximum length the row height of *all* text blocks is decreased. This is especially useful with the serial number function.

#### Max. Width

The value in the field *max. width* indicates when the new line in a text row occurs.

#### Textbox

Klicking the **T** button opens the so called *textbox*. The textbox allows editing texts, defining tabulators, parameterizing of circular text and selecting special characters from a character table.

### 7.4 The Node Toolbar



Fig. 7.4-1: Freely placeable node toolbar - collection of node editing tools

Indication: The object parameters toolbar (shown below) is switched over to the node toolbar while activating node mode. This happens either by double clicking a node or by clicking node editing button in the common tools toolbar.



Fig. 7.4-2: Freely placeable toolbar - collection of all object parameters

Tip: The functions of the node edition that are used the most can be called up via the right mouse button. The allocation of the right mouse button changes, depending if one or several nodes are marked. In detail: ▶ please refer to 5.11.4: Context Menus Node Editing

Indication: You select several nodes by keeping pressed the SHIFT key and by clicking with the left mouse button on the nodes that you want to mark one after another.

#### **Round button**



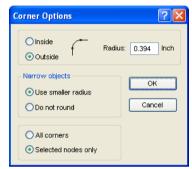


Fig. 7.4-3: Round dialog of nodes

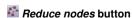
The following setting possibilities are available in the *round* dialog:

### **Rounding Inside**

If this button is activated *only* the *selected nodes* or the *whole object* are rounded inside at the given radius depending on the option selected in the dialog.

#### **Rounding Outside**

If this button is activated *only* the *selected nodes* or the *whole object* are rounded outside at the given radius depending on the option selected in the dialog.





### Reduce nodes

If this button is activated in the node edition all redundant nodes are removed which means the object is reduced of those nodes whose removal does not influence the course of the curve.

Attention: The node reduction always refers to the whole object.

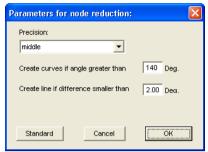


Fig. 7.4-4: Settings dialog for the node reduction

# Symmetric node button



With the instruction *symmetric node* the tangents are created symmetrically which means that both tangents form a line **and** the check points on both ends have the same distance to the node dot

# Sharp node button



With the instruction *sharp node* the symmetry and smoothing of a node is removed again. After that, each tangent can be modified. The display of the curve does not change at first.

### Smooth curve button



With this option the tangents of a curve are modified in that way that they form a line. Always the minimum possible modification of the tangents is selected for this. At the position where a line passes into a curve this instruction adapts the tangent exactly to the line.

The advantage of the **smooth curve** instruction is that the transition from curves to lines and the course of the curve is done smoothly. When cutting later unaesthetic offsets are thus avoided.

Indication: If on both sides of the dot to be edited there are lines this instruction is not available. When moving tangents both tangents of a curve node loose their symmetric alignment to one another. With the smooth curve-instruction they are turned into a line again.

# New origin button



If you want to mill it is important for you to know where the milling cutter starts respectively where the tool first dips into the material to be edited. The origin nodes are marked by a **square with an additional contour.** This option moves the origin to the previously marked node dot.

# ti Open node button



This option creates open objects. Mark the node dot to be separated and then activate the **open node** button.

# Join nodes button



With this function you can combine open objects with each other. Click with the node cursor on the first node dot. Press the SHIFT keyand mark now the second node dot. Marked node dots are / will be filled with black and the status row indicates how many objects are marked respective selected. At the end, activate the *join nodes* button and the object will be closed.

Tip: A second possibility for marking node dots is using the marking function. For marking, draw a frame around the wanted dots with the left mouse button pressed.

Indication: The connection is only possible if two nodes are marked that are both end points of an open object.

### Delete nodes button



This option deletes the node dot that was previously marked.

If it is an end point of an open object the two adjoining node dots are connected with a line if on one or both sides of the deleted node dots were curves. The node dots are connected to a line if on both sides of the deleted node were lines.

Indication: You delete a marked node dot the fastest with the DEL key on your keyboard.

# Insert node button



To insert node dots you move the node cursor to the spot on the wire frame of the object where the new node shall be inserted. Then you activate the *insert node* button.

Indication: CTRL - click inserts a node directly at the desired position.

### Connect with curve button



This option changes lines to curves with tangents.

# Connect with line button



This option changes curves to lines.

Indication: All information of the curve is lost.

# Start Tool Path inside button

This option inserts a so called start tool path inside at the selected node. (Special function for routers and lasers).

#### 7.4 The Node Toolbar

# Start Tool Path outside button

This option inserts a so called start tool path outside at the selected node. (Special function for routers and lasers).

# Align nodes horizontal button



This option aligns the selected nodes in the horizontal. With a doubleclick on a node - gets red - can be determined by which node is to be aligned.

# Align nodes vertical button



This option aligns the selected nodes in the vertikal. With a doubleclick on a node - gets red - can be determined by which node is to be aligned.

### Alignment buttons

This function aligns the node dots horizontally or vertically accurately.

Mark at least two node dots that shall be aligned accurately and double click on the **reference dot**. The reference dot is the dot to which shall be aligned.

# Arrange horizontally button



This function aligns node dots horizontally.





This function aligns the node dots vertically.

# 7

# Orthogonalize button



A further possibility to align nodes is to align corners. This function balances nodes that are almost vertical or horizontal to their predecessor or successor nodes. *Orthogonalize* is a combination of align horizontally and vertically. This way, *right angles* can be fast created.

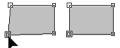


Fig. 7.4-5: Align corners - before / after

The previous illustration shows the method of operation of the *ortthogonalization*. In the left illustration you can see the square in the original state. The down left corner is selected, the *node* toolbar is opened by a double click on this corner. The marked node will be aligned horizontally and vertically to its adjoining nodes. This way, a right angle is created. The result can be seen in the right illustration.

# 7.4.1 Direct Input of Coordinates of Node Positions

### Position (mm) - horiz.(ontal) and vert.(ical)

In the *node* toolbar section *position* node dots can be positioned through the input of their **X** or **Y-coordinates**. With this positioning you differentiate between *absolute* and *relative* values.

#### Absolute values

With the input of absolute values the entered values are allocated to the **selected** node.

#### Relative values



With the input of relative values the selected node is moved at the given coordinate value in horizontal and vertical direction *relative to the selected* node which means the entered and original coordinates are added.

### Method of operation:

You first enter the wanted coordinates and keep pressed the SHIFT key while activating the **move** button.

#### Horizontal / vertical restriction when drawing lines and curves



With the CTRL key pressed lines can be restricted vertically or horizontally which means that the movement of the line is only possible in one direction.

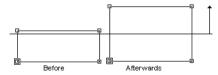


Fig. 7.4-6: Restricted drawing of nodes resp. lines

When drawing curves the curve is deformed. The deformation depends on the selected contact point as you can see in the following illustration.

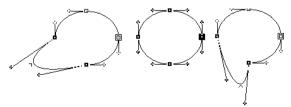


Fig. 7.4-7: Restricted drawing of curves

Indication: The node attribute smooth is automatically saved if the selected and

7.4.1 Direct Input of Coordinates of Node Positions

### following nodes are a curve.

# Tip: The zoom functions are also active in the node editing mode. Radius

In the window right next to the buttons mentioned above the *radius* with which the node or nodes shall be rounded can be set.

### Narrow objects

Here, you can select between two options:

If the option *use smaller radius* is selected EuroCUT calculates the radius that still is applicable for the rounding of this narrow object.

When selecting the *do not round* -option it is not rounded with narrow objects.

# 7.5 The Object Tools Toolbar

The Object Tools toolbar is switched on or off via the Window menu.



Note: This is the section which in former EuroCUT versions (right mouse click for icon assignment) was the variable section of the object toolbar.



Fig. 7.5-1: Freely placeable toolbar - collection of object tools



Fig. 7.5-2: Anchored toolbar

#### **BUTTONS FROM 1 TO 21**

- 1. Delete Objects
- 2. Do Axis Change with Objects
- 3. Horizontal Mirror of Selected Objects
- 4. Vertical Mirror of Selected Objects
- 5. Group Objects
- 6. Ungroup Objects
- 7. Combine Objects
- 8. Release Combination of Objects
- 9. Generate Block Shadow
- 10. Align Objects
- 11. Close Objects

- 12. Open Objects
- 13. Round Objects
- 14. Delete Redundant Nodes
- 15. Vectorize Objects
- 16. Generate Contour Line
- 17. Start Foil Optimization
- 18. Set Start Tool Paths
- 19. Hatch Objects
- 20. Generate Out- or Inlines
- 21. Weld Objects

# 7.6 The Object Parameter Toolbar



Fig. 7.6-1: Freely placeable toolbar - collection of object parameters

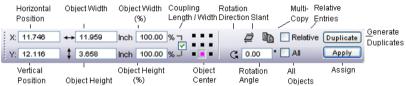


Fig. 7.6-2: Object parameters toolbar with explanations

# 7.6.1 The Multi Copy Command

Definition: Multi Copy = Multiple copies of selected objects (Duplicates)

# 7.6.1.1 The Multi Copy Button

Pressing the button opens the following dialog:



# 7.6.1.2 Copies X:

Using the 
■ or 
■ button the number of duplicates can be increased or decreased in increments of one. The alignment is done in the *Main Direction*. Alternatively, any integer value may be entered in the field.

## 7.6.1.3 Copies Y:

Using the 
→ und 
→ button the number of duplicates can be increased or decreased in increments of one. The alignment is done in the *Main Direction*. Alternatively, any integer value may be entered in the field.

#### 7.6.1.4 Offset X:

This value determines the distance between the duplicates in X-Axis direction.

#### 7.6.1.5 Offset Y:

This value determines the distance between the duplicates in Y-Axis direction.

## 7.6.1.6 The Select Objects Option

If this option is enabled, all duplicates will be selected finally.

# 7.6.1.7 The Fill Working Area Option

If this option is enabled, then the working sheet only and not the desktop is filled with duplicates.

Note: Enabling this option, de-activates the Copies X and Copies Y fields.

# 7.6.1.8 The Create Clones Option

If this option is enabled, then the selected object is uses as control object for cloning. All duplicates are generated as clone objects.

# 7.6.1.9 The Group Result Option

Enabling this option groups all duplicates finally.

# 7.6.1.10 The Optimize Traverse Path Option

If this option is enabled, duplicates are generated in meanders. This reduces the head movement of the output device and shortens the output process.

Note: The main direction option defines additionally, if meandering is done in X-Axis or Y-Axis direction.

# 7.6.1.11 The Main Direction Option

The 
■ button sorts the duplicates in Y-Axis direction - "column by column". The
■-button sorts the duplicates in Y-Axis direction - "line by line".

# 7.7 The Status Line Object Info

This status line informs about the properties and attributes of objects on the EuroCUT desktop. This information comprises number, type of object, color model, color value and many other data important for the evaluation.

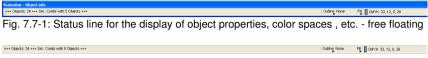


Fig. 7.7-2: Status line for the display of object properties, color spaces, etc. - fixed

## 7.8 The Status Line Element Info

This status line indicates the current mouse cursor position in x/y-coordinates. In addition, in the left part next to the cursor coordinates subsidiary texts and additional texts from the layer info for example from the field *material name* are displayed. It is also possible to show driver information as for example the set tool depth for a particular layer.

Fig. 7.8-1: Status line element with subsidiary texts and element information, here coordinates

# 7.9 The Preview Tools Toolbar



Cliparts can also be inserted and pulled out by Drag'n Drop (comment using right mouse button)

#### The Arrow Tool



This mode allows you to *mark, move, group temporarily* (marking function) and *modify the size* of objects in the *output* preview.

### The Magnifying Glass+



The button with the (+) plus sign increases parts of the output preview. Draw with the marking function a frame around the area that shall be increased. This function can be carried out successively several times until a beep reminds acoustically of the last possible step.

# T(Num)

#### The Magnifying Glass-



The button with the (-) minus sign decreases *gradually* parts of the desktop or of the working area.



#### The Sheet



The button with the symbolic sheet of paper shows the material area increased to the maximum

#### The Screen

**●** F4

The button that symbolizes a screen displays all objects on the material area as big as possible. The section is thus selected that is it the biggest possible display with all objects visible.

## The Magnifying Glass for Selected Objects



The "dotted loupe" button displays all selected objects as big as possible.

#### The Measure Tool



This tool serves for the determination and the percental modification of object dimensions.

### The Output Command



The activation of this button gives the data to the Plot-Manager for the output to the connected device.

# 7.10 The Preview Object Parameters Toolbar

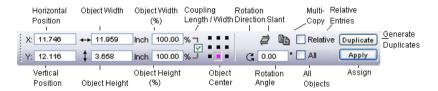
The *preview object parameters* toolbar is activated with the following shortcut.



Indication: It is identical with not variable part of the object parameters toolbar in previous EuroCUT versions.



Fig. 7.10-1: Object parameter toolbar with position, size, angle, multi copy, ...



Note: The display of the object parameters toolbar varies depending on how the object properties are set!

# 8 Tools

# 8.1 The Desktop

After starting EuroCUT the desktop with the working area appears as follows:

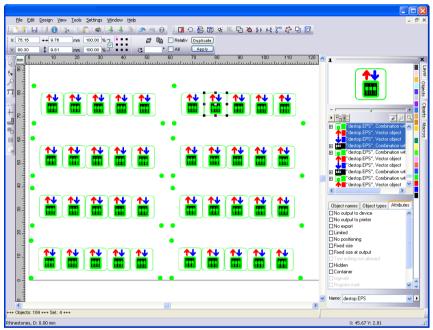


Fig. 8.1-1: EuroCUT Desktop with working area and shown tool-toolbar, rulers, Object Manager and status lines

The *working area* is marked by a black frame that has on the right and below a gray shade. The working area serves for the orientation and dimensioning.

The *rulers* can be freely positioned or completely switched off. The *layer* toolbar is integrated into the Sidebar. The *metric* (cm, mm, inch) can be directly changed via a button that is within the angle of the two rulers. Also ruler's origin can be changed. Following options are available: Set Origin to Absolute Coordinates, Move Origin, Reset Origin, Set Origin to Center of Page, Show Origin and Release Origin.

In the **status line** you find much information about the objects on the working area. For example the **wire frame**, **filling**, **object dimensions**, **-number**, **combination** or **grouping** are displayed.

# 8.1.1 Cursor forms on the working area and their meaning

Cursor form Meaning

no object marked or selected

Indication: You mark objects by positioning the mouse cursor above the object and pressing the left mouse button.

Indication: This cursor is only active if the cursor is within the range of the inner part of the object or in the range between the 8 black squares on the wire frame line. The object must be marked.

Indication: The cursors for the modification of the object size are only active if the cursor is within the range of the 8 black squares on the wire frame line of the object. You switch to the skewing-/rotation-mode by clicking with the left mouse button with active cross cursor (see above move objects).

Cursor form Meaning
Object in the skew/rotate-mode
Rotate object
Skew object (set tilted horizontally/vertically)

# 8.2 The Textbox Dialog

The EuroCUT textbox contains four dialogs which are explained in detail on the following pages.

### The Textbox Edit dialog

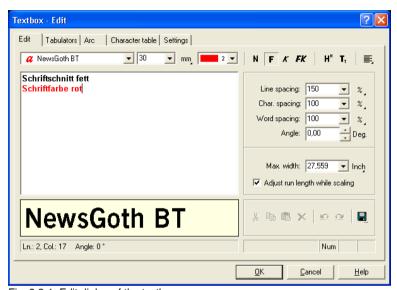


Fig. 8.2-1: Edit dialog of the textbox

The most functions in this dialog correspond to those in the *text editor-toolbar*. 

please refer to 7.3: The *Text Editor* Toolbar.

In addition, the font color can be selected.

In the left part of the dialog is the text input field. Underneath, the selected font type is displayed heightened. If the text is marked, the marked text is shown here. If no text is marked, the *name of the used font type* is indicated.

Space (1/1, 1/2, 1/4, 1/8)

Key	_	CTRL	SHIFT	SHIFT+CTRL
SPACE	1/1 em	1/2 em	em	em quad
Key	quad	quad	quad	-

Underneath the text preview is the status line that provides following data:

- Z.: line in which is the cursor Sp.: Column in which is the cursor
- X: X-position of the cursor on the working area Y: Y-position of the cursor on the working

#### 8.2 The Textbox Dialog

#### area

Angle: Rotation used for the objects - (object angle of rotation)

Right next to the preview field are the *clipboard* functions (Windows Clipboard).



Fig. 8.2-2: Windows clipboard buttons with function's explanations

Pressing the **save** button takes over the previously set values. When opening the textbox the next time the last saved values are used for the new text.

#### Max. Width

With the *maximum width* you determine the carriage return in the text input field. The value that is entered here corresponds to the length of your working area. A smaller value that is entered here carries out the line feed earlier.

Indication: This value can be determined for the whole text block or only for the marked line in the text input field.

### Adjust run length while scaling

This option effects that when increasing or decreasing text blocks the width of the text is adjusted automatically.

### The textbox tabulators dialog

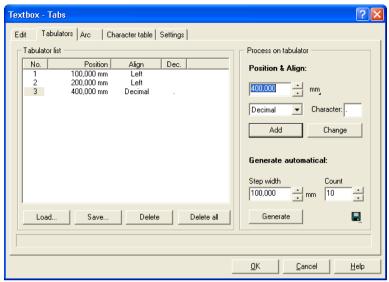


Fig. 8.2-3: The tabulators dialog of the textbox

Tabulators guarantee the accurate alignment of characters at a numeric determinable spot in a text line or in a text block.

# Indication: The tabulator list in the left part of the dialog is empty after the first start of the tabulators dialog.

Under **no.** all set tabulators are shown ascending numerically. The **position** indicates the distance of the tabulator from the left border of the text. **Alignment** determines how the text shall be aligned to this tabulator, **left**, **right**, **centered** or **decimal**. When using decimal tabulators which are listed under **dec.**, in addition the separator can be freely chosen. Mostly, as separator a comma or the dot is used. But any arbitrary text characters can be used.

The buttons underneath the tabulator display window serve for the *loading* of existing tabulator templates, for *saving* new templates or *deleting* single or all tabulators.

#### **Edit tabulators**

Under **position & amp; alignment:** here, the position as well as the alignment of a tabulator can be determined. A new tabulator is defined by entering a new value into the position field and then activating the **add**-button. Right next to it the **measuring unit** of the tabulators can be selected. You can select between **millimeter**, **centimeter** and **inch**.

The activation of the *modify*-button allows determining the position of the tabulator at a new value. After pressing the button the input field appears highlighted in blue and the wanted values can be entered. You can have the same result by positioning the mouse cursor in the field, marking the existing value and entering a new one. All defined

#### 8.2 The Textbox Dialog

tabulators are shown in the left preview window.

#### Generate automatical

The *generate automatical* of tabulators is a useful tool for the creation of for example price lists, menus or something similar.

Just enter the *step width* and the *count* and press the *generate*-button. If the *save* -button right next to it is pressed, the here done settings are saved as *standard settings* and are available again when next opening the textbox.

The pressing of the *load* button opens the dialog for loading a previously saved template.

#### The textbox arc dialog

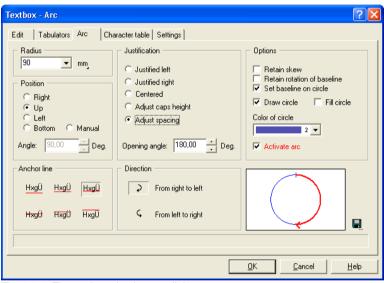


Fig. 8.2-4: The textbox circular text dialog

#### Radius

This value defines the half diameter of the circle to which the text block shall be aligned. The preview window in the dialog shows below right the position of the text in the circle.

## **Position**

You can modify the position of your font at the circle. It can be *right*, *top*, *left* or *bottom*. If you select the option *manually* you can enter in the field *angle* the angle at which your texts starts.

#### **Anchor line**

These buttons determine how your text shall be set at the circle line. You can select between:

HxgÜ block height down

HxgÜ descender
HxgÜ base line
HxgÜ x-height
HxgÜ ascender
HxgÜ block height up

#### Justification

Here you enter how your text shall be justified as measured by the dot of the circle that you have defined by position. If you enter for example *centered*, the application sets the exact middle of your writing at the position dot. The preview window shows you the *justification*, the *position* and the *length of the text*.

With *adjust caps height* the font size of the letters of your text changes proportionally to the size of the circle. The bigger the circle that you selected the bigger the letters will be and vice versa

**Adjust spacing** unifies the distance of the letters. The **opening angle** allows an individual correction of the character spacing if the option **adjust spacing** was activated.

#### Direction

This option modifies the direction of the text either *clockwise* (from right to left) or *counter-clockwise* (from left to right).

Indication: With this option the text can also be put inside the circle. The angle thereby is  $180^{\circ}$ .

## **Options**

**Retain skew** means that the letters of your text keep their skewing in the circle set if they had been skewed before.

If you have selected the option *retain rotation of baseline* the letters are not rotated at the circle line. The letters are always the "right way around" as if they were orientating at a horizontal line.

If you have selected the **set baseline on circle** the circle line is rotated to the base line which means that the letters of your text are spinned round.

*Draw circle* draws the circle defined by radius also on the working area. This option serves for the control of the selected options.

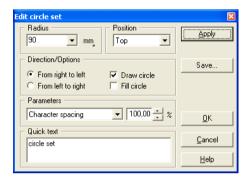
*Fill circle* draws the circle defined by radius filled and in the selected *color of circle* on the working area.

#### 8.2 The Textbox Dialog

With the option *activate arc* and the *OK*-button you confirm the parameters of the circle set and let it draw on the working area.

With the -button you save the settings for later usage.

The following interactive dialog appears if the circle set on the working area is active and the *T*-button or the *circle set*-submenu of the context menu is activated.



The possible interactive settings correspond to the above mentioned. The *apply*-button carries out the modification directly on the working area.

## The textbox character table dialog

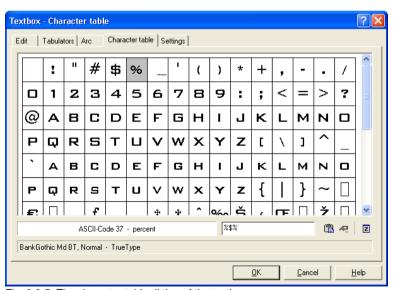


Fig. 8.2-5: The character table dialog of the textbox

The button for the character table offers the possibility to select such characters from the symbol set that cannot be entered directly via the keyboard. These characters can only be selected via an ALT number-combination (ASCII-Code-No.).

In the upper part of the dialog all characters of the selected font type are shown. Below, the **ASCII-Code**, the **name of the character** and which **font type** (here: Americana) in which **type styles** (here: bold) is currently shown is displayed.

Indication: Only the characters that are contained in the respective font are shown. A filled type style is also a measure for the quality of a font.

Right next to it the selected characters are entered. You select signs by positioning the mouse cursor on the wanted character and pressing once the left mouse button. Pressing the right mouse button only selects one character but does not transfer it to the code-field.

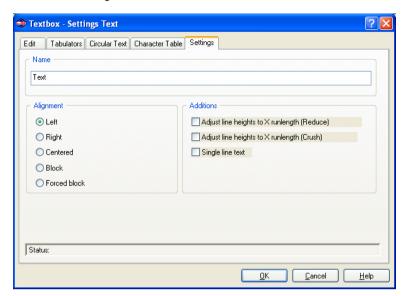
Pressing the button applies the inputs and changes to the *edit textbox* dialog. Pressing the button increases the currently active character. Pressing the button opens the *settings* dialog:

In this dialog you have the possibility to create the colors of the character table according to your wishes.



The Textbox Settings Dialog

#### 8.2 The Textbox Dialog



#### Name

In the text field a name for a text block can be defined. By default, the name "text". The name is shown in the *object's* tab list of the sidebar and in the *object names* tab.

## Alignment

Here the *alignment* of text blocks is pre-defined; these options correlate with the items in the *text* toolbar.

#### Left

If the *left* option is enabled, then the marked text block will be justified left.

## Right

If the *right* option is enabled, then the marked text block will be justified right.

#### Centered

If the *centered* option is enabled, then the marked text block will be justified centered.

## Block

If the **block** option is enabled, then the marked text block will be justified as block.

## Forced Block

If the *forced block* option is enabled, then the marked text block will be justified as forced block, which means that all lines of text - even the last one - are adjusted on the column width or width of the work sheet.

#### Additions

## Adjust line heights to X runlength (Reduce)

If this option is enabled, then when the X runlength is changing, the text block will be scaled-down proportionally.

## Adjust line heights to X runlength (Crush)

If this option is enabled, then when the X runlength is changing, the text block will be compressed, which means that the character distance will be reduced.

## Single line text

If this option is enabled, then is prevented, that a line break is executed at the end of the line.

## 8.2.1 Edit Text

## 8.2.1.1 Keyboard Allocation On Top Text Tool

## **Cursor Navigation**

Key	Meaning
To the right	One sign to the right. When reaching the right end of the row the cursor will be positioned at the beginning of the next row. An existing selection will be cancelled.
To the left	One sign to the left. When reaching the left beginning of the row the cursor will be positioned at the end of the previous row. An existing selection will be cancelled.
Downwards	One row down. When reaching the last row no further positioning is done. An existing selection will be cancelled.
Upwards	One row up. When reaching the first row no further positioning is done. An existing selection will be cancelled.
POS 1	Positions the cursor at the beginning of the row. An existing selection will be cancelled.
END	Positions the cursor at the end of the row. An existing selection will be cancelled.
CTRL+right	Shifting of the signs! - Shifts all signs from the current position to the right. If a text is selected only the selected signs are shifted.
CTRL+left	Shifting of the signs! - Shifts all signs from the current position to the left. If a text is selected only the selected signs are shifted.
CTRL+downwards	Shifting of the signs! - Shifts all signs from the current position downwards. If a text is selected only the selected signs are shifted.
CTRL+upwards	Shifting of the signs! - Shifts all signs from the current position upwards. If a text is selected only the selected signs are shifted.
CTRL+POS 1	Positions the cursor at the beginning of the text. An existing selection will be cancelled.
CTRL+END	Positions the cursor at the end of the text. An existing selection will be cancelled.

Selections

SHIFT+right Selects the current sign to the right or increases / decreases an

existing selection.

SHIFT+left Selects the current sign to the left or increases / decreases an

existing selection.

SHIFT+downwards Selects from the current position onwards one row downwards

or increases / decreases an existing selection.

SHIFT+upwards Selects from the current position onwards one row upwards or

increases / decreases an existing selection.

SHIFT+POS 1 Selects from the current position onwards all signs left until the

beginning of the row or increases / decreases an existing

selection.

SHIFT+END Selects from the current position onwards all signs right to the

end of the row or increases / decreases an existing selection.

SHIFT+PgDn Selects from the current position onwards all signs downwards

to the end of the text or increases / decreases an existing

selection.

SHIFT+PgUp Selects from the current position onwards all signs upwards to

the beginning of the text or increases / decreases an existing

selection.

CTRL+A Selects the whole text and positions the cursor at the beginning

of the text.

During existing selection

CTRL+right Shifts the selected signs to the right.

CTRL+left Shifts the selected signs to the left.

CTRL+downwards Shifts the selected signs downwards.

CTRL+upwards Shifts the selected signs upwards.

**Deleting** 

Delete Deletes the sign right of the cursor. If the cursor is at the end of

the row the next row is connected with the current row.

Indication: If a text is selected the whole selection is deleted!

**BACKSPACE** 

#### 8 2 1 Edit Text

Deletes the sign left of the cursor. If the cursor is at the beginning of a row the current row is connected with the

previous row.

If a text is selected the whole selection is deleted! Indication:

Inserting

SHIFT+SPACE Inserts 1/2 space character.

CTRL+SPACE Inserts 1/4 space character.

CTRL+SHIFT+SPACE Inserts 1/8 space character.

Enter

At the **end** of the current row

Inserts a new row and positions the cursor at the beginning of

this row.

In the **middle** of the

current row

Breaks the current line and positions the cursor at the

beginning of the next row.

At the **beginning** of the

current row

Inserts a new row in front of the current row and leaves the cursor at this row. At the beginning of the first row (position 0/0) no new row can be inserted. If a text is selected the whole

selection is deleted before.

Clipboard

CTRL+X / SHIFT+delete Cut the selected text and copy to clipboard.

CTRL+C / CTRL+insert Copy the selected text to clipboard.

CTRL+V / SHIFT+insert Insert text from the clipboard at the current cursor position.

Undo / Redo

F5 / CTRL+Z Undo last action

F6 / CTRL +Y Redo

Miscellaneous

CTRL+T opens format text dialog

CTRL+SHIFT+T opens textbox

Insert switches between insert and overwrite mode

F9 switches between contour and whole face mode CTRL+W Refreshes the text

CTRL+SHIFT+U Upper -changes all selected signs to capital letters

CTRL+SHIFT+L Lower - changes all selected signs to small letters

CTRL+SHIFT+R Switch - inversion of all selected signs from small to capital

letters and vice versa

CTRL+SHIFT+X Revert - inversion of all selected signs from front to back and

vice versa.

Indication: only wise if the selection is in one single row.

CTRL+SHIFT+K Small capitals for all selected signs

CTRL+K Save Kerning-value between 2 selected letters permanently in

the global font structure.

Indication: Requirement for this is an existing sign shifting in X-direction so that the new Kerning value can be recalculated. At the moment, this is only possible with the

EUROSYSTEMS database scripts.

## 8.2.1.2 Mouse Manipulation On Top Text Tool

Left Positions the cursor at the desired position and clears an

existing selection.

SHIFT+left Selects the text from the current position onwards up to the

new position respectively increases / decreases an already

existing selection.

Left+mouse movement Selects the text into the desired movement-direction until

letting go the left mouse key.

Left double click Selects the whole row.

Right Opens a context sensitive menu in which the text relevant

commands appear.

CTRL+downwards Sign shifting! - Shifts all signs of the whole row downwards. If a

text is selected only the selected signs are shifted.

CTRL+upwards Sign shifting! - Shifts all signs of the whole row upwards. If a

text is selected only the selected signs are shifted.

CTRL+to the right Sign shifting! - Shifts all signs from the current position to the

right. If a text is selected only the selected signs are shifted.

8.2.1 Edit Text

CTRL+to the left Sign shifting! - Shifts all signs from the current position to the

left. If a text is selected only the selected signs are shifted.

Page down OnTop-Editor: Scrolls the text 5 rows downwards. An existing

selection is cleared.

Textbox: The amount of rows to be scrolled results from the

size of the window.

Page up OnTop-Editor: Scrolls the text 5 rows upwards. An existing

selection is cleared.

Textbox: The amount of rows to be scrolled results from the

size of the window.

CTRL+page down Sign shifting Y-direction (negative).

No selection: Shifts from the current row until the end of the

text all rows downwards.

With selection: Only the selected signs are shifted downwards.

CTRL+page up Sign shifting Y-direction (positive).

No selection: Shifts from the current row until the end of the

text all rows upwards.

With selection: Only the selected signs are shifted upwards

## 8.3 The Outline Function

This function is activated via the button in the variable part of the **object** parameter toolbar or via the **tools** menu, menu entry **outline...** 



The *outline* function creates contours in a freely definable distance around graphical and text objects.

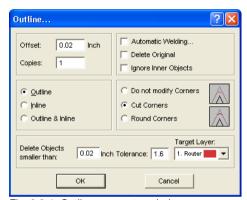


Fig. 8.3-1: Outline parameter window

#### Offset

The value for the distance of the inline and outline from the original object are entered in the field **offset**.

## Copies

The option *copies* indicates how many in- or outlines shall be created simultaneously at a function call.

#### Automatic welding

**Automatic welding** means that all overlappings of in- or outlines shall be removed so that a closed contour is created.

#### Delete original

If the button *delete original* is activated the original object is deleted after the creation of the contour.

The corner treatment can be influenced via three additional options.

## Do not modify corners

The option *do not modify corners* creates the mathematical accurate dot on the outline to each corner dot. This leads to the fact that in pointed corners the outline is extended

#### 8.3 The Outline Function

endlessly which often leads to unaesthetic results. Therefore the option *cut corners* is pre-defined as default. This option shortens the extension to the value that is entered in the field *tolerance*.

#### Round corners

**Round corners** transfers the corner dot in a rounded curve. The field **tolerance** indicates in which offset from the corner dot is cut respectively rounded.

## Delete objects smaller than

**Delete objects smaller than** defines the size of a filter that deletes automatically small and smallest "rejects" that might occur at the creation of an outline. The cumbersome welding of smallest parts thus can be omitted.

## 8.4 The Undo Redo Stack

The undo redo stack is activated via following key combination:



These functions can *undo* or *redo* all *object-related* actions.

Indication: actions that refer for example to the working area, the desktop or the layer-toolbar are not taken into the stack.

The pre-settings in the settings menu, submenu miscellaneous

The *Undo Redo* stack related settings as for example the number of stack actions are carried out in the following setup dialog.

Indication: The maximum number of the undo steps can only be modified with no objects on the working area.

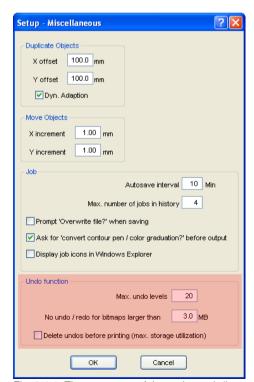


Fig. 8.4-1: The parameter of the undo stack (here: marked in red)

The area *undo function* comprises the settings that effect the undo stack.

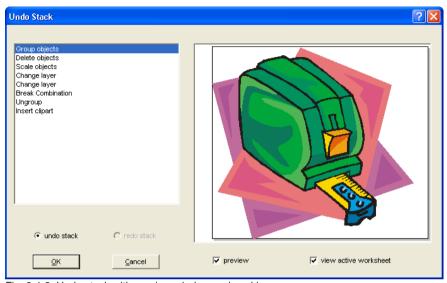


Fig. 8.4-2: Undo stack with preview window and working area

In the left stack the action can be selected up to which you want to go back. The preview window shows the status of the working area and of the objects on the working area at the moment of the action.

The *redo* stack operates in the same way.

## 8.5 The Alignment Function



Fig. 8.5-1: The alignment button

This function aligns two or more marked objects to each other or to the working area.

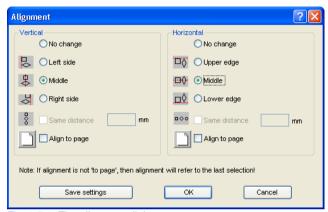


Fig. 8.5-2: The alignment dialog

Objects can be aligned horizontally or vertically. A centered alignment is also possible as the selection of the same distance between the marked objects. The type of alignment is illustrated by icons. Setting can be stored by pressing the *Save settings* button.

Indication: The last marked or drawn object serves for alignment as reference object, that means that all others are aligned in the same way. If alignment is not 'Align to Page', then alignment will refer to the last selection.

## 8.6 The Sort With Simulation... Tool

This tool serves for the *sortation of objects* and the *determination of sequences* before the output at the connected device. A simulation with or without complete path of the device tools facilitates the estimation of the results.

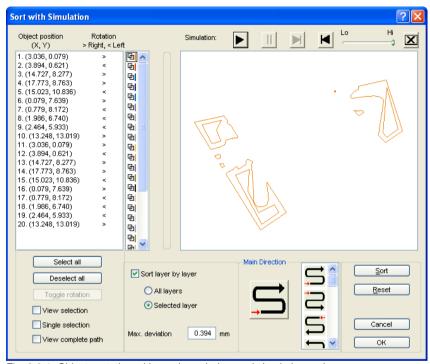


Fig. 8.6-1: Object-sortation with preview-window and simulation option

## 8.6.1 Simulation

The operation of the simulator is similar to a DVD-player.

**Lo** (low) up to **Hi** (high) regulates the speed of the simulation display.

Indication: Before simulation, in addition to orientation, you have to do sorting by clicking on the sort button.

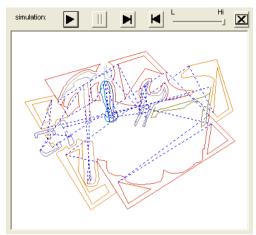


Fig. 8.6-2: Option show traverse path (lines dashed in blue) activated

#### Color bar

A click on the wanted color bar selects the respective color layer.

#### Select all

Selects all objects of the list.

## Deselect all

Deselects all objects of the list.

## Toggle rotation

This option modifies the orientation from *clockwise* (right) to *counterclockwise* (*left*) and vice versa.

## View selection

Shows the selected objects in the preview window.

## Single selection

In the list only one object can be selected; the multi-selection (standard) is deactivated.

## View complete path

A line dashed in blue shows the track that the tool head covers.

#### Sort layer by layer

## All layers

This option comprises all layers to the sortation if sort layer by layer was activated.

Indication: This option is, depending on the driver setting, deactivated in the output preview

## Selected layer

This option comprises only to the selected layer to the sortation if **sort layer by layer** was activated.

#### Max. deviation in ... mm

In the input field the value for the maximum deviation of the thought vertical respective horizontal line that an object may have in order to be sorted can be entered.

#### Main direction

16 methods can be activated as main direction for the sortation. The icon shows with a red arrow where sortation beginns.

#### Sort

Only the *sort* button activates the object sortation. Then you can check in the simulation if the sortation meets the demands.

#### Reset

Resets the objects in the sort-list to the initial value.

## 8.7 The Pen Attributes Tool

With this tool, objects can be provided with wire frame and diverse pen attributes. A pen attribute is color wire frame thickness, corner and end treatment, etc.

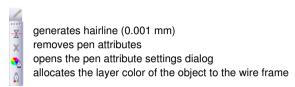


Fig. 8.7-1: Pen attributes tool with sub functions and description

#### Create hairline



Fig. 8.7-2: The hairline button

The activation of this button creates a hairline around marked objects.

Indication: The thickness of this hairline is not variable and is 0.01 mm.

#### Remove pen attributes



Fig. 8.7-3: The remove pen attributes button

The activation of the *remove pen attributes* button removes *all* pen attributes.

## The pen attributes dialog



Fig. 8.7-4: The pen attributes-button

Via the *pen attributes* dialog the wire frame pen of curves, combinations or text objects can be designed. Wire frame pens are used among other things for drawing the object outlines in the full surface mode or preview mode and for printing.

Indication: The pen attributes have no influence on the display of the objects in the wire frame mode (F9). Here, the outlines of the objects are drawn with a simple wire frame line in the layer color.

#### 8.7 The Pen Attributes Tool

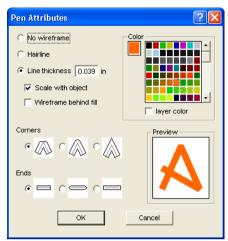


Fig. 8.7-5: The set pen attributes dialog

#### No wireframe

If you select the option *no wireframe* the object will not have a wire frame. In the full surface and preview mode closed curves are drawn as area without outline with this setting. Open curves are, as in the wire frame mode, drawn as outline in the color of the layer.

## Hairline

If the option *hairline* is activated the object is encircled with a very thin pen of constant thickness.

## Color

In the field *color* you can determine the color of the wire frame.

Indication: This can be different from the layer color. Thus it is possible to highlight the outline of the objects from the filling also in the full surface mode.

## Line thickness

Select the option line thickness to determine an arbitrary pen thickness in the input field.

## Scale with object

Scale with object means that the line thickness is adjusted proportionally when distorting respective scaling the object. If this field is not activated the wire frame pen keeps the set thickness.

#### Wireframe behind fill

With the option *wireframe behind fill* you can prevent that the pen "runs" into the filling of the object. The outline is then drawn by the filling so that only the part of the outline lying outside of the filling is visible.

#### Corners

You have also the possibility to determine the appearance of the corners. You can select between *cut*, *rounded* and *sharp corners*. The appearance of the respective corner form is given to the icons and also displayed in the preview field.

#### Ends

Also you can select the form of the *ends* of *open* objects. *Ends* can appear *cut*, *rounded* or *extended*.

#### Color field

The current color of the pen is shown in the *color field* left of the palette and in the preview field.

There are two possibilities to modify the pen color.

1. To mix the pen color anew you *double click on the color field* left of the palette. Then following color selection dialog appears with the currently set values of the pen color:

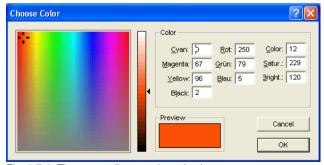


Fig. 8.7-6: The pen attributes color selection

After you have determined the pen color, it appears in the **pen attribute** dialog in the **color field** left of the color palette. The pen color is also shown in the preview field.

2. In the palette you can freely choose the color values. These are selected by simply clicking with the mouse on the wanted color field. With the scroll bar on the right edge of the color palette you set the color intensity.

## 8.7 The Pen Attributes Tool

## Assign layer color to object contour



Fig. 8.7-7: The assign layer color button

The activation of this button allocates the layer color to the contour of a marked object.

## 8.8 The Welding Tool

This function is activated via the button in the variable part of the **object** parameter toolbar or via the **tools** menu, menu entry **welding...** 



This function welds two or more vector objects with each other to a combination. Depending on the number and the form of the selected objects you can choose between the following options: *manually, automatically, by color, full area.* 



Fig. 8.8-1: Tools menu - welding submenu

#### Dialog...

The activation of this submenu opens the following dialog

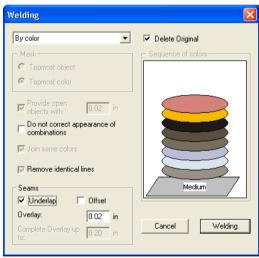


Fig. 8.8-2: Welding dialog

## Manually

**Manually** separates all intersections that occur because of the overlapping of outlines and creates object parts. With the **arrow**-function you mark the object parts that you want to remove. With the DEL-button the selected object parts are deleted. Overlapping-free object parts are kept and can later be further edited. The original color of the object parts

8.8 The Welding Tool

are kept with the manual welding.

#### Automatically

**Automatically** calculates the common areas of the objects. All overlapping parts are combined, transparent interior elements are considered.

Indication: With this option, objects of different colors are welded to a combination object.

If the object colors shall be considered please select the options **by color**, **full area** or **screen printing**.

The option *automatically* is especially suitable for the welding of serifs with scripts. The serif of the previous letter overlaps often with the successive character. The material would be slit at these positions without welding. The automatic welding eliminates this overlapping and takes care of a cuttable transition in the serifs.

Tip: If single parts are missing after the automatic welding, then reduce the character spacing in the text editor from 100% to 99%. This causes that identical node dots that lie on top of each other are misplaced so that they are recognized also as single nodes and the welding routine is carried out properly.

#### By color

**By color** removes all areas that are hidden by colors lying above. It does not matter how many objects and colors you select. If open objects are also selected they can be closed or provided with a line weight.

#### Full area

The option *full area* underfills objects of one color whose areas hide those of another. To do this, the partially hidden objects are modified so that they underlay completely the ones lying above. Here, you can also proceed with the open objects as described under *automatically*.

Tip: The mostly used field of application is the showcase labeling where the by color-option is often too laborious to be pasted over. With 2 maximum 3 foil colors you take the full surface option where the single foil colors are pasted above the other.

## **Delete original**

With the checkbox *delete original* you set if the initial objects shall be deleted after the welding process or not.

## Provide open objects with contour ... mm

If open objects are amongst the selected you can indicate with the option **provide open objects with contour** ... which thickness the created closed object shall have.

#### Do not correct appearance of combinations

With this option combinations are treated that they are welded as displayed in the full surface mode. Overlays in combinations remain transparent.

#### Join same colors

It can happen that the same color reappears in different group- or combination objects. Then, select the option *join same colors* so that those merge to one color layer.

Indication: This is especially important with the creation of screen printing templates as with the screen printing process the darkest color is always spread at last in order to prevent possible white gap that might occur while mounting the single colors.

#### Remove identical lines

With this option all vectors that are identical are removed but one.

## 8.8.1 Seams

## **Underlap - Offset**

These options can only be activated with *by color*. In the field *overlay* you can enter the value for the *underlap* or the offset.

#### Overlay ... mm

If the option **screen printing** is activated you can enter here the value for the **overlay** of the colors in mm.

#### Complete overlay up to:

Here, you can additionally enter the limit up to which width it shall be completely overlaid.

## 8.9 The Color Bucket Tool

With this function you can fill objects with color graduations or bitmaps. The user has here four available buttons.

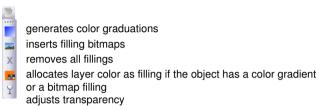


Fig. 8.9-1: The color bucket tool with sub functions

## Create color graduations



Fig. 8.9-2: The color graduation button

Pressing this button opens the *color graduation* dialog in which the appearance of the gradient fill of *closed curves*, *text objects* or *combinations* is determined.



Fig. 8.9-3: The color graduation dialog with settings options

## Determination of the color graduation

In the field *type* select the type of color graduation. You can choose between *linear*, *radial*, *conical* and *square*. In the preview window up right in the dialog the appearance of the respective type is displayed.

#### **Options**

In the field *steps screen* you determine the number of color graduation streaks at the display on the screen.

Steps print means the respective number at the output on a printer.

With the fields *hor.(izontal) center* and *vert.(ical) center* you determine the center point of the color graduation.

## Indication: These two fields are not active with the type linear.

With the input of 0% the center point is above the filled object. It can be moved in relation to it at 100% of the object width to the left or right respective at 100% of the object height up or down. As well, the origin can be determined with the mouse. To do this, move the mouse cursor in the preview window and click with the left mouse button on the spot where you want to have the origin.

The field *angle* describes the position of the color graduation streak with *linear*, *conical* and *square* filling.

If *linear* is set you can set the angle of the graduation also by means of the preview field. To do this, click on any spot of the field. Keep the mouse button pressed and move the mouse. A line, that is tied to the origin appears and follows the movements of the mouse. After letting go the left mouse button the angle that was determined with the line is taken over for the graduation.

#### Distance from margin

The set value that lies herewith between 0% and 45% indicates the position of the first and last color relative to the center of the graduation.

Indication: The distance from the margin can only be modified with linear and quadratic filling.

## Determination of the original color

Under *graduation* the start and end color as well as the *position* and *color* of possible intermediate steps is selected. The bar between the two triangles, the color graduation bar indicates the course of the colors.

Click into the left triangle to determine the original color. For the modification of the color value you have two possibilities. A double click into the field *color* left of the color palette opens the *color selection* dialog.

#### Selection of the target color and further color stations

In order to set the target color of the graduation you first activate the triangle at the right margin of the color graduation bar. *Further color stations* can be inserted with a *double click* on the bar above the graduation bar. A small *triangle* that indicates the position of the color in the graduation is shown at the selected position. The exact position is entered as percent value in the field *position*. The position can be modified by moving the triangle

#### 8.9 The Color Bucket Tool

or through input of the wanted value in the field *position*. In order to select the color at the wanted position you first select the triangle that points to the position. Then you can determine a new color in the ways described above. To remove a graduation step click on the triangle that has its position. Then press the DEL key. The triangle disappears from the bar and the color is not considered anymore at the graduation.

#### Indication: The original and the target color cannot be deleted.

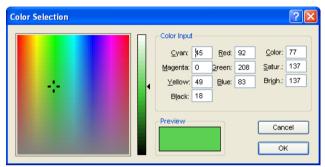


Fig. 8.9-4: The color selection dialog

Here you can modify the current original color. A click into the left color field selects a color, the vertical ruler determines the intensity and the *preview*-field shows the selected color.

#### Color

The color value can also be defined numerically. The following color models are available: CMYK (cyan, magenta, yellow, black), RGB (red, green, blue) and HSB (hue, saturation, brightness).

#### Insert fill bitmaps



Fig. 8.9-5: The bitmap fill button

Pressing this button opens the *bitmap fill* dialog via which you can fill the vector objects with bitmaps.

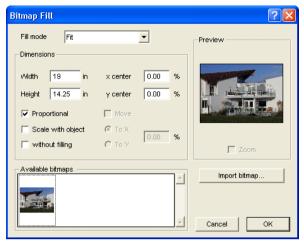


Fig. 8.9-6: The bitmap fill dialog

## Selecting a fill bitmap

You first have to determine with which bitmap the selected object shall be filled. You have three possibilities:

#### 1. Scanning a new fill bitmap

Scan your template that you want to use as fill bitmap via the EuroCUT Twain Interface (*file* menu, menu item *scan*). Open the fill bitmap dialog. The selected bitmap is now shown in the preview and also appears in the field named *available bitmaps*. Now do your settings and confirm the dialog with OK. If the result does not correspond with your demands you have the possibility to "loosen" the bitmap again which means that you can restore the original status of your scanned bitmap. To do this, select the option *remove mask* in the context menu.

## 2. Import new fill bitmap

Click on *import fill bitmap* in order to select a new bitmap as fill. A file selection dialog appears. There, you can search for and select the wanted bitmap.

The selected bitmap is then shown in the preview and also appears in the bar with the available bitmaps down left in the dialog.

#### 8.9 The Color Bucket Tool



Fig. 8.9-7: The file selection dialog for the bitmap import

Available import formats are: jpg, pcd, pcx, tif and bmp.

#### 3. Insert used fill bitmap

If you want to use an already used fill bitmap, select it from the bar with the available bitmaps. Via mouse click one of the bitmaps shown there is selected. To search for bitmaps not shown, please use the scroll bar.

#### Fill mode

In the field *fill mode* you select the mode of the fill bitmap. Possible modi are *a) tile*, *b)* seamless tiling, *c) fit* and *d) object size*.

## a) Tile

*Tile* fills the object with tiles drawn side by side and below each other from the select fill bitmap. The width and height of a single tile are determined in the fields with the same name in the group *measurements*. Tick the field *proportional* to guarantee that in case of a modification of height or width the other corresponding value is adapted proportionally and the bitmap is not distorted.

If you activate the option **scale with object** the measurements of the tiling in case of distortion of the object are automatically adjusted. As default the first tile is placed in the upper left corner of the object outline. By means of the fields **X-center** and **Y-center** you have the possibility the freely select the starting position. Enter here a *negative value* 

between 0% and -100% to move the tile to the left respective upwards. With *positive* values between 0% and 100% the center point of the first tile is moved accordingly to the right respective downwards.

By selecting the option *move* you can create an offset within the tiling rows. With *to X* resp. *to Y* you determine if the offset shall be done in horizontal or vertical orientation. The % field on the right serves for the input of the size of the offset of the tiling width respective the tiling height in percent.

## b) Seamless tiling

**Seamless tiling** corresponds mainly to the option tiling. The difference is in the display of the tiling. With seamless tiling all rectangles with exactly the same measurements are drawn. This way, especially with patterns, a smoother picture is created.

Indication: The disadvantage of this method is that the position of the single tilings can vary depending on the size of the view.

#### c) Fit

In the mode *fit* the bitmap is only drawn *once* into the object. The preview shows the exact proportions of bitmap and object. With the input fields *width* and *height* you determine how big the bitmap to be filled shall be.

The positions of the bitmap within the object can be modified in two ways.

- 1. In the fields **X-center** and **Y-center** the deviation of the center point of the bitmap to the center point of the object can be given in percent.
- 2. But you also can determine the position by means of the preview field. Click on the bitmap in the preview field and keep the mouse button pressed. Now, the picture can be positioned by moving the mouse. A cross hair is shown for the exact positioning. After letting go the mouse button the wanted position is taken over.

## d) Object size

The last mode *object size* fits the bitmap optimal in the object. Its width and height are calculated so that the whole area of the object is completely filled.

## No filling



Fig. 8.9-8: The no filling button

If this button is pressed, fillings and fill bitmaps of all marked objects are removed. Only the outline of the objects remains in the previously allocated layer color.

8.9 The Color Bucket Tool

## Fill with layer color



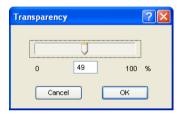
Fig. 8.9-9: The fill with layer color button

If this button is activated the marked layer color is allocated as filling if the object has a color graduation or a fill bitmap.

## Adjust transparency



Fig. 8.9-10: The adjust transparency button



If this button is activated, transparency of a color filling can be adjusted linearly from 0 to 100 %.

## 8.10 The Measure / Measurement Tool



Fig. 8.10-1: The measure / measurement button

Activate the *measure* button in the toolbox with the mouse pointer. Return to the working area; the mouse pointer appears as circular sight. Move the center point of the sight to the starting point of the track to be measured. Keep pressed the left mouse button while moving to the end point of the track and let go the mouse button when you have reached the end point. A subsidiary line marks the measured track.

Indication: Keep pressed the SHIFT key during the measurement. Then the measurement is limited horizontally or vertically. This facilitates the exact measurement of straight lines.

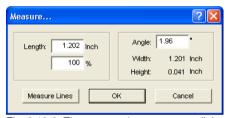


Fig. 8.10-2: The measure/measurement dialog

In the text field name *length* the result of your measurement appears. In order to modify this value, first mark the text field and then enter the new value. In the text field underneath you can *percental increase* or *decrease* the objects.

In addition, you get information about the angle of the measure lines, the width of the measured object at the starting point of the measurement and the difference in height between the starting and the end point that is resulted from the measure angle.

## Measurement



Fig. 8.10-3: Measurement tool / track

The *measure lines* button changes to the measurement tool (see illustration). This tool is attached to the mouse cursor and can be moved to the wanted position. After letting go the mouse button the detected track is entered above the measurement track.

## 9.973 in

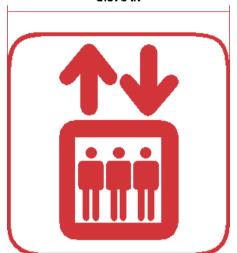


Fig. 8.10-4: Measurement track with the detected value in mm

Indication: The default size of the dimension text can be set via the settings / standard settings / miscellaneous... menu.

## 8.11 The Stop Watch

The stop watch is integrated in the menu bar of EuroCUT. A click on the *00:00:00* menu (format: hh:mm:ss) opens the submenus for steering the watch.



Fig. 8.11-1: The stop watch integrated in the EuroCUT menu bar

### Start

The activation of the *start* menu starts the stop watch. To stop intervals the *start* menu can be activated several times. The total time continues until the *reset* menu is activated.

## Stop

The activation of the **stop** menu stops the stop watch and enters the value into the duration field of the **Job Info**.

Duration 00:01:33

Fig. 8.11-2: Duration field of the Job-Info

#### Reset

The *reset* menu resets the watch to 00:00:00.

## 8.12 The *Tracing* Tool (Vectorization)

*Tracing* means the generating a cutting contour (vectors) out of a pixel image (bitmap).

## 8.12.1

## 8.12.2 Color assignment

## Colors sel.: (Number)

Via mouse click in this column the colors are selected, which should be mapped to one color in the right column. The preview shows the bitmap after merging this colors. You can use this function for manual color reduction with control of results.

### Indication: By default 16 colors are selected.

#### Sel. colors map onto

After, for example, all green tones were selected in the left column, one can select with one click the color on which the green tones should be mapped. The 1st preview shows the bitmap after mapping.

#### **Deselect colors**

Undoes last selection in left column.

## Undo last color mapping

If this option is activated, the last assignment in both columns is undone.

#### Reset to original values

Sets both color columns back to the initial state when the dialog was opened.

#### Max. number of colors

Reduces number of colors in the bitmap to the selected value. A minimum of 16 colors and a maximum of 256 colors is selectable.

# Indication: A higher number of colors seem appropriate, since no sensible color mapping is possible.

#### Preview 1

#### Reduced to X colors

In the preview 1 the color reduced original bitmap is shown. The number of shown colors is geared to the value of the *Max number of colors* option.

Indication: The content of the preview can be moved via mouse. If additionally the checkbox move is activated, the contents of both previews are moved and scaled simultaneously.

#### Preview 2

After vectorization: (Number) nodes

Preview 2 shows the result of the vectorization using the chosen parameters. Additionally the number of resulting nodes is shown. The number of nodes gives information about complexity of the result and is so an indication for the reworking effort.

Indication: The content of the preview can be moved via mouse. If additionally the checkbox move is activated, the contents of both previews are moved and scaled simultaneously.

#### Outlined checkbox

If the *Outlined* checkbox is activated, the result (the vectors) is shown in contours.

#### Checkbox Move

The checkbox between the two previews links both previews while moving them.

#### Plus / Minus

The Plus / Minus buttons besides the two previews enlarge or reduce the according preview.

#### Preview button

Activating the **Preview** button starts vectorization and shows the result in the right preview (preview 2). Thereby you can choose between full surface and contour mode.

#### 8.12.3 Parameters

## Create bitmap outline

The option *Create bitmap outline* means that an identical image without filling is created from the original bitmap contour. On the working area, the bitmap outline appears as jagged line in a group with the vector contour. The bitmap outline is put in a gray layer that was added at the end of the color layer list.

Tip: In order to color it differently for better differentiation select the gray layer (R 128, G 128, B 128) and assign this color to the bitmap outline.

The bitmap outline facilitates and quickens that rework of the vector contour as it is drawn only as jagged line on the working area. The quality of the results remains uninfluenced.

#### 8 12 3 Parameters

### Vectorize background

With the option *Vectorize background* a vector object can also be created for the area in the background of the bitmap objects.

### Optimize for text objects

By activating the option *Optimize for ext objects* better results at the tracing of texts can be obtained.

## Allow contour size &It; 5 pixel

If the option *Allow contour size &It; 5 pixeI* is activated, then also closed objects are created by objects that are smaller than 5 pixeIs.

Indication: bar 1 is without function when selection this option.

### Avoid overlap

The option *Avoid overlap* serves to automatically remove possible overlapping of the vector contours.

## 8.12.4 Sliders

The tracing has four bars to influence the accuracy of the result.

#### Bar 1: Filter contours

*Filter contours:* ~ filters the result of bigger dirt particles in which contours that were created by objects smaller than 5 pixels are not delivered back.

### Bar 2: Reduce number of nodes

**Reduce number of nodes:** ~ reduces the number of nodes that lie on a curve. The course of the curve differs the more from the original course the higher the value of the setting was chosen.

Tip: A small amount of tangential points shortens the rework time enormously so that a middle setting is often a reasonable compromise.

#### Bar 3: Adjust curves

**Adjust curves:** ~ regards the course of lines and curves and eliminates outliers in horizontal and vertical orientation that do not influence the course of the curve or line. This way, tangential points that lie within the selected range of tolerance are not considered with the tracing.

## Bar 4: Smooth curves

**Smooth curves:** ~ influences the position of the *tangents* with curves. The higher you set the value the more smoothened dots are created. Smoothened curves are characterized that the tangents lie on a line at that at the output on the cutter smooth transitions are cut.

Indication: A too high value influences also the accuracy of the result so that here also a middle value is a good compromise between cutting result tracing of the original.

## 8.13 The Contour (Line) Function

With the *contour line* function the outer edge of arbitrary many objects is calculated and provided with a wire frame line. Contrary to the outline you can contour also bitmaps with this tool. In addition, not every single object is outlined. Instead, it is tried to possibly find one contour that comprises all selected objects. This function is therefore especially suited for the creation of cutting lines around labels. The objects of the label can be arranged arbitrarily.

Then the wire frame of the object is calculated in the wanted distance with the tool described here. The contour line thus created can be used later for cutting out the printed label.

First select the objects that you want to contour / outline. Then select *contour...* in the *tool* menu.

The following dialog for the creation of the parameters appears:

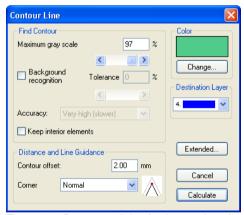


Fig. 8.13-1: Parameter dialog for the creation of contour lines

#### Find contour

With the fields in the dialog group *find contour* you can influence the calculation of the wire frame line. Generally, all objects that are not white are considered with the contour finding. Ideally, the background of the graphic to be contoured should therefore be white. But especially bitmaps contain often light gray spots that can occur when scanning.

#### Maximum gray scale

With the option *maximum gray scale* you can determine that gray spots above the selected intensity are *not* contoured. You can enter values between 50 and 99% or set them with the roll bar. 50% correspond to a relatively dark gray and 99% to an almost white color.

### Accuracy

In the field *accuracy* you can select between three options. The low accuracy works the fastest. If the result is not satisfying with this setting, select the middle or a higher accuracy. The calculation of the contour line then takes a little bit longer.

Indication: The field accuracy is not activated if only a single bitmap was selected.

### Keep interior elements

If the option *keep interior elements* is activated, possibly created interior elements are not deleted. This way you have the possibility to cut out parts of the graphic by applying a brighter "plaster".

Look at the following illustration for this:



Fig. 8.13-2: Option: keep interior elements

On the left side you see the two initial objects. A smaller white circle is put onto the black circle. On the right, the calculated contour line is displayed. The option *keep interior elements* was active, also the inner circle was considered at the contour finding. With the dialog field switched off, only the outer contour would have been created.

Indication: As default, keep interior elements should be switched off.

## Distance and line guidance

In the second dialog group *distance* and *line guidance* you can influence the appearance of the contour line.

#### Contour offset

With *contour offset* you determine how far away the wire frame line shall be from the graphic. If you enter here the value "0" a contour line is created that directly is attached to the edge of the selected objects. With values smaller than 0 the contour line goes into the contoured objects.

## Corner shape

The option *corner shape* determines how the contour line acts at salient corners.

**Normal** creates the mathematical exact dot on the contour to every corner dot. The contour line can thus be extended very long at sharp corners which often leads to unaesthetic results. The options *cut off* and *round* lead to more satisfying results in such cases.

8.13 The Contour (Line) Function

## Cut off

Cut off shortens the contour at the indicated distance and cuts off the corner by a section.

#### Round

Round leads the corner dot to a rounded curve.

#### Color

On the right side of the dialog you can see a color selection field. A click on the *change button* opens the *color selection* dialog. With this dialog you can allocate colors to contours.

## Destination Layer

This Field determines in which color layer - in doing so indirectly, with which tool - the contour line is processed.

Note: The contour line color can be different in the full surface mode (print) and the contour mode (output).

## 8.14 The Job Info

The job info can be opened in three ways:

- 1. Via the edit menu / menu item iob info...
- 2. Automatically when saving a new job
- 3. Via the so named menu item in the context sensitive menu (right mouse button)

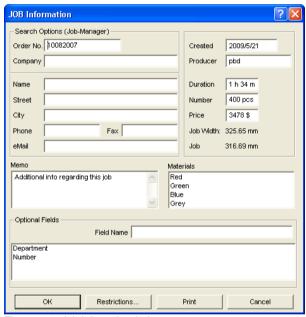


Fig. 8.14-1: Job info main window

With the job info you have the possibility to save additional information to each job. This information can be printed and used for the invoicing or as accompanying ticket to jobs. If the job info is printed, also the complete path in which the job was saved is printed.

Besides information as for example *order number* and *company* address the job info gives information about the used *materials*, *duration of the production*, *number* of cut / printed jobs as well as the intended or calculated *price*. In the *memo* field keyword comments can be saved.

In the **settings** menu / menu item **standard settings** / menu item **job info...** the job info can be extended by arbitrary many fields.

Indication: The information under the field media are only inserted automatically, if you have given these information to the respective color layer in the layer settings dialog and selected the adequate palettes at the design. Further information about

this can be found here: Decision please refer to 9.3.6: II. Layer Settings Color Setup

Tip: The switch between the single fields is done the fastest way with the TABULATOR key.



Fig. 8.14-2: Job restrictions

To each job following restrictions can be added:

## No output

This job cannot be output.

## No export

This job cannot be exported and thus cannot be converted to another format.

## No printing

This job cannot be printed.

## No saving

This job cannot be saved.

## Password protection

In addition to the restrictions described above, a password can be given to each EuroCUT job. This way, the unauthorized access to these job data is not possible.

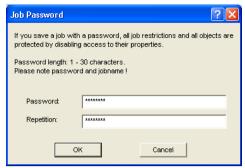


Fig. 8.14-3: Dialog for the determination of a job password

## 8.15 The Plot Manager

The Plot Manager has the following tasks:

## 8.15.1 Creation And Modification of Device Configurations

With the **Plot Manager** it is possible to create a device configuration or short, to create an output device. In a **device** all information necessary for the output of the data as for example driver and ports are summarized.

In EuroCUT, these devices then can be used for the output of the graphics. It is possible, to output simultaneously at several devices.

## 8.15.2 Monitoring the Output Processes of the Jobs

The outputs to the respective devices can be monitored with the Plot Manager, for example the output can be broken or aborted and the sequence of the jobs can be changed retroactively.

## 8.15.3 Output of Data to Local Ports

The serial and parallel ports of the computer are identified and can be used for the file output.

## 8.15.4 Administration of Hotfolders

A function independent of EuroCUT is the administration of Hotfolder. A Hotfolder is a directory monitored by the Plot Manager. If a file is copied to this directory the Plot Manager carries out automatically certain configurable functions.

## 8.15.5 Plot Server Function

The Plot Manager can enable devices so that other Plot Managers can use these enabled devices. This allows separating design and output working places.

Important note:You start the Plot Manager with a double click on the is down right of the screen in the task bar.



Fig. 8.15-1: Plot Manager main window with job preview down left

## 8.15.6 Devices Folder

Each device possesses three device folders in which the jobs are shown:

Indication: with jobs, also those output actions are meant that are carried out by Hotfolders or on local ports.

#### **Devices Folder 1**

#### A Active Jobs

All jobs that shall be output as soon as the device is ready are collected in this folder. If a job has been output completely, the next job is output. If the option "show message window before output of a job" is active, a notification dialog is shown before each output.

#### **Devices Folder 2**

### A Passive Jobs

If the output device is broken, all jobs to be output are moved to this folder.

#### **Devices Folder 3**

#### Saved Jobs

Here, all jobs that have been output are saved. The number of the saved jobs can be indicated in the options dialog of the device. If the number of the saved jobs is reached the

#### 8.15.6 Devices Folder

next one to be saved replaces the oldest existing job.

#### Job Functions

The functions differ according to device folder, device type and job status.

Indication: The functions can be carried out via a context menu.

## Functions for jobs at local devices:

#### Active Jobs

If the job is being output:

#### Pause

The output of the data is paused. The job is marked with the ₱symbol.

#### Paused Jobs

#### Continue

The output is continued.

### Set Job to passive

The job is removed from the list of the active jobs and added to the folder of the passive jobs.

## Delete Job

The job is deleted.

#### Passive Jobs

#### Activate Job

The job is removed from the list of the passive jobs and added to the folder of the active jobs.

### Delete Job

The job is deleted.

User message: to this job, a notification text can be entered. This information is shown if the job shall be output respective if it is selected.

#### Saved Jobs

### Activate Job

The job is removed from the list of the output jobs and added to the folders of the passive or active jobs depending on the setup device.

#### Delete Job

The job is deleted.

#### Plot to File

Here you can determine if the job shall be output to a file.

#### Save as

Save job data into file before cut data processing.

#### Functions for Jobs at Plot Server:

#### Active Jobs

No functions

#### Passive Johs

#### Activate Job

The job is removed from the list of the passive jobs and added to the folder of the active jobs.

#### Delete Job

The job is deleted.

User message: to this job, a notification text can be entered. This information is shown if the job shall be output respective if it is selected.

## Saved Jobs

#### Activate Job

The job is removed from the list of the output jobs and added to the folder of the passive or active jobs depending to the setup device.

### Delete job

The job is deleted.

#### Save as

Save job data into file before cut data processing.

#### Functions for jobs at Hotfolders:

#### Active Jobs

No functions

### Passive Jobs

#### Activate Job

The job is removed from the list of the passive jobs and added to the folder of the active jobs.

## Delete Job

The job is deleted.

*User message:* To this job, a notification text can be entered. This information is shown if the job shall be output respective if it is selected.

## Saved Jobs

Activate Job

The job is removed from the list of the output jobs and added to the folder of the passive or active jobs depending to the setup device.

#### Delete Job

The job is deleted.

#### Save as

Save job data into file before cut data processing.

### Functions for Jobs at local ports:

#### Active Jobs

If the job is being output:

#### Pause

The output of the data is broken. The job is marked with the • symbol.

#### Paused Jobs

## Continue

The output is continued.

### Set Job to passive

The job is removed from the list of the active jobs and added to the folder of the passive jobs.

#### Delete Job

The job is deleted.

#### Passive Jobs

### Activate Job

The job is removed from the list of the passive jobs and added to the folder of the active jobs.

#### Delete Job

The job is deleted.

Notification: To this job, a notification text can be entered. This information is shown if the job shall be output respective if it is selected.

#### Saved Jobs

## Activate Job

The job is removed from the list of the output jobs and added to the folder of the passive or active jobs depending to the setup device.

Delete Job

The job is deleted.

Plot to File

Here you can determine if the job shall be output to a file.

Save as

Save job data into file before cut data processing.

## 8.15.7 Settings of the Plot Manager

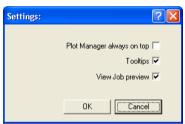


Fig. 8.15-2: Optional parameters for the Plot-Manager

If the option is activated **Plot Manager always on top**, the Plot Manager window remains always in the foreground.

If the option *tooltips* is activated, a short description to a dialog element is shown if the mouse pointer remains above the dialog element.

If the option view job preview is activated a preview of the output data is shown.

### **Command line parameters**

If the Plot-Manager is started without parameters it checks all devices if there are jobs for processing.

If a job was found it is carried out. It stops if no jobs were found or if all jobs have been processed.

If, when calling up the parameter **!SPOOL!** is given, the Plot Manager remains active. It then has to be terminated manually with a right mouse click onto the symbol in the taskbar.

### Hotfolder

With a Hotfolder a directory can be monitored. If a file is copied to the directory to be monitored one of the following actions is carried out automatically depending on the settings:

#### 8.15.7 Settings of the Plot Manager

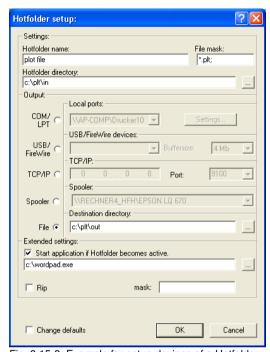


Fig. 8.15-3: Example for setup devices of a Hotfolder

## Settings

Hotfolder name: here you have to enter the name of the Hotfolder

File mask: here, the file name ending are given, that shall be considered, for example \*.plt.

Hotfolder directory: here, it is determined which directory the Hotfolder shall monitor.

## Output

*COM/LPT:* the file is output to a local serial respective parallel port.

USB: the file is output to a USB device. A USB device is only shown if it is connected with the computer.

*TCP/IP:* the file is send to a TCP/IP address. With some addresses, you additionally have to enter the right port number.

Spooler: the file is output via a printer driver.

File: the file is copied to the output directory. An existing file with the same name is overwritten.

After having carried out the action, the input file is deleted.

Indication: if "file" is set as output, the application is started **after** the copy. In all other cases, the application is started **before** the output.

### **Extended Settings**

Start application if Hotfolder becomes active: in addition, another application can be started that shall further process the input file to be processed. The file name is marked with %s.

RIP: only necessary if Pjannto RIP uses this Hotfolder as RIP Hotfolder.

Mask: formatting of the output file name: %File file name; date/time: %Y - %d\_%H-%M-%S year/month/day: hour/second/minute

Change defaults: prevents that the user modifies the output parameters accidentally.

## 8.15.7.1 Device Options

In the *Device Options* window you can set - for each device which is listed in the Plot Manager - the following device options.

Note: This window will be enabled by clicking with the right mouse button on a device item and selecting the Options menu item.

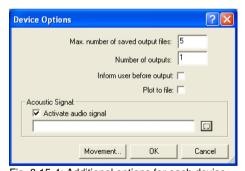


Fig. 8.15-4: Additional options for each device

## Maximal number of saved output files

The registered value of this option limits the number of saved output jobs for this device in the history of stored files.

## Number of outputs (of a Job)

The registered value of this option defines how often active Jobs will be given out.

#### 8.15.7 Settings of the Plot Manager

## Inform user before output

If this option is enabled, then a message window will be shown, before the outputting of each Job. This gives the user the opportunity to prepare the machine before the data output.



#### Plot to File

If this option is enabled, then the output is redirected to a file. Before writing the file to the **Job Save As** dialog is enabled.

## Activate Sound Signal

If this option is enabled, then an individual sound signal will be given out before each output of a Job, in order to draw attention to the user.

A sound file in the WAV file format can be selected using the <u>u</u> button.

#### The Movement... Button

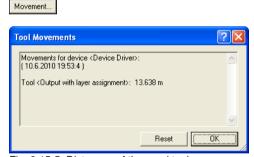


Fig. 8.15-5: Distances of the used tools

This feature tracks the distance (tool motion), from *every tool* of the activated output device in meters. In addition to the distance, date and time of each output are given.

## 8.16 The PhotoCUT Function

**PhotoCUT** creates vectors out of bitmaps. PhotoCUT calculates from Windows bitmap files (\*.BMP, \*.PCX, \*.TIF) raster strips or patterns that can be output with a cutting plotter. The picture is divided in logical pixel and the average gray value detected for each of these logical pixel. A picture is created that has fewer pixels than the original. Then, horizontal or vertical strips, circles, squares, ... are created from this picture whose width is proportional to the gray value at the respective position.

## 8.16.1 The PhotoCUT Dialog

Open the **PhotoCUT** dialog by selecting the so named menu item in the **tools** menu.



Fig. 8.16-1: Dialog with parameter-setup

#### General settings

### Pixel in X-direction

In this field, enter the number of *pixel* that shall be combined to a *logical* pixel *in X-direction*. The smaller the value in this field, the better the output quality of the "picture".

### Pixel in Y-direction

In this field, enter the number of *pixel* that shall be combined to a logical pixel *in Y-orientation*. The smaller the value in this field, the better the output quality of the "picture".

#### Remaining width

This value determines the *remaining width* of a strip (only with strips) in mm of the line respective column size.

#### Excursion: contrast (adjust via image menu contrast)

Because of the division of the bitmaps into logical pixel the line respective column size is determined. The width of a strip depends on the set gray value and the contrast. The maximum width is line respective column size minus the value of the remaining width.

Corresponding to the contrast value the width of the strip is identified by the average shade of gray. The contrast is the proportion between white and black in %, which means with 100% contrast the 100% black is mapped on the maximum and 100% white on the minimum width of the stripe. If the contrast is reduced, the 100% black is only calculated with for example 50% of the maximum width of the stripe.

## Minimum gray value

The *Minimum gray value* is a limit for the shade of gray. You can for example remove a constant gray bitmap background.

Indication: This value is only relevant if a graphic is darker than its background.

For all examples the following picture serves as template: (Standard path: C:\Program Files\EUROSYSTEMS\EuroCUT Basic 7\Bitmaps\photo.bmp)

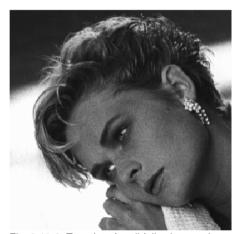


Fig. 8.16-2: Template for all following result examples

## Negative

The range of value of the shades of gray is reversed which means that 100% black become 0% white and vice versa.

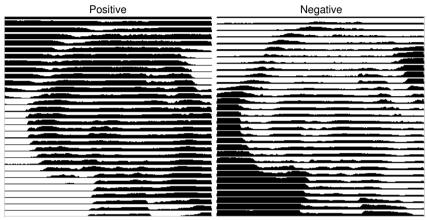


Fig. 8.16-3: Example for the reversion of the range of value

## Reverse direction (only with stripes)

If this option is activated, the width of the stripe is aligned downwards.

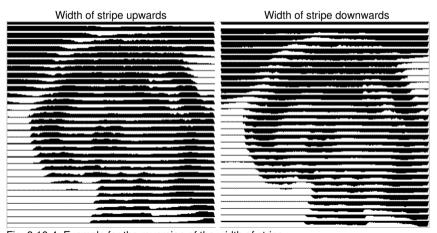


Fig. 8.16-4: Example for the reversion of the width of stripe

## Cut out

Width of stripe upwards

Width of stripe downwards

## Double (only with stripes)

If this option is activated, the width of stripe is created up and down.

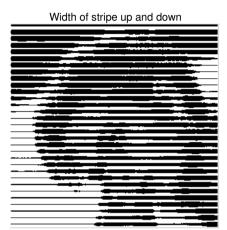


Fig. 8.16-5: Example for "double"

#### Horizontal or vertical

With the options *horizontal* or *vertical* the direction of the stripe is determined.

## **Bitmap**

In the area named *bitmap* the file data of the template (of the picture) are shown. In the upper area the *width* and *height* of the picture in pixel are indicated and the *resolution* in dpi. Underneath, the width and height of the picture are shown in millimeters.

Depending on the functions in the area *general settings* different effects are created.

## Example 1

Following values have been set:

Pixel in X-direction = 1
Pixel in Y-direction = 10
Remaining width = 0
Contrast = 80
Minimum gray value = 0
Orientation = horizontal

Negative = not active Reverse direction = no active Double = not active

## Result



Fig. 8.16-6: Result from the value of example 1

## Example 2

Following values have been set:

Pixel in X-direction = 3
Pixel in Y-direction = 15
Remaining width = 5
Contrast = 60
Minimum gray value = 0
Orientation = horizontal
Negative = not active
Reverse direction = not active
Double = not active

### Result

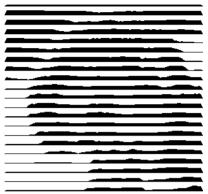


Fig. 8.16-7: Result from the value of example 2

With the 2 examples you can see that already small modifications of the values lead to big discrepancies with the result.

## Weeding aid

## Create weeding aid

The stripes at the ends are automatically thickened so that the result can be wed faster.

## Stripes per strap

In this field the number of stripes that shall contain a strap can be set.

## Width of strap

In this field you define the width of a strap.

For information, underneath these fields the estimated *number of objects* is shown. This is important to decide beforehand if the expenditure of time for the weeding is in a responsible relation to the complexity.

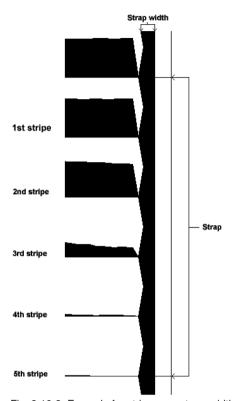


Fig. 8.16-8: Example for stripes per strap, width of strap and stripes

## The different modi

In the PhotoCUT dialog you can select between following *modi: stripes, rhombuses*, *circles, rectangles, single rhombuses, single circles, single rectangles.* 

With which mode you obtain the best and most attractive result depends strongly of the used template. Templates rich in contrast are usually better suited for optically interesting results.

Tip: The screen does not always show a view that enables a reliable evaluation of the results. Therefore, print the result on your printer. Now you can judge the result of the procedure relatively exactly and do not risk to waste expensive material! 8.16.1 The PhotoCUT Dialog

## 9 The Sidebar

The **Sidebar** is switched on or off via the **Window** menu.



## 9.1 Term Definition Sidebar

A "sidebar" means a lateral toolbar with tabs. It is comparable to the so-called docking bars in CorelDRAW. In summary, we find the layer editing (formerly Layerbox), the clip art manager, object manager, file manager, and the macros.

## Functionality of the Sidebar for the user:

The Sidebar summarizes different tools. Previously distributed toolbars such as Layerbar, Clipart Manager were combined in a compact tab structure. The sidebar serves as a central element of the object management.

## 9.2 The Anchorage Control



Fig. 9.2-1: Anchorage control with arrow and dotted line for moving and placing

Note: Only in the docked state, the Anchorage control is activated and visible. The Collapse Button



Pressing the *Collapse* button folds in the sidebar so that only the *tab bar* and the *Unfold* button stay visible on the right side.

#### The Unfold Button



Enabling the *Unfold* button folds out the sidebar to the previous set size.

#### The Close Button



Pressing the *Close* button removes the sidebar from the program user interface.

#### The Dotted Line

The **Dotted Line** is used to move the entire sidebar. While the **left mouse button is hold down**, the sidebar can be moved to any place. **Double-clicking on the dotted line** looses the sidebar as well. Double-clicking on the head **or** moving the mouse towards the right edge of the bar **anchors** the sidebar.

## 9.2 The Anchorage Control

## The Tab Bar



Fig. 9.2-2: Tab bar with activated layer tab

The selection is done by clicking on the appropriate tab.

Note: The bar may include, depending on the program version more, less or other than those shown tabs.

## 9.3 The Layer Tab

The *Sidebar* is switched on or off via the **Window** Menu. Selection using the *Layer* tab.



The *Layer* area serves for the coloring of objects, the definition of foil colors, the selection of objects that have a layer color, the locking and the hiding of color layers as well as the allocation of *output* tools.

## 9.3.1 A) The Layer Area



## 9.3.2 B) The Layer Options

New

Fig. 9.3-1: The New button

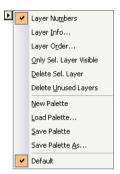
This option generates a new layer an opens the corresponding dialog.

Sel

Fig. 9.3-2: The Sel(lect) button

This option selects the clicked Layer.

## 9.3.3 C) The Palettes Options



## Layer numbers

The activation of this option switches on or off the numbering next to to the color bar.

## 9.3.3.1 Layer Info Dialog

## **Layer Info Dialog**

opens the following Setup Layer dialog.

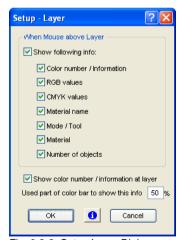


Fig. 9.3-3: Setup Layer Dialog

When mouse over layer, show following info,

the activated information is shown in so-called Tooltip.

In addition, the *used part of color bar to this info %, number of visible layers* can be defined and the *window width* of the *layer* toolbar can be changed interactively.

## 9.3.3.2 Layer Order Dialog



Fig. 9.3-4: The Change Layer Order Dialog

The sequence of the layers can be changed arbitrarily. To do so, please use the  $\it up$ ,  $\it down$ ,  $\it to top$ ,  $\it to bottom$  button.

## 9.3.3.3 Only sel. layer visible

Only shows the objects that lie in teh selected layer.

## 9.3.3.4 Del sel. layer

The activation of this option deletes the selected layer.

Note: This option can only be activated if no objects lie in this layer, if the layer is unused.

## 9.3.3.5 Delete unused layer

All layers that do not contain any objects (unused) are deleted.

#### 9.3.3.6 New

This option generates a new color palette.

Note: 6 base layers will always be created. Order and color can be changed anytime.

## 9.3.3.7 Load

Previously defined palletes can be loaded.

## 9.3.3.8 Save

With this instruction a newly defined or mdoified palette is saved on your harddisk.

Note: If a new or changed palette is named 'Default', this palette is used at every restart of EuroCUT.

## 9.3.3.9 Save as

This instruction allows the renaming of a palette name and save the palette using the new name.

## 9.3.3.10 Default (History)

This instruction loads the color palette that is delivered as standard with EuroCUT. It is a Mactac foil table.

## History

This function facilitates the loading of the last color palettes. At the end of the menu list the names of the last edited color palettes appear.

## 9.3.4 Status Indicator Layer

- Object in Layer Color
- Layer not visible
- Laver is locked
- Layer is active and empty
- | Object in active Layer

Fig. 9.3-5: Layer Statusanzeige

## Object in layer color

Is a layer marked with this symbol, it means that objects are in this color or layer assignment exists. The selection is easiest using the Sel button.

### Not visible layer

Is a layer marked with this symbol, it means that objects in this color or layer assignments are not visible at present. They exist an can be switched visible if needed. In general layers are set to invisible, if they are obstructive while designing.

#### Locked layer

Is a layer marked with this symbol, it means that objects in this color or layer assignments are locked, thus can not be edited, moved or scaled.

### Layer active but not occupied

Is a layer marked with a frame, it means that no objects are available in this color or layer assignment, but the layer is active. Now, for example, objects can be filled with that color or contour and layer assignments can be done. The number indicates the layer number and the depth of arrangement.

Note: The term depth of arrangement means that objects with a lower number are drawn before those with higher numbers. The layer order also has an influence on the drawing sequence.

## Object in layer and active

Is a layer marked with a frame and this symbol, it means that the layer is active and there are objects in that color (or layer assignments) on the desktop. The number indicates the layer number and the depth of arrangement.

Note: The term depth of arrangement means that objects with a lower number are drawn before those with higher numbers. The layer order also has an influence on the drawing sequence.

## 9.3.5 I. Layer SettingsOutput Setup

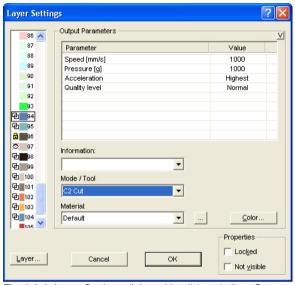


Fig. 9.3-6: Layer Settings dialog with toll / mode list - Output setup

# 9.3.6 II. Layer Settings Color Setup

The following view appears after you press the *color* button.

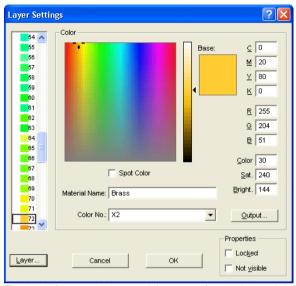


Fig. 9.3-7: Layer - color, material name, color number and define properties - color setup

In the *layer settings* dialog the following three color models are available.

- 1. CMYK Cyan, Magenta, Yellow, Kontrast
- 2. RGB Red. Green. Blue
- 3. HSB Hue, Saturation, Brightness

### Layer button



#### Save

This instruction saves an additional layer containing individual settings.

#### Insert

Inserts a layer into the *Layer* toolbar.

9.3.6 II. Layer Settings Color Setup

#### Delete

This instruction deletes a layer from the *Layer* toolbar.

### Save palette

This option saves all modifications in the corresponding palette file into the pal subfolder.

## **Properties**

#### Locked

**Locked** means that objects which are in this color layer can not be marked or selected. In front of the locked layer appears symbolic a U-lock.

#### Not visible

**Not visible** lets disappear all objects from the desktop which are assigned to this layer. In front of the not visible layer appears symbolic a stroked eye.

Note: Both functions can be undone at any time by activating the layer settings dialog using the right mouse button in the color bar. Now the resetting of properties is possible.

#### Color

#### Material name

In the field *Material name* you can assign to a color layer an individual name.

#### Color number

In the field *color number* you can enter the name associated with this type of material or color number.

Note: The advantage of the allocation of foil name and color number is that you can assign all materials to color layers - tailored to your stock. In designing these materials can be taken into account so that the assignment is visible during output. For each choice of films or types of materials a palette that is used in the design can be stored.

### **Output button**

The activation of the *output* button switches to the *Output* setup.

Important note: This dialog is only enabled when this option was set in the driver! Only then the output button appears.

### Spot color

The color name that is entered in this field is written into the output file if an EPS export is done.

Note: Often, this option is used for the definition of cutting paths, or the spot color is treated as a special channel in Photoshop.

## Palette history

This function facilitates the loading of the last color palettes. At the end of the menu list the names of the last edited color palettes appear.

#### Sel button

Sel

Fig. 9.3-8: Sel(ect) button

If the **sel** button is pressed all objects which lie in the selected layer are marked.

# 9.3.7 Hotkeys in the layer processing

The following hotkeys are available in the layer processing.

Adjacent hotkey opens the Layer Settings dialog box



### Jump in the toolbar

POS 1 key

Jump to the first layer

END key

Jump to the last layer

Paup key Jump to 1/10 of the total layer number

CURSOR up / down Jump to the next layer

### Color assignment via the toolbar

**Double-click** assigns the layer color to marked objects

**Double-click + CTRL** assigns to marked objects a pen contour in the active layer

key color

# Movement of single layers / modification of the sequence

1. Step: Position mouse cursor on wanted layer

2. Step: Press left mouse button and keep pressed

3. Step: Move layer to the wanted position

4. Step: Press once right mouse button

5. Result: The layer is at the new position

# 9.4 The Cliparts Tab

# 9.4.1 Clipart Management

The *Cliparts* tab is switched on or off via the *window* menu.



The *Cliparts* tab serves for the administration of your cliparts.

You can take these so-called cliparts from the wnate clipart group via drag & drop to the EuroCUT working sheet and edit them further.

# 9.4.1.1 Definition Clipart

What is a *Clipart*? Cliparts are objects, parts of jobs or whole jobs that have been added to the cliparts tab. Cliparts serve primarily to direct and quick access to design elements. As clip art is therefore virtually everything that is needed for quick or frequent job generating, for example sign plates of different sizes, logos, design templates, and much more.

Cliparts are similar to jobs in the handling.

Note: Aid lines are not saved.

# 9.4.1.2 Add Cliparts

Cliparts can be added via drag & drop or right mouse button context menu activation submenu "Add Cliparts".

## 9.4.1.3 Delete Cliparts

Cliparts can be deleted from the group using the DEL key.

# 9.4.1.4 Definition Clipart Folder

Folder is the structural generic term. In a *Clipart Folder*, several *Clipart Groups* can be included.

# 9.4.1.5 Definition Clipart Groups

Group is the structural generic sub term. Individual cliparts are collected in *Clipart Groups*.



Fig. 9.4-1: Clipart area with control elements



Fig. 9.4-2: Clipart info window

The Clipart info window is displayed if the mouse cursor whiles a short period of time above the desired thumbnail.

# 9.4.1.6 Add Clipart Folder... Button



# 9.4.1.7 Settings Tab



#### Folder Field

The selected folder in the Folder field is added to the list of clip art management.

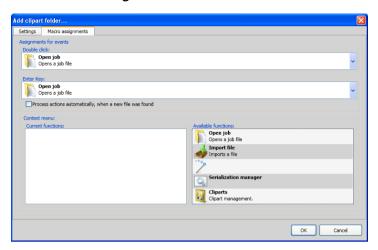
## **Monitor Folder Option**

With this option, the directory monitoring is turned on, ie, whenever a new file is stored in this folder, a thumbnail is created.

# With Subfolders Option

All subfolders are included in the monitoring if this option is also enabled.

# 9.4.1.8 Macro Assignments Tab

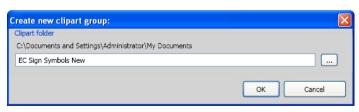


Using the *Macro Assignments* tab events (e. g. double-click or enter key) can be assigned to specific functions. The possible function assignments are listed in the *Available functions* area.

Additionally functions can be added to the *context menu* via drag & drop. After this procedure they are listed in the *Current Functions* area.

# 9.4.1.9 Create New Clipart Group... Button



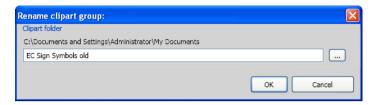


### Clipart Folder Field

In this field the name of a new clipart group can be entered.

# 9.4.1.10 Rename Clipart Group Button





### Clipart Folder Field

Clicking on the ... button allows the selection of the clipart folder that should be renamed.

# 9.4.1.11 Edit Clipart Folder... Button





#### Folder Field

The directory field in the selected directory can be edited.

### **Monitor Folder Option**

With this option the folder monitoring is turned on that is, every time when a new file is stored in this directory a thumbnail is created.

### With Subfolders Option

All subfolders are included in the monitoring if this option is also enabled.

# 9.4.1.12 Import Clipart Files... Button



By means of this function elder **CLA files** can be read. All previous versions of EuroCUT used the cla file format when saving cliparts. This function converts them into the new format.

### 9.4.1.13 Refresh Button



Rereads the clipart group and generates up to date thumbnails.

# 9.4.1.14 Save Changes Button



Saves the current state of the clipart management.

### 9.4.1.15 Diminish Presentation of Folder Levels... Button



Shortens the visible path by one folder level. This provides clarity in a complex and widespread clipart folder structure.

# 9.4.1.16 Increase Presentation of Folder Levels... Button



The visible path is extended by one more folder level.

# 9.4.1.17 Common Settings... Button



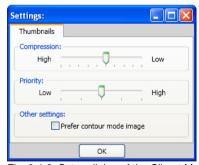


Fig. 9.4-3: Setup dialog of the Clipart Manager

### Thumbnails Tab

#### 9.4.1 Clipart Management

### Compression

This option determines which compression rate will be used when generating preview images (Thumbnails).

## Priority

This option adjusts, how the thumbnail creation behaves in relation to the main application. The higher the priority, the more CPU time the process gets assigned.

### Other Settings

## Prefer contour mode image option

Enabling this option displays the thumbnails in contour mode i. e. without color fill - analogous to the *contour* mode.

# 9.4.1.18 Number of Thumbnails per Line Button





### 9.4.1.19 Slider

The slider serves to determine the number of thumbnails that can be displayed in a line. This is based on the current width of the sidebar. Here there are 6 thumbnails that are displayed per line.

### 9.4.1.20 Show Name

This option shows in the activated state the name of the clipart file in addition to the thumphnail.

## 9.4.1.21 Thumbnail View / List View Button



### 9.4.1.22 Thumbnail View



### 9.4.1.23 List View

2	EC Sign Symbole0	24.04.2009 15:49	3,48 KB
<b>~</b>	EC Sign Symbole1	24.04.2009 15:49	0,64 KB
T	EC Sign Symbole1	24.04.2009 15:49	5,56 KB
X	EC Sign Symbole1	24.04.2009 15:49	1,33 KB

### 9.4.1.24 The Search Field



# 9.4.1.25 Search by File Name

By default, is searched in the order of the letters, how they are entered.

Note: Permitted are also wildcards such as \* and ?.

### Example:

Be\* - searches for all file names beginning with Be

B??ling - searches for all filenames that start with B, then have 2 characters in between and end up with ling, such as Billing

## 9.4.2 The Context Menus

# 9.4.2.1 Context Menu 1



Description of menu items: Please refer to 9.4.1.6: Add Clipart Folder... Button ff

# 9.4.2.2 Context Menu 2



Description of menu items: Description of menu items: please refer to 9.4.1.6: Add Clipart Folder... Button ff

### 9.4.2.3 Context Menu 3 Search Field



# 9.4.2 The Context Menus

# 9.4.2.4 Context Menu 4 Clipart



# 9.5 The Macros Tab

The *Macros* tab is responsible for managing scripts for the automation of functional and work processes - **Keyword: Process Management**. Here all macros are listed that are located in the macros subfolder of the program.

### 9.5.1 The Macro List

The figure below shows the start view after enabling the *macro* tab - here: **macro list** only with the *number of duplicates* macro.

# 9.5.1.1 Macro Title



Fig. 9.5-1: Icon and title resp. macro name

# 9.5.1.2 The Execute Button



A click on the *execute* button enables the selected macro. Depending on the preset the macro is executed, either directly or there will be required additional input from the user.



Fig. 9.5-2: Macro view before processing

# 9.5.2 The Tool Bar Area

## 9.5.2.1 The Tool Bar



Fig. 9.5-3: Closed tool bar with layer selection

## The Open/Close Button



A click on the Open/Close button opens and closes the complete tool bar.



Fig. 9.5-4: Opened tool bar

# 9.5.2.2 Layer Selection and Assignment

### The Layer Selection Button

Fig. 9.5-5:

With this button selected objects can be related to any layer and tool (if assigned!).

# The Assign Layer Button

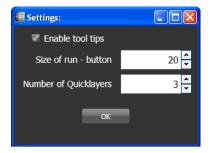
Fig. 9.5-6:

After clicking on the **Assign Layer** button the selected objects are **assigned in fact** to the chosen layer.

# 9.5.2.3 Common Settings



After clicking on the *Common Settings* button the following dialog appears:



# 9.5.2.3.0.1 Enable tool tips

The *Enable tool tips* option activates respectively deactivates the display of **help texts** in the Workflow Manager

### 9.5.2.3.0.2 Size of run button

This option determines the size of the run button for starting the macro. Especially for touch screens a resizing can be done.

# 9.5.2.3.0.3 Number of Quicklayers

This option determines how much Quick layers are displayed in the **Macro tab**.

# 9.5.2 The Tool Bar Area

# 10 Add Ons

# 10.1 The PhraseWriter

The PhraseWriter is an application that creates and administers text modules - also independent from EuroCUT. These text modules can be inserted in active applications.

# 10.1.1 How are text modules being created?

**Step 1:** In the left category field activate the context menu with the right mouse button and create a "new entry" with the *new*-instruction and name the new text module.

**Step 1a:** If step 1 is repeated before a text was entered in the text module edit field, a folder, a so-called **category**, is created in the tree structure!

**Step 2:** Enter a text in the text module edit field via the keyboard or insert a text from Windows clipboard.

Step 3: Allocate a name for the XML file with the menu entry file, save as.

# 10.1.1.1 Category selection in minimized status:

The selection is done via the context menu (right mouse button) in the Windows info bar.

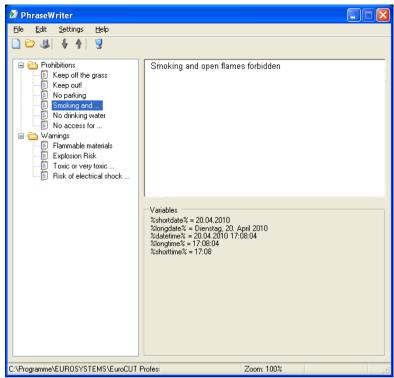


Fig. 10.1-1: Main dialog with tree structure of the categories, text module-entries (left), text module-edit field and list of variables (right)

# 10.1.2 The Icon In The Windows Info Bar



Fig. 10.1-2: Icon in the Windows info bar

The icon above is the central control element if the main dialog of the PhraseWriters was minimized. A double click on the icon reactivates the main dialog and shows the window in the foreground. A click with the right mouse button on the icon activates the context menu in the info bar.

# 10.1.3 The Context Menu In The Info Bar

Via the option add entry all categories (folders) with text modules are shown.



Fig. 10.1-3: Context menu of the icon in the info bar (right mouse button)

# 10.1.3.1 Add entry

This option creates a new category with text modules.

### Categories

This option lists all available text module files (\*.xml).

# **Settings**

This option opens the main dialog and moves the cursor into the right input window - ready for entering a new text module.

#### Quit

This option ends the application.

# 10.1.4 The Settings Window

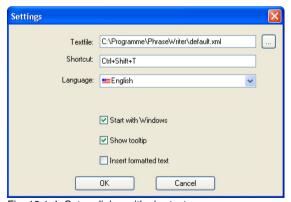


Fig. 10.1-4: Setup dialog with shortcuts

# **Textfile**

By means of the ... button the path of a text module file (\*.XML) can be set.

10.1.4 The Settings Window

### **Shortcut**

Via the keyboard a shortcut for the PhraseWriter can be defined.

### Language

This option allows the change of the language if translations are available for the PhraseWriter.

#### Start with Windows

If this option is activated, the PhraseWriter is started automatically at every new start of Windows. The icon is - down right -in the info bar of the Windows desktop.

### Show tooltip

If this option is activated, an explaining info text is shown when moving the mouse cursor above the buttons.

#### Insert formatted text

If this option is activated, also formatted texts from the Windows clipboard are inserted.



Fig. 10.1-5: Toolbar

The sequence of the buttons from left to right: new, open, save, move upwards, move downwards, settings

### 10.1.4.1 The context menu left



Fig. 10.1-6: The context menu of the category and text modules entries

### Rename

This option allows renaming categories or text module entries.

#### New

This option creates a new text module entry. Repeating this instruction immediately creates a folder, a category in the tree.

### Copy

This option creates a copy with the same name of a category or a text module entry.

#### Delete

This option deletes a category or a selected text module entry.

Attention: when deleting no direct safety inquiry is done. Only when quitting you are asked if the carried out modifications shall be saved. If this question is answered with "yes" the deletion cannot be made undone.

#### Sort

This instruction sorts all entries of a selected category ascending, from A to Z.

#### Sort all

This instruction sorts all entries of all categories ascending, from A to Z.

# 10.1.4.2 The context menu right

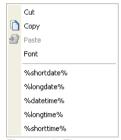


Fig. 10.1-7: The context menu in the text module edit field

#### Cut

This instruction cuts a marked text part and puts it into the Windows clipboard.

### Copy

This instruction copies a marked text part and copies it into the Windows clipboard.

#### **Paste**

This instruction pastes a text part from the Windows clipboard to the edit field.

#### Font

This instruction opens the font dialog and modifies the font of a marked text.

#### List of variables

The selection of a variable is done with a mouse click. After clicking they are inserted in the text module entry field.

#### Variables

In this field all available variables are listed. Right next to the name of the variable an example with the respective formatting are shown.

# 10.1.5 Reference Part PhraseWriter

### 10.1.5.1 The File Menu

### 10.1.5.1.1 The New Command

With the *new* instruction a new XML file is being created.

CTRL+N

### 10.1.5.1.2 The *Open* Command

With the *open* instruction a new XML file is loaded.

CTRL+O

# 10.1.5.1.3 The Import Command

With the *import* instruction a XML file is imported into an already loaded file. CTRL+I

#### 10.1.5.1.4 The Save Command

With the **save** instruction a XML file is saved on a data carrier.

CTRL+S

#### 10.1.5.1.5 The Save As Command

With the save as instruction a XML file is saved under a new name.

### 10.1.5.1.6 The Quit Command

With the *quit* instruction the PhraseWriter is terminated.

ALT+F4

### 10.1.5.2 The *Edit* Menu

### 10.1.5.2.1 The Rename Command

With the *rename* instruction text module categories and text modules can be renamed.

#### 10.1.5.2.2 The New Command

With the *new* instruction a new entry in a text module category is created.

## 10.1.5.2.3 The *Copy* Command

With the *copy* instruction a new entry with the same name is created in the activated text module category.

# 10.1.5.2.4 The Delete Instruction

With the *delete* instruction an entry is deleted from a text module category.

#### 10.1.5.2.5 The Sort Command

With the *sort* instruction the entries of a text module category are sorted ascending from A to Z.

#### 10.1.5.2.6 The Sort All Command

With the **sort all** instruction all entries of all text module categories are sorted ascending from A to Z.

# 10.1.5.3 The Settings Menu

# 10.1.5.3.1 The Standard Settings Command

With the **standard settings** instruction the dialog for setting the PhraseWriter parameters is opened.

In detail: ▶ please refer to 10.1.1: How are text modules being created?

#### 10.1.5.3.2 The Default Font Command

The *default font* instruction opens a dialog in which the display font for the PhraseWriter can be determined.

#### 10.1.5.3.3 The Window List Command

The *window list* instruction opens a dialog in which all currently opened application windows are listed. All selected windows are *ignored* by the PhraseWriter

### 10.1.5.4 The *Help* Menu

# 10.1.5.4.1 The Help Command

With the *help* instruction the PhraseWriter help is loaded.



# 10.1.5.4.2 The About... Command

With the *about* instruction a window is opened in which the version and a link to the manfufacturer's website is shown.

# 10.2 Fontmanager

For Type 1, TrueType, and BE fonts with an own database management

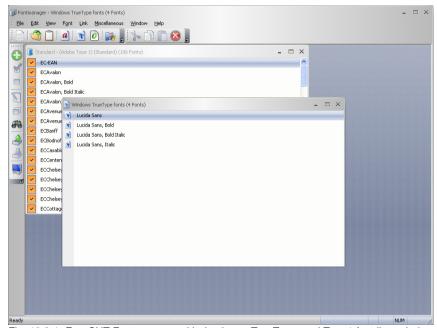


Fig. 10.2-1: EuroCUT Fontmanager with database, TrueType, and Type1 font lists window

# 10.2.1 What Can The Fontmanager?

#### **Preface**

The Fontmanager for TrueType, Type 1 and URW BE fonts works database-oriented, i.e. the fonts are installed only once from any data medium in any font database. Subsequently, the files belonging to a font are no longer needed. When generating a font database, for example in a network environment, all the fonts will be available to all users. It is no longer necessary for every user to keep or maintain font files locally on his hard disk.

The number of installed fonts is limited only by the available disk capacity. Fonts can be grouped into different databases. Once installed fonts are available at any time even if Jobs are loaded which include fonts which are not active at the moment.

# 10.2.1.1 Performance Characteristics (PC)

What can such a tool, or in other words, for what do you need such a tool?

The following features will shed light on the key features that describe the use of such a tool, and should demonstrate their value.

# 10.2.1.1.1 PC1: Font Databases for TrueType, OpenType, Type 1, and BE\* Font Formats

For the 3 above mentioned font formats, you can create your own databases. It serves for clarity and it is advantageous if the change between different formats and databases at any time is possible.

All fonts can be used in different formats for job preparation.

\*) A font format of URW Signus.

## 10.2.1.1.2 PC2: Font Management

Font Management means adding, activating, deactivating, duplicating, exporting and importing of fonts.

### 10.2.1.1.2.1 Advantages of the EuroCUT font management:

- All fonts are inserted into the EuroCUT font list at run time.
- There is a central place to manage "font matters".
- In addition to the Windows font management, you have the possibility to create custom categorization of fonts such as script, sans serif, roman, etc..
- If necessary, any font can be enabled or disabled. This is for the clarity of the font list.

### 10.2.1.1.3 PC3: Kerning - Kerning Editor With Inter-Active Interface

With the Kerning Editor the character spacing in fonts can be changed permanently. This is usually necessary when in the production of fonts no such kerning pairs were generated. The number of existing kerning pairs is a quality criterion for fonts.

### 10.2.2 Toolbars

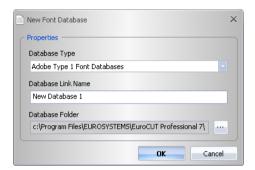
### 10.2.2.1 The File Toolbar



#### 10.2.2.1.1 The New Button



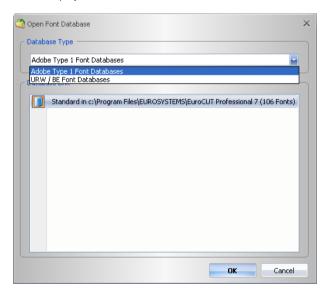
By means of activating the **New** button you can create a new font database. Along with the name type and folders can be specified.



# 10.2.2.1.2 The Open Button



By means of activating the *Open* button you can open a font database. All existing links will be displayed in a list.



10.2.2 Toolbars

# 10.2.2.1.3 The *Import* Button

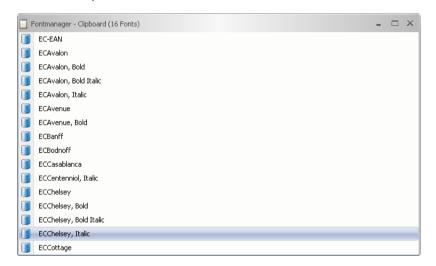


By means of activating the *Import* button a font database can be imported.

# 10.2.2.1.4 The Clipboard Button



Enabling the *Clipboard* button opens a window with the content of the clipboard. By means of the clipboard fonts can be transferred from one database into another.



# 10.2.2.1.5 The True Type Font Window Button



Enabling the *True Type Font Window* button open a window with all installed TrueType fonts.

# 10.2.2.1.6 The Adobe Type 1 Font Window Button



Enabling the **Adobe Type 1 Font Window** button open a window with all installed Type 1 fonts.

### 10.2.2.2 The Font Toolbar

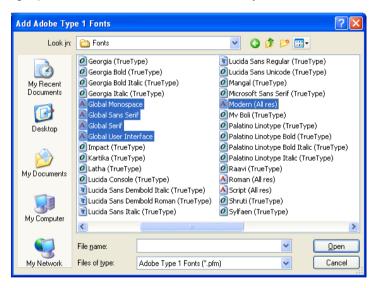


### 10.2.2.2.1 The Add Button



Fig. 10.2-2: Add fonts

Enabling the *Add* button opens the window, in which the choice to install fonts is possible. The selection of font file formats may vary depending upon the choice of the database. The selection is made by clicking on the desired fonts. With CTRL + click a single font (see figure) can be selected with SHIF + click additionally other fonts can be selected.



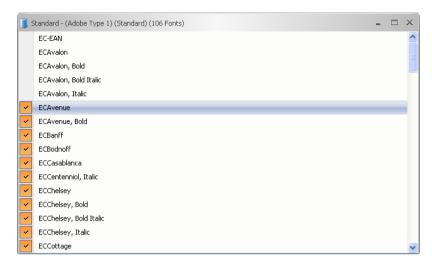
### 10.2.2.2.2 The Activate Button



Fig. 10.2-3: Activate fonts

A click on the *Acitvate* button makes the selected font in EuroCUT usable. Afterwards it is listed in the list of useable fonts.

#### 10.2.2 Toolbars



The first four fonts are de-activated und can be activated using the *Activate* button, i.e. can be used in the EuroCUT text editor.

### 10.2.2.2.3 The Deactivate Button



Fig. 10.2-4: Deactivate fonts

A click on the *Deactivate* button deletes the selected font in the EuroCUT font list. This function is the **reverse function** of the activate function.

### 10.2.2.2.4 The Rename Button



Fig. 10.2-5: Rename fonts

By means of activating the *Rename* button a font can be renamed. This is particularly useful if the Fonthersteller has used other names than the industry name or if instead of font names digits were used.



## 10.2.2.2.5 The Duplicate Button



Fig. 10.2-6: Duplicate fonts

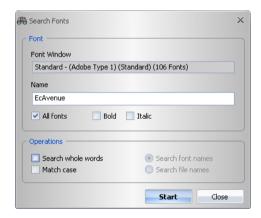
Acitvating the *Duplicate* button doubles the font entry in the database and allows renaming. The dupicated font now can be moved into another database.

### 10.2.2.2.6 The Search Button



Fig. 10.2-7: Search fonts

With this option in the activated database window can be searched for fonts. It can be searched by file name or font name. Additionally the search for font weights (bold, italic) is possible. The result ist displayed in a separate font window.



### 10.2.2.2.8 The Export Button



Fig. 10.2-8: Export fonts

Enabling of the *Export* button opens the following dialog.

#### 10.2.2 Toolbars

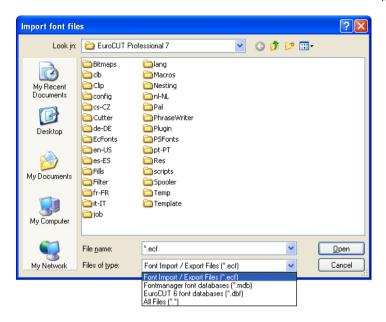


# 10.2.2.2.9 The Import Button



Fig. 10.2-9: Import fonts

Enabling this button opens a dialog in which you can select the folder, where the to import fonts are located. Valid file formats are: \*.ECF, \*.MDB and \*.DBF.



### 10.2.2.2.10 The Preview Button



Fig. 10.2-10: Font preview

A click on the **Preview** button opens the font preview window. It shows - in an enlarged bitmap view - how the selected font looks like.

Note: The font preview window can also be activated by double clicking on the desired font.



Note: + and - on the num keyboard increases resp. decreases the view in the font preview.

# 10.2.2.3 The Clipboard Toolbar



Its functionality is comparable with the Windows Clipboard.

## 10.2.2.3.1 The Cut Button



Activating the *Cut* button deletes the selected font from the list and copies it into the clipboard.

# 10.2.2.3.2 The Copy Button



Activating the *Copy* button copies the selected font into the clipboard.

# 10.2.2.3.3 The Paste Button



Activating the *Paste* button inserts the selected font from the clipboard into the selected database.

### 10.2.2.3.4 The Delete Button



Activating the *Delete* button removes the selected font or fonts from the database.

### 10.2.2.3.5 The Undo Button



Activating the *Undo* button resets into the state ahead of the last action.

### 10.2.3 Reference Section

### 10.2.3.1 The File Menu

#### 10.2.3.1.1 The New Command

With the *New* command a new database can be generated.



In addition to the name of the database, its type and destination folder can be specified too.

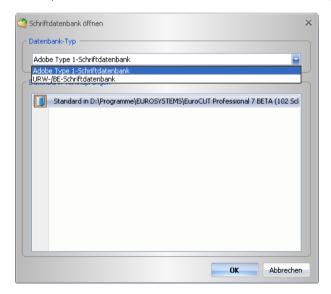


# 10.2.3.1.2 The *Open* Command

With the *Open* command a database can be opened.



The to open database can be chosen from a list, that lists all existing font databases.

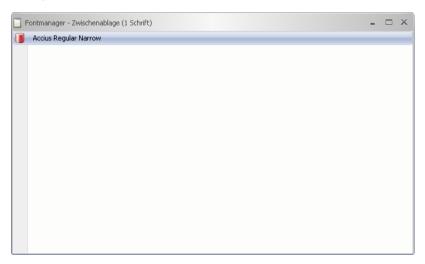


# 10.2.3.1.3 The Clipboard Command

With the *Clipboard* command fonts can be transferred from one database into another.



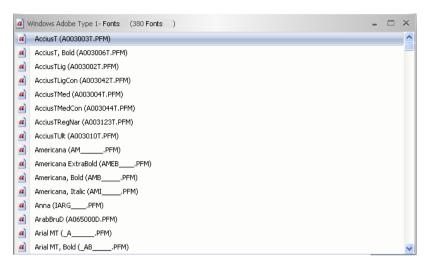
The clipboard can contain one ore more fonts. The selection of the fonts is done by marking the fonts in a font window.



### 10.2.3.1.4 The Windows Fonts Command

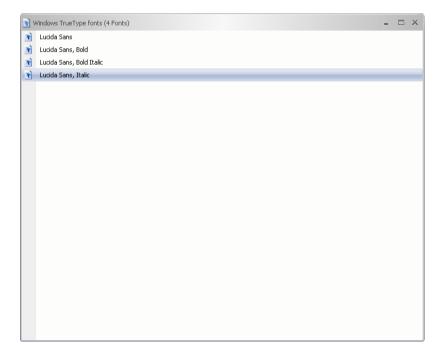
# 10.2.3.1.4.1 The Adobe Type 1... Command

The *Adobe Type 1* command opens a window in that will be listed all available fonts in the Type 1 file format. This fonts can be used in EuroCUT and are listed in the list of font types.



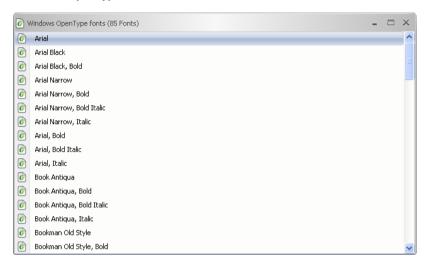
#### 10.2.3.1.4.2 The TrueType... Command

The *True Type* command opens a window in which will be listed all True Type fonts that are available. This fonts can be used in EuroCUT, if the *Use True Type Fonts* option was enabled in the *Text* menu.



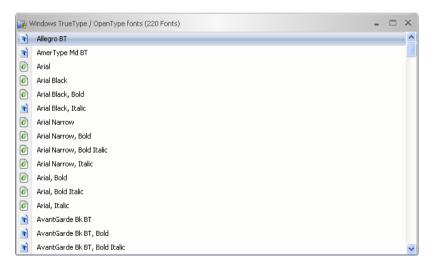
#### 10.2.3.1.4.3 Der OpenType... Command

The *OpenType* instruction opens a window, that lists all in your windows system available fonts in the *OpenType* file format.



#### 10.2.3.1.4.4 The TrueType and OpenType... Command

The *TrueType and OpenType* instruction opens a window, that lists all in your windows system available fonts in the *OpenType and TrueType* file format *together* in *one* font window.



#### 10.2.3.1.5 The Font Folders Command

#### 10.2.3.1.5.1 The URW / BE... Command

This instruction serves opening and listing of fonts in the URW BE file format in a new font window. After selecting the appropriate folder, in which the fonts are located, a window with these fonts is displayed. Then you can select these fonts and copy them in another - mostly a standard font window - to activate them.

#### 10.2.3.1.5.2 The *Adobe Type 1...* Command

This instruction serves opening and listing of fonts in the *Type 1* file format in a new font window. After selecting the appropriate folder, in which the fonts are located, a window with these fonts is displayed. Then you can select these fonts and copy them in another mostly a standard font window - to activate them.

#### 10.2.3.1.5.3 The TrueType and OpenType... Command

This instruction serves opening and listing of fonts in the *Type 1* file format in a new font window. After selecting the appropriate folder, in which the fonts are located, a window with these fonts is displayed. Then you can select these fonts and copy them in another mostly a standard font window - to activate them.

#### 10.2.3.1.6 The Quit Command

The Quit command finishs the program.



#### 10.2.3.2 The Edit Menu

#### 10.2.3.2.1 The Cut Command

The *Cut* command deletes the selected font in the active font window and copies it into the *Clipboard* for re-usage.



#### 10.2.3.2.2 The *Copy* Command

With the *Copy* command the selected fonts in the active font window are copied into the *Clipboard* for re-usage.



#### 10.2.3.2.3 The Insert Command

The *Insert* command puts the content of the *Clipboard* into the active font window.



#### 10.2.3.2.4 The Delete Command

The **Delete** command removes the selected fonts in the active font window.



#### 10.2.3.2.5 The Delete All Command

The **Delete All** command removes all selected fonts in the active font window.

#### 10.2.3.2.6 The View Menu

#### 10.2.3.2.6.1 The Symbols Submenu

The *Symbols* submenu entry allows the setting of the size of the symbols ahead of the font name in the font window.

#### 10.2.3.2.6.2 The Small Command

The *Small* command sets the symbols at a size of 16 x 16px.

#### 10.2.3.2.6.3 The Middle Command

The *Middle* command sets the symbols at a size of 24 x 24px.

#### 10.2.3.2.6.4 The *Large* Command

The *Large* command sets the symbols at a size of 32 x 32px.

#### 10.2.3.2.6.5 The Extra Large Command

The *Extra Large* command sets the symbols at a size of 48 x 48px.

#### 10.2.3.2.6.6 The Checkmarks Command

The *Checkmarks* command switches the *Checkmarks* symbol on resp. off.

#### 10.2.3.2.6.7 The Font Names Command

With the *Font Names* command **only** font names are displayed in the font window.

#### 10.2.3.2.6.8 The Font + File Name Command

With the *Font + File Name* command additionally to the font names their file names are displayed too.

#### 10.2.3.2.6.9 The File Name Command

With the File Name command only the font's file names are listet in the font window.

#### 10.2.3.2.6.10 The Postscript Name Command

With the *Postscript Name* command the font's Postscript names are listet in the font window.

Note File name, font name and Postscript name of a font can be different. Which name is displayed depends on personal preference.

#### 10.2.3.2.6.11 The Reset Command

The **Reset** command sets the display in the Font window back to its initial state.

#### 10.2.3.2.7 The Selection Menu

#### 10.2.3.2.7.1 The Select All Command

The Select All command marks all fonts in the active font window.

#### 10.2.3.2.7.2 The Reset Command

The **Reset** command sets the view of the font window back into its intial state.

#### 10.2.3.2.7.3 The Invert Command

The *Invert* command reverses the selection state, that means, that all marked fonts will be deselected and all unmarked fonts will be selected.

#### 10.2.3.2.8 The Sort Menu

#### 10.2.3.2.8.1 The Ascending Command

The *Ascending* command sorts all entries of the font window from A to Z.

#### 10.2.3.2.8.2 The Descending Command

The **Descending** command sorts all entries of the font window from Z to A.

#### 10.2.3.2.8.3 The Sort Case-Sensitive Command

If this option is enabled, the case sensitivity is taken into account when sorting.

#### 10.2.3.3 The View Menu

#### 10.2.3.3.1 The Menu Bar Command

The *Menu Bar* command switches the menu bar off.

Note: The menu bar can be switched on again using the context menu of the program bar.

#### 10.2.3.3.2 The Status Bar Command

The *Status Bar* command switches the info line, which is located at the bottom of the font window, on resp. off.

#### 10.2.3.3.3 The Themes Command

This menu item allows the selection of so called themes or skins, which determine the appearance of the application regarding color, background and buttons. The user can select a theme that suits his personal taste.

#### 10.2.3.3.4 The Symbol Bar Command

The **Symbol Bar** menu entry manages the view of the toolbars.

#### 10.2.3.3.4.1 The File Command

The File command switches the File tool bar on resp. off.

#### 10.2.3.3.4.2 The Font Command

The *Font* command switches the *Font* tool bar on resp. off.

#### 10.2.3.3.4.3 The Clipboard Command

The *Clipboard* command switches the *Clipboard* window on resp. off.

#### 10.2.3.3.4.4 The Miscellaneous Command

This command shows or hides the *Miscellaneous* toolbar.

#### 10.2.3.4 The Font Menu

#### 10.2.3.4.1 The Preview Command

The *Preview* command opens the font preview window. It shows in an enlarged bitmap view how the selected font looks.





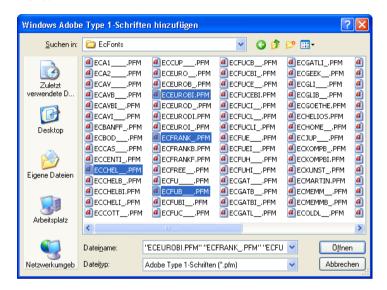
Note: The Font Preview window can also be enabled by a doubleclick on the desired font. With the "+" and "-" key on the num keypad the view of the font preview can be enlarged or diminished.

#### 10.2.3.4.2 The Character Table Command

This command switches the *character table* of the selected font on or off.

#### 10.2.3.4.3 The Add Command

The *Add* command opens the window in which the selection of the to install fonts is possible. The selection of the font formats may vary depending upon the choice of the database. The selection is made by clicking on the desired font. Using CTRL+click individual fonts (see figure) can be selected. Using SHIFT+click sequences of fonts can be marked.



#### 10.2.3.4.4 The Duplicate Command

The *Duplicate* command doubles a font entry in the database and allows renaming. The duplicatd font now can be moved into another database.



#### 10.2.3.4.5 The Rename Command

Using the *Rename* command a font can be renames. This is particularly useful, when the font manufacturer uses a font name which is not the font's industry name or if he uses digits instead of font names.

#### 10.2.3 Reference Section



#### 10.2.3.4.6 The Search Command

With the *Search* commad a font search in the active database window can be done. Criteria can be file name or font name. Additionally the search of type faces (bold, italic) is possible. The search result is displayed in a separate font window.

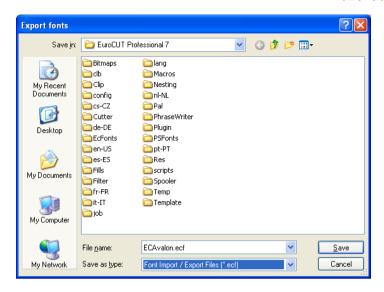
CTRL+F



### 10.2.3.4.7 The Export Command

With the *Export* command fonts can be exported into the \*.ECF file format. 

CTRL+E



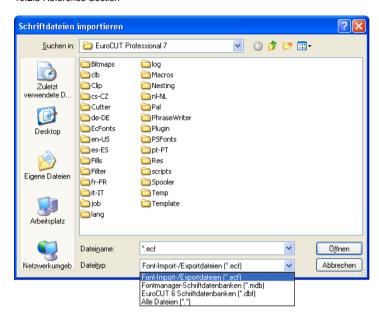
#### 10.2.3.4.8 The Import Command

With the *Import* command external databases can be imported. This function is to ensure that, on multiple computers in a company, the same font stock can be used.



After confirmation of the *Open* button, this import file is read. The information contained in this file are displayed in a font list. The to import fonts can be selected.

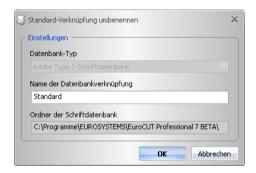
#### 10.2.3 Reference Section



#### 10.2.3.5 The Link Menu

#### 10.2.3.5.1 The Rename Command

With the *Rename* command a database can be renamed.



#### 10.2.3.5.2 The Delete Command

The **Delete** command removes the selected database.

#### 10.2.3.5.3 The Set as Default Command

The **Set as Default** command defines a standard database that is, these fonts are made available at startup.

#### 10.2.3.5.4 The Font Database Menu

#### 10.2.3.5.4.1 The Add Command

This instruction open an existing database and inserts it into in the management as a new link.

#### 10.2.3.5.4.2 The Copy Command

This instruction copies the database of the aktive linkage into another folder.

#### 10.2.3.5.4.3 The Delete Command

This instruction removes an existing database linkage.

#### 10.2.3.5.4.4 The Compress Command

The *Compress* command rectifies the selected database. While compressing the index is reorganized, the to delete marked entries will be deleted, ... After compressing, the size of the database file will be smaller than before.

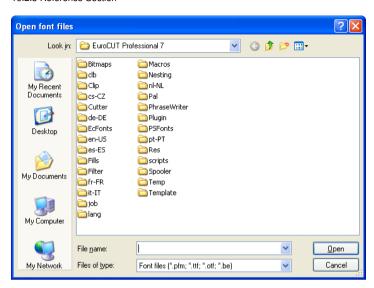


#### 10.2.3.6 The Miscellaneous Menu

#### 10.2.3.6.1 The Open Font File Command

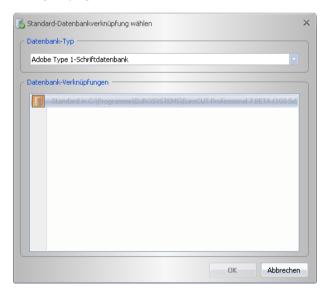
With *Open font file* command a font file in the \*.PFM, \*.TTF, \*.OTF, \*.BE can be opened.

#### 10.2.3 Reference Section



#### 10.2.3.6.2 The Default Link Command

With *Default Link* command a database link can be defined as default. This link then used when the program starts. As result of this operation it is set, which fonts are available after starting the program.



#### 10.2.3.6.3 The Global Font Search Command

With the *Global Font Search* command will be searched for a particular font in all database links of the selected type.





#### 10.2.3.6.4 The Use Fonts Command

#### 10.2.3.6.4.1 The Windows TrueType Fonts Command

This option switches the usage of fonts in the *TrueType font format* on or off.

#### 10.2.3.6.4.2 The Windows Adobe Type 1 Fonts Command

This option switches the usage of fonts in the Adobe Type 1 font format on or off.

#### 10.2.3.6.4.3 The URW / BE Database Fonts Command

This option switches the usage of fonts in the URW / BE Database font format on or off.

#### 10.2.3.6.4.4 The Adobe Type 1 Database Fonts Command

This option switches the usage of fonts in the Windows system using the *Adobe Type 1 Database fonts* on or off.

#### 10.2.3.6.4.5 TrueType Font Files

#### The Use TrueType Font Files Menu Entry

Switches the usage of in the Windows system installed TrueType font files on resp. off.

#### The Properties Menu Entry

This menu item applies only to Windows fonts. Other directories as the Windows font directory can also be used, but only temporarily for the session of EuroCUT Basic 7,

#### 10.2.3 Reference Section

where as they are not installed in the Windows system.

Advantage: You can work with the fonts just as if they were installed.

#### 10.2.3.6.4.6 Adobe Type 1 Font Files

#### The Use Adobe Type 1 Font Files Menu Entry

Switches the usage of in the Windows system installed *Adobe Type 1 font files* on resp. off.

#### The Properties Menu Entry

This menu item applies only to Windows fonts. Other directories as the Windows font directory can also be used, but only temporarily for the session of EuroCUT Basic 7, where as they are not installed in the Windows system.

Advantage: You can work with the fonts just as if they were installed.

#### 10.2.3.6.5 The Windows Character Sets Command

#### 10.2.3.6.5.1 The Adobe Type 1 Fonts... Menu Entry



Using this option an other character set for an in your Windows system installed *Adobe Type 1* font can be chosen. This new selected character set is used for the display on your EuroCUT desktop.

#### 10.2.3.6.5.2 The *TrueType / OpenType Fonts...* Menu Entry



Using this option an other character set for an in your Windows system installed *TrueType/OpenType* font can be chosen. This new selected character set is used for the display on your EuroCUT desktop.

#### 10.2.3.7 The Window Menu

#### 10.2.3.7.1 The Close Command

With the Close command the active window is closed.



#### 10.2.3.7.2 The Close All Command

The Close All command closes all open font windows.

#### 10.2.3.7.3 The Next Command

With the *Next* command can be switched to the next open font window.



#### 10.2.3.7.4 The Previous Command

With the *Previous* command can be switched to the previous open font window.



#### 10.2.3.7.5 The Arrange Symbols Command

The Arrange Symbols command arranges all symbols at the bottom of the window.

#### 10.2.3.7.6 The Cascade Command

The *Cascade* command let overlap the font windows.

#### 10.2.3.7.7 The Split Vertical Command

The *Split Vertical* command divides the working sheet vertical in as many equal parts, as how many font windows are open, and and displays them side by side horizontally.

#### 10.2.3.7.8 The Split Horizontal Command

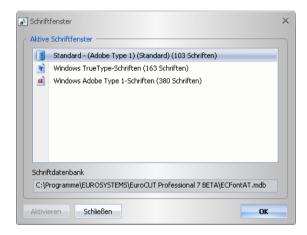
The *Split Horizontal* command divides the working sheet horizontal in as many equal parts, as how many font windows are open, and and displays them side by side vertically.

#### 10.2.3.7.9 The List of Open Windows

In this list all font windows are displayed, that are open. A click switches any window into the foreground.

#### 10.2.3.7.10 The Font Window Command

Activation of the *Font Window* command open a window, which list all active databases resp. font windows. The *Activate* button enables the selected font database, that means, that the database can be used in EuroCUT.



## 10.2.3.8 The Help Menu

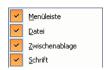
#### 10.2.3.8.1 The Info Command

The *Info* command informs about the version status of the software. In addition, data are made with regard to memory size and usage.



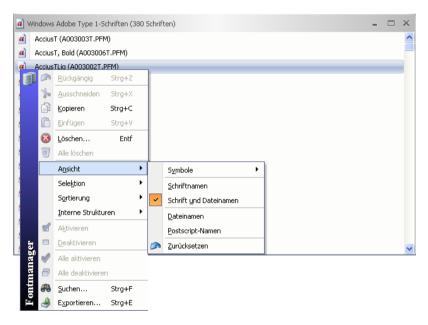
#### 10.2.4 The Context Menus

## 10.2.4.1 The Context Menu in The Program Header



The *Context Menu in The Program Header* is enabled using the right mouse button in the upper area of the program window. Using this context menu, menu line and toolbars can be individually enabled or disabled.

#### 10.2.4.2 The Context Menu in The Database Window



The *Context Menu in The Database Window* is enabled, by clicking with the **right** mouse button in the area beside the font name. Using this context menu functions can be selected, which are also present in the menus. Each particular function are described in detail in the reference section of this manual.

## 11 Tips & Tricks - Trouble Shooting

Often, it is just a bagatelle that makes the "implementation" of new software difficult. Similar to a new machine, there are questions and problems with new software that often can be explained and solved easily. Therefore, we have explained a selection of questions that occur daily at our hotline- and support routine more closely.

#### 11.1 Buffer Overflow Serial Port

The cutter cuts the first characters neatly and then starts to draw indefinable curves.

Tip 1

With serial activation of the cutter, this is a typical buffer overflow problem and occurs if the protocol for the serial transfer is not set correctly. Most cutters are activated with the following parameters with a serial data transfer: bits per second: 9600, data bits: 8, parity: none, stop bits: 1, protocol resp. flow control: hardware

## 11.2 Output Size Mimaki

The output size on a Mimaki cutter does not correspond with the configured size but is more than twice as big.

Tip 2

The Mimaki cutter of the CG series is delivered ex works with a plot resolution of 0.025 mm even if they can work with a resolution of 0.01 mm and do so internally. The drivers of EuroCUT are set to these "device"-resolution because the cutters can be activated faster and more accurate.

For the adjustment of this plot resolution you switch on the cutter, press the < button at the control panel and after the cutter has measured the roll you press the function key until "interface" appears in the display. Then, you press the ENTER key until you reach the menu item "Stepsize" and then the ^-button. The display now shows "0.01". Confirm the selection with ENTER and END.

## 11.3 Output Size Graphtec

The output size on my Graphtec cutter does not correspond with the configured size but is more than twice as big.

Tip 3

Setting the step size:

In the GP-GL mode it is possible to set the minimal distance of the cutting knife's path to one of the following widths: 0.01 mm, 0.025 mm, 0.05 mm or 0.1 mm. The default setting is 0.1 mm. This value must be changed, if your program's driver uses another step size.

Step 1: Switch into the command mode "GP-GL".

11.3 Output Size Graphtec

**Step 2:** Press the enter key; the menu step size appears.

Step 3: Press, key to select the desired value (0.100 mm, 0.050 mm, 0.025 mm, or 0.010 mm) and confirm with enter key. Press (NEXT) or (PREV.) to

Schritt 3: Drücken Sie oder , um zwischen "0,100 mm", "0,050 mm", "0,025 mm" oder "0,010 mm" zu wählen, und danach zur Bestätigung die Eingabetaste . Drücken Sie (NEXT) oder (PREV.), to undo your selection.

Step 4: Press (PAUSE) key in order to cancel the PAUSE mode.

In the case of controlling the plotter from EuroCUT, the value of the step size must be set to 0.025. This is the resolution which is preconfigured in the drivers.

## 11.4 Computer without serial COM port

My computer provides no serial COM port, but a USB port. How can I connect my cutting plotter, which provides only a serial interface?

Tip 4

In this case there is a computer accessory called - USB serial adapter- that provides one or more serial COM ports on one USB port.

Note: Not all adapters offered work properly, especially the use on 64-bit operating systems is sometimes not free from errors. It may be that different adapters must be tried.

## 11.5 Tracing (Vectorization)

Which resolution should be used when tracing to get a good tracing result?

Tip 5

You should use the optical resolution (i.e. 600 dpi) of the scanner if you have qualitative good templates. Please consider not confusing this with the highest possible resolution as most of the scanners can transfer nowadays a resolution more than twice as high (interpolated). This may be a quality advantage for scans of photos but it is not convenient for the tracing. Very small originals (i.e. logos on business cards) should first be enlarged with a photocopy machine and then scan. With bad originals you should use a *smaller* resolution.

## 11.6 Cutter Does Not Respond!

a. First check if you have selected the correct cutter driver and the correct port: for example <device name> at COM2 in the EuroCUT cutting dialog Tip 6

**b.** COM connection: Check if the parameters of the port are set correctly. To do so, call up the system control of Windows. In the device manager, select the corresponding connection, for example: COM.

Popular standard parameter are: Baud: 9600, data bits: 8, parity: none, stop bit: 1, protocol / flow control: hardware

The settings in the system control and at the cutter must be identical otherwise no or only faulty data transfer will take place.

**c.** USB connection: Check if the correct USB driver is installed for the device. The settings are in the Windows device manager under USB controller. The USB driver for the cutting cutter must be entered in this list otherwise no activation is possible.

If the USB driver does not appear there, install it from the delivered data carrier of your device.

**d.** Original cable: Check if you use the original cable recommended by the manufacturer. If this is not the case, there might be bigger problems during the data transfer. EuroCUT "communicates" during the data transfer with the cutter so that missing or faulty connected data cable with the cutter lead to input or output errors.

#### 11.7 Buffer Overflow

#### The cutter reports "buffer overflow" or does not cut the whole job

Tip 7

This is often because of an incorrect setting of the used protocol of the serial (COM) port. In most cases it is sufficient to set the protocol respective the flow control of the port to *hardware*.

## 11.8 Script Font Welding

#### The automatic welding of script fonts does not work as expected

Tip 8

The success rate with the automatic welding increases clearly if the letter spacing is reduced from 100% to 99.9% or even 99%. This results in the fact that two nodes that lie mathematically exactly on top of the other can be slightly moved so that they can be "identified" as two dots.

Indication: Another possibility is the modification of the kerning in the Fontmanager for Adobe fonts with which problematic kerning pairs can be edited.

## 11.9 Generate Circle Segments

With the construction of logos or signets often circle segments are needed. They can be created as follows with the help of *node editing* function. 

please refer to 7.4: The *Node* Toolbar

Tip 9

- draw a circle with the wanted radius or diameter.
- mark all nodes with the node tool
- double click on the origin

select separate

Afterwards, all circle segments are available and can be selected with the **arrow** tool.

## 11.10 Data Import From Apple Computers

#### Data import from Apple computers in EuroCUT

Tip 10

When exporting Apple data you have to pay attention to some settings to have a perfect data export. All popular Apple compatible illustration and graphic applications can export EPS data. (Illustrator, Freehand, ...)

- For the contours, as line width only hairline (0.01 mm) must be entered.
- 2. No fillings should be transferred.
- 3. All texts must be converted to graphical objects. (text in curves)
- Grouped or combined objects must not be available. (break up before)
- 5. Especially with the Freehand-export the export filter for the Illustrator-format must be selected.
- As file name extension .eps should be used and you should not use umlauts as ü, ä, ü.

## 11.11 Typical Sources of Errors When Cutting

#### a) The foil is clamped too loose

Tip 11

**Consequence:** the knive moves the foil during the cutting and the contour is not closed completely.

**Remedy:** when inserting the foil pay attention that the foil is clamped evenly and does not undulate.

#### b) The speed is too high

**Consequence:** small foil parts especially serifs and counters are unscrewed.

**Remedy:** reduce speed and lower the pressure.

#### c) The tool pressure is too high

**Consequence:** the release paper is also carved, character parts are unscrewed and parts of the release material get stuck at the characters. The weeding of the foil gets more difficult.

**Remedy:** reduce pressure and correct the depth of the knife if necessary.

#### d) The tool pressure is too low

**Consequence:** foil and adhesive were only partly cut through. The weeding is possible only with difficulty or not at all.

**Remedy:** increase the pressure and correct the depth of the knife if necessary.

#### e) The knife is set too deep

**Consequence:** foil, adhesive and release material were cut. Foil cannot be used any more.

Remedy: correct the setting of the depth of your cutting knife.

#### f) The knife is used up

**Consequence:** only the foil and not the adhesive is cut through.

Indication: when using standard foil the using up of the knife is little. When using reflection or sandblast foil the using up is much higher.

Remedy: use new original knife.

#### g) The characters were unscrewed

**Consequence:** The weeding border is possible only with difficulty. The unscrewed parts stick to the foil and cannot be detached any more.

Generally is presumed: the smaller the font size the thinner the foil must be; the adhesive force of the gluten is higher.

**Remedy:** reduce the speed and if necessary the tool pressure until this effect does not occur any more.

#### h) The release paper is also cut

**Consequence:** the release material sticks to the foil. The weeding is possible only with difficulty or not at all.

**Remedy:** correct the setting of the depths of the cutting knife and also reduce if necessary the tool pressure.

## 11.12 Plotter Via USB Is Not Working!

#### Error message: Cannot open interface!

Tipp 12

Check first, if your cutter is listed in the **Device Manager** (Control Panel / System / Hardware / Device Manager). If not, reinstall the device driver as described in the plotter manual.

#### 11.12 Plotter Via USB Is Not Working!

Check then, if the USB port for your cutter is selected in the EuroCUT **Device Settings.** You'll find the **Device Settings** window in the **Settings** / **Common Settings** / **Devices** menu.

Note: A USB cable should be no longer than 5 m without booster.

#### 11.13 Summa Plotter Does Not Read Out!

Error message: Waiting for response... Cannot open interface...

Tip 13

Check, if your plotter is set on the device language DMPL. If the cutter is set to HPGL, read out via cable is not possible.

## 11.14 The Values for Cutting Pressure And Speed Are Not Saved

After changing the values it is often forgottten to confirm the values. Please press the \_\_\_\_ button beside the *Enter Material* field and enable the *Save Material Data* option.

**Tip 14** 

## 11.15 Error Message While Output into File

Error message: "Error for CreateFile"

Tip 15

This error message is given out, if the access right *Write* for the *program folder* of EuroCUT is not set.

Relief: Enable write rights for the program folder.

# 11.16 Code is not accepted with Windows 7 or Vista (No Dongle)

Error message: Invalid code or after each program start the code must be entered again

Tip 16

The program must be executed once with **aministrator** rights. Click with the right mouse button in the program menu on EuroCUT Basic 7 and select "Execute as administrator".

Note: Don't change anything on the given activation data resp. license data.

## **Annex**

#### A The ANSI Character Table

Under Windows, besides the characters on the keyboard there are many other characters available. These are particularly the ANSI-characters from number 128 to 255. To shorten the search for the correct character, we have integrated an ANSI list in the EuroCUT text input. To insert a special character in EuroCUT, use the character table in the *textbox...* 

Attention: Not all font-character sets have the same allocation. It can vary from font to font!

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
16	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
32				#	\$	%	&	•	(	)	*	+	,	-		/
48	0	1	2	3	4	5	6	7	8	9	:	;	<	ı	>	?
64	@	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0
80	Р	Q	R	S	Т	D	٧	W	Х	Υ	Z	Ε	\	]	٨	_
96	,	а	b	С	đ	е	f	g	h	i	j	k	1	m	n	0
112	р	q	r	s	t	u	٧	W	х	У	Z	-{	- 1	}	}	•
128	€	•	,	f	**	:	†	‡	^	%o	š	<	Œ	•	Ž	٠
144	•	•	,	;	*	•	-	-	~	TM	š	>	œ	•	ž	Ÿ
160		i	¢	£	¤	¥		§		©	ā	«	7	-	®	1
176	0	±	2	3	١.	μ	¶	٠	۵	1	ō	>>	⅓	1⁄2	3/4	3
192	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ϊ
208	Ð	Ñ	Ò	Ó	ô	õ	ö	×	Ø	Ù	Ú	0	Ü	Ý	Þ	В
224	à	á	â	ã	ä	å	æ	Ç	è	é	ê	ë	ì	í	î	Ϊ
240	ð	ñ	õ	ó	ô	õ	ö	÷	Ø	ù	ú	û	ü	ý	þ	ÿ

Example: to insert the character "¾" in the text, enter following number via the keypad: ALT+0190.

#### **B EuroCUT Basic 7 Fonts**

#### Industrial Name Comparable With EuroCUT Font

Antique Olive EC Martinique Compact

Avant Garde Book
Avant Garde Book Oblique
Avant Garde Demi
Avant Garde Demi Oblique

EC Avalon Bold
EC Avalon Bold
EC Avalon Bold Italic

Avenir 55 Roman EC Avenue
Avenir 95 Black EC Avenue Bold
Bodoni Poster EC Bodnoff
Brush Script EC Banff

Caslon Open Face EC Casablanca Open Face

Cheltham Book EC Chelsey
Cheltham Bold EC Chelsey Bold
Cheltham Bold Italic EC Chelsey Bold Italic
Cheltham Italic EC Chelsey Italic
Compacta Bold EC Kompakt Bold
Compacta Bold Italic EC Kompakt Bold Italic

Cooper Black EC Cupertino
Cottonwood EC Cottage
Courier EC Standard
Courier Bold EC Standard Bold
Courier Bold Oblique EC Standard Bold Italic

Courier Oblique
EUrostile
Eurostile Bold
Eurostile Bold
Eurostile Bold Dblique
EUrostile Oblique
EUrostile Oblique
EUrostile Demi
EUrostile Demi
EUrostile Demi Italic
Eurostile Cethio No.2 Roman
EC Euro Bold Italic
EC Euro Demi
EC Euro Demi
EC Euro Demi

Eurostile Demi Italic EC Euro Demi Italic
Franklin Gothic No2 Roman EC Frankfurt
Frutiger 65 Bold EC Frank 65
Frutiger 95 Ultra Bold EC Frank 95
Freestyle Script EC Freeport
Futura Book EC Fujiyma

Futura Bold
Futura Bold Italic
Futura Condensed
Futura Condensed Bold
Futura Condensed Bold
Futura Condensed Bold Italic
Futura Condensed Bold Italic
Futura Condensed Bold Italic
Futura Condensed Extra Bold
Futura Condensed Extra Bold
Futura Condensed Extra Bold

Futura Condensed Extra Bold Italic
Futura Condensed Italic
Futura Condensed Light
Futura Condensed Light
Futura Condensed Light Italic

EC Fujiyma Condensed Light
EC Fujiyma Condensed Light Italic

EC Fujiyma Condensed Light Italic

Futura Extra Bold EC Fujiyma Extra Bold Futura Extra Bold Italic EC Fujiyma Extra Bold Italic

Futura Heavy
Futura Heavy Italic
EC Fujiyma Heavy
Futura Heavy Italic
EC Fujiyma Heavy Italic

#### B EuroCUT Basic 7 Fonts

Garamond Book FC Gatineau Garamond Bold EC Gatineau Bold Garamond Bold Italic EC Gatineau Bold Italic Garamond Light EC Gatineau Light Garamond Light Italic EC Gatineau Light Italic Glypha 55 Roman FC Glister Glypha 65 Bold EC Glister Bold Gothic 13 EC Goethe Helvetica Roman **EC Swiss** EC Swiss Thin Helvetica Thin FC Swiss Thin Italic Helvetica Thin Italic EC Swiss Bold Helvetica Bold EC Swiss Bold Italic Helvetica Bold Italic Helvetica Compressed EC Swiss Compressed Helvetica Italic EC Swiss Italic Helvetica Neue Bold FC Swiss Neue Bold Helvetica Neue Bold Italic EC Swiss Neue Bold Italic Helvetica Neue Italic EC Swiss Neue Italic Helvetica Neue Roman EC Swiss Neue Helvetica Neue Thin FC Swiss Neue Thin

Helvetica Neue Thin Italic Hobo Juniper Künstler Script Linotext

Linotext
Linotype Centennial 55 Roman
Linotype Centennial 65 Italic

Memphis Medium Memphis Extra Bold

Omnia
Peignot Bemi
Present
Rockwell Roman
Rockwell Light
Rockwell Bold
Rockwell Italic

Shelley Allegro Script Times Times Bold

Times Bold Italic Times Italic Trajan

Univers Regular
Univers Bold
Univers Bold Italic
Univers Italic
Univers Black
Univers Black Italic
Univers Thin
Univers Thin Italic

Universal Greek with Math Pi

EC Swiss Neue Thin Italic EC Homeward Bound EC Jupiter EC Kunst Script EC Oldlinus EC Centenniol EC Centenniol Italic EC Memm Medium

EC Memm Extra Bold EC Opitan EC Peridon Demi EC Perfect EC Rocky EC Rocky Light

EC Rocky Eight
EC Rocky Bold
EC Rocky Italic
EC Shell Script
EC Roman
EC Roman Bold
EC Roman Bold Italic
EC Roman Italic

EC Troja EC Usa EC Usa Bold EC Usa Bold Italic EC Usa Italic EC Usa Black EC Usa Black Italic EC Usa Thin

EC Usa Thin Italic

EC Greek Meathe Symbole

VAG Rounded Bold EC Helios Bold

Zapf Chancery Medium Italic EC Zürich Calligraph Italic

ID Automation EC-EAN
#-key assigned with ,#-key assigned with ,#-key assigned with ,#-key assigned with ,#-key assigned with ,EC Plak Bold Italic
#-key assigned with ,EC Plak Italic

#### C EuroCUT fonts

**EC-EAN** 



1234567890 \* \$ % /

ECAvalon-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECAvalon-Boldltalic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECAvalon-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECAvalon
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

# ECAvenue-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECAvenue
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECBanff
ABCDEJGHIIKLMNOP2RSTUVWXUZ
abcdefghijklmnopgrotuvwxyz
1234567890 ßäöüÄÖÜ! \$%&/()?

## ECBodnoff ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"§\$%&/()=?@#

ECCasablanca ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"§\$%&/()=?@#

ECCentenniol-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@# ECChelsey-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECChelsey-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECChelsey-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECChelsey ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

eccottace Abodefchijklmnopqrstuvwxyz Abodefchijklmnopqrstuvwxyz 1284587890 SSÄÖÜÄÖÜ! \$%&/0?

ECCupertino
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECEuro-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECEuro-BoldItalic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECEuro-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"Ş\$%&/()=?@#

ECEuro
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECEurodemi-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECEurodemi
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

## ECFrank-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFrank
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFrankurt
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFreeport
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 häöüÄÖÜ! \$%&/() ?

ECFuyijama-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijama-BoldItalic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijama
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacond-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacond-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacond-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacond
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacondextra-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

## ECFuyijamacondextra-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacondlight-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 BäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamacondlight
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamaextra-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamaextra-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamaheavy-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECFuyijamaheavy
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 BäöüÄÖÜ!"§\$%&/()=?@#

ECGatineau-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECGatineau-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"[\$%&/()=?@#

ECGatineau ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\\$\%\&/()=?@#

ECGatineaulight-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECGatineaulight ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

# ECGlister-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECGlister ABCDEFGHIJKLMNOPORSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECGoethe
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"\\$\\$%&/()=?@#

ECGreekmathe  $AB\Psi\Delta E\Phi\Gamma HI\Xi K\Lambda MNO\Pi\Theta P\Sigma T\Theta\Omega 6XYZ$  αβψδεφγηιξκλμνοπθρστθωφχυζ  $+-\times \div = \pm \mp^{\circ\prime\prime\prime} \varsigma \qquad ) \lessgtr \{\} / \Sigma \Pi \sqrt{|[]}$ 

ECHelios-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECHomeward

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopgrstuvwxyz

1234567890 ßäöüÄÖÜ! \$%&/()?

EGUPITER

ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890 SSÄÖÜÄÖÜ! S%&/O?

ECKompakt-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"\$\$%&/(1=?@#

ECKompakt-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/(1 = ?@#

ECKunstScript ABCDEFGHTJKLMNOPORSTUMOYh abedefghijklmnepgrstuvwxyx 1234567890 fläväÄÖÜ!\*\$\$%&//) = ? @#

ECMartinique ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECMemm-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@# C EuroCUT fonts

ECMemm ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECOldlinus ABCDEHGHIJKLANOPQRSTHUUXYZ abcdefghijklmnopgrstubwxyz 1234567890 häöüÄÖÄ!"S\$%&/()=?@#

ECPerfect
ABCDEFGHJJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECPeridonDemi
ABCDEFGHIJKLMNOPQRSTUVWXYZ
AbcdefqHijklmnopqrstuvwxyz
1234567890 BäöüÄÖÜ!"\\$\%\%\()=?@#

ECPlak Bold Kursiv ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@-

ECPlak Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@-

ECPlak Kursiv ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@-

ECPlak
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@-

ECRocky-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECRocky-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECRocky
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECRockylight
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECRoman-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!''\\$\% &/()=?@# ECRoman-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 βäöüÄÖÜ!''§\$%&/()=?@#

ECRoman-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 βäöüÄÖÜ!"§\$%&/()=?@#

ECRoman
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECShellScript
ABCDETGHIJKLMNOPQRSTUVWXYX
abcdefghijklmnopqrstuvwxyx
1234567890 fäöüÄÖÜ!"\$\$%4Ef()=?@#

ECStandard-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECStandard-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECStandard-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECStandard
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwiss-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwiss-BoldItalic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwiss-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwiss
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwisscompressed
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECSwissneue-Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

# ECSwissneue-BoldItalic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwissneue-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwissneue
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECSwissneuethin-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECSwissneuethin ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"\$\$%&/()=?@#

ECSwissthin-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"\$\$%&/()=?@#

ECSwissthin ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 BäöüÄÖÜ!"\$\$%&/()=?@# ECTROJA ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890 SSÄÖÜÄÖÜ! \$%&/()?

ECUsa-Bold ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsa-BoldItalic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsa-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsa
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsablack-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

# ECUsablack ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsalight-Italic ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECUsalight
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

ECZuerichCalligraph-Italic
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ßäöüÄÖÜ!"§\$%&/()=?@#

## D EuroCUT symbol fonts

## D.1 Sign symbols (ECSignsymbole)





























































































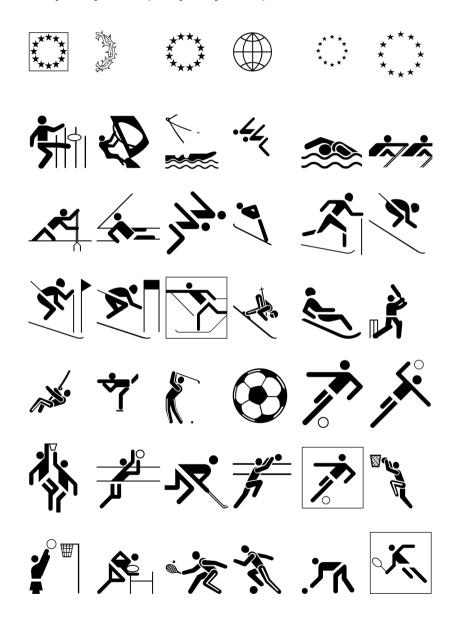


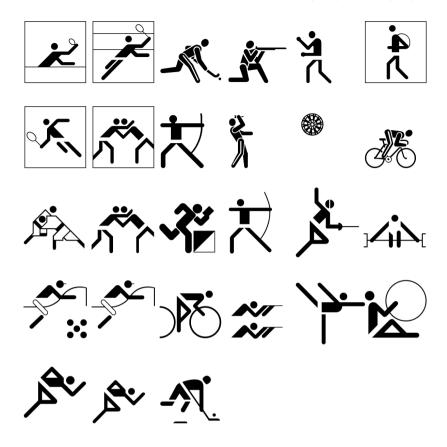




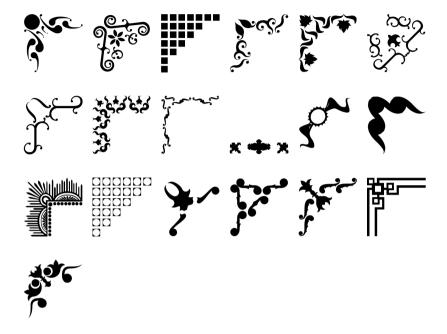


## D.2 Sport symbols (ECSportsymbole)





## D.3 Frame symbols (ECRahmensymbole)



## **E Driver List**

New or updated drivers can be downloaded from www.eurosystems.lu/driver/index.dml?sprache=eng.

Allen Datagraph

824 830 836

848 936

Anagraph

ANA Express AE-101 ANA Express AE-101e ANA Express AE-120
ANA Express AE-120e ANA Express AE-60 ANA Express AE-60e

ANA Express AE-70 ANA Express AE-75e

Aristo

AG 130 Signline
AG 50 Offline
AG 600
AG 75 Signline
AG 75 Signline
AG 75 Signline
AG 75 Signline
AARISTOMAT 1310
AARISTOMAT 1317

Artsign

Artsign

ASC365

ASC365

Atlas

Atlas

Calcomp

Classic

Cogi

CA 1300 CA 730 CP 630 CT 1200 CT 630 E 1360

E 720 E 870

Cole

CL1100 CL1350 CL720

CL870

COPAM

CP-2500 CP-3050 CP-3500

CP-4050 CP-4500

Creation

 PCUT CR1080
 PCUT CR1200
 PCUT CR630

 PCUT CR900
 PCUT CS1080
 PCUT CS1200

 PCUT CS630
 PCUT CS900
 PCUT CT1000

 PCUT CT1200
 PCUT CT1300
 PCUT CT1600

PCUT CT630 PCUT CT635 PCUT CT900

#### E Driver List

 PCUT CTN1080E
 PCUT CTN1200E
 PCUT CTN1500

 PCUT CTN630
 PCUT CTN630E
 PCUT CTN900

 PCUT CTN900E
 PCUT CTN900E
 PCUT CTN900E

Creation HK

King Cut KCUT A1200 King Cut KCUT A24 King Cut KCUT A36
King Cut KCUT A48 King Cut KCUT A900 King Cut KCUT B24
King Cut KCUT B48 King Cut KCUT B900 King Cut KCUT CT1200
King Cut KCUT CT24 King Cut KCUT CT36 King Cut KCUT CT48
King Cut KCUT CT630 King Cut KCUT CT900

DAS

SmartCutter 12 SmartCutter 24

**DCS** 

DCS-F300

Desay

XP-300P XP-380P XP-450P XP-540P XP-660P

DGI

Omega OM-100 Omega OM-130 Omega OM-150 Omega OM-40 Omega OM-60 Omega OM-70 Omega OM-80

**Emblem** 

EC 120 EC 60

**Encad** 

NovaCut Series

Foison

C12 C24 C48 CT-1200 CT-630 FS-24 FS-48 S24

**GCC** 

Bengal BN-60 Bobcat BI-60 Expert 24 Expert 24 LX Expert 52 Expert 52 LX Expert Pro-132S Expert Pro-60 Jaguar II 101 Jaguar II 132 Jaguar II 61 Jaguar III 101 Jaguar III 132 Jaguar III 183 Jaguar III 61 Jaguar IV 101 Jaguar IV 132 Jaguar IV 183 Jaguar IV 61 Jaguar JG 101S Jaguar JG 132S Jaguar JG 61 Jaguar JG 76S Puma II 132 Puma II 60 Puma III 132 Puma III 60 Puma SP 132S Puma SP 30 Puma SP 60 RX-101S **RX-132S RX-183S** 

RX-61 Sable SB-60 SignPal GRC Series SignPal LYNX S-132S SignPal LYNX S-30 SignPal LYNX S-60

Ultra GRC-101S Ultra GRC-132S Ultra GRC-50

Ultra GRC-61 Ultra GRC-76S

Gerber

 EmbossTrack
 Envision 375
 Envision 750

 FasTrack
 FasTrack 1300
 FasTrack 550

 FasTrack 650
 HS 15 /750
 Odyssey

P2C 1200 P2C 1400 P2C 1400 Tangential

P2C 1600 P2C 1600 Tangential P2C 600 Sprint/4B old Sprint/4B Fastboard Sprint/4B new

Grafityp

CSR CSR Ecom 92 CSRTurboDMPL

Flatbed

Graphtec

(HPGL) old CE 1000-60 (HPGL) CE 3000-120 (+USB) CE 3000-40 (+USB) CE 3000-60 (+USB) CE 3000Mk2 CE 5000-60 CE 5000-120 CE 5000-40 CE 6000-120 CE 6000-40 CE 6000-60 Craft ROBO Craft ROBO PRO II FC Series (GPGL) FC4100-100 (HPGL) FC4100-130 (HPGL) FC4100-75 (HPGL) FC5100-100 (HPGL) FC5100-130 (HPGL) FC5100-75 (HPGL) FC7000-160 FC7000-100 FC7000-130 FC7000-60 FC7000-75 FC8000-100 FC8000-130 FC8000-160 FC8000-60 JX 1130 (HPGL)

FC8000-75 JX 1060 (HPGL) w/o perforation old Sign Jet Series

Gravograph

△Gravo-BOX 97 △IS6000 △IS800

Helo

HSP 1360 HSP 360 HSP 720

Hengxing

Rabbit HX-1000 Rabbit HX-1120 Rabbit HX-1360 Rabbit HX-630 Rabbit HX-720 Rabbit HX-800

Rabbit HX-960

Houston

100C DMPL 69C DMPL

loline

IolineArtpro 3500Artpro 3700Artpro 4000ClassicSignmaker 5000SmarTrac I/S 110SmarTrac I/S 130SmarTrac I/S 60

SmarTrac I/S 85 Studio 7 Studio 8

Super 88

### E Driver List

Jiachen

JC-1100DS JC-1100E JC-1100H JC-1350DS JC-1350E JC-1350H JC-720DS JC-720E JC-850DS JC-850H

JC-850E

Kierner

▲KS 90 (DCS)

Kimoto

Freecut 130 Freecut 150 Freecut 60

Freecut 75

Kuhlmann

**△**MVP

LG Palopoli

MLP-24

Liyu

HC 1201 HC 751 HC 901 MC 631 MC 801 SC 1261

SC 631 SC 801

Master

XP-300P XP-380P XP-450P

XP-540P XP-660P

Masterplot

Masterplot

MAX

CM-200

Mimaki

CG-100 CG-100EX CG-100Lx **CG-100SR II** CG-100SR III CG-101 CG-12 CG-121 CG-130 FX II CG-130EX CG-130FX CG-130Lx CG-130SR II CG-130SR III CG-160 FX II CG-160FX CG-45 CG-5 CG-50 CG-51 CG-6 CG-60EX CG-60i CG-60SR CG-60SR II CG-60SR III CG-60st CG-61 CG-75 FX II CG-75FX CG-90SD CG-9 CG-90i CJV-30-100 CJV-30-130 CJV-30-160

ME 500

CJV-30-60 MY CUT

ME 650

Mutoh Junior 24 Kona 760 MC-1300 MC-650S SC-1000E SC-650E TC-1300 Ultima SC 1400D XP-621C	Kona 1400 MC-1000 MC-1300S MC-750S SC-1300E SC-750E TC-650 XP-1251C XP-941C	Kona 1650 MC-1000S MC-1650 SC Series SC-550 TC-1000 TC-750 XP-521C
New Star Omega OM-100 Omega OM-40 Omega OM-80	Omega OM-130 Omega OM-60	Omega OM-150 Omega OM-70
ORXYZ Elite LX-Series	HX-Series OR-Series	JML-Series
<b>Pericut</b> 1000 901	1000/1300 IT (Transfer) 901/1000/1300	1300
PERITEC 1000/1200		
RCS-Isert ▲Fräse,Gravierer		
Redsail RS1120C RS800C	RS1360C	RS720C
<b>Refine</b> EH-1101 EH-871 MH-721	EH-1351 MH-1101 MH-871	EH-721 MH-1351
Roland CJ-500 CM 300 CX 12 CX-400 GX-24 GX-500 PC 60	CM 12 CM 400 CX 24 CX-500 GX-300 GX-640 PNC 1000	CM 24 CM 500 CX-300 EGX-350 GX-400 PC 50 PNC 1100

PNC 1410

PNC 1860

PNC 2700

PNC 1210

PNC 1850

PNC 2300

PNC 1200

PNC 1800

PNC 2100

#### E Driver List

PNC 5000 PNC 900 PNC 910 PNC 910 PNC 950 SP-300 (USB) SP-300 (USB) Print & Cut SP-540 SP-540 Print & Cut

Secabo

C120 C40 C60 C60 II S120 S160

S60

SEI

△Flatbed PLT 70 / 100

Seiki Tech

 SK-1100H
 SK-1100T
 SK-1350H

 SK-1350T
 SK-720H
 SK-720T

 SK-850H
 SK-850T
 SK-870T

Silhouette

Cameo

Summa

S-Class 2 S120 D S-Class 2 S120 T S-Class 2 S120 TA S-Class 2 S140 D S-Class 2 S140 T S-Class 2 S140 TA S-Class 2 S160 D S-Class 2 S160 T S-Class 2 S160 TA S-Class 2 S75 D S-Class 2 S75 T S-Class 2 S75 TA S-Class S120 T S-Class S120 D S-Class S120 TA S-Class S140 D S-Class S140 T S-Class S140 TA S-Class S160 D S-Class S160 T S-Class S160 TA S-Class S75 D S-Class S75 T S-Class S75 TA SummaCut D1020 SummaCut D120 / D120 SE SummaCut D120R SummaCut D1220 SummaCut D140 SummaCut D140R SummaCut D15 SummaCut D160R SummaCut D500 SummaCut D520 SummaCut D60 / D60 SE SummaCut D60R SummaCut D60R FX SummaCut D620 SummaCut D760 SummaSign Pro D-Series SummaSign Pro D1010 SummaSign Pro D1300 SummaSign Pro D1400 SummaSign Pro D1600 SL SummaSign Pro D610 SummaSign Pro D750 SummaSign Pro T 750 SummaSign Pro T-Series SummaSign Pro T1010 SummaSign Pro T1300 SummaSign Pro T610

SummaSign T 1600 Pro SL

SummaSign T1010A

SummaSign T600

Summagraphics

SummaSign T 1400 Pro

D1000 T1000

Technoplot

Millennium T 610 Pro Millennium T 750 Pro

Teetz

**△**Controller

**Universal Drivers** 

DMPL 0.025 HPGL 0.01 HPGL 0.025

**HPGL 0.05** HPGL/2

USCutter

MH-721 MH-1101 MH-1351

VCS

▲MultiCAM

VHF

**∆**VHF1

Vinvl Express

**Bobcat** Lynx Panther I 24 Panther I 30 Panther I 40 Panther I 50 Panther II 24 Panther II 30 Panther II 40 Panther II 50 Panther III 24 Panther III 30 Panther III 40 Panther III 50 Puma I Puma II Q Series 100 Q Series 130 Q Series 160 Q Series 24 Q Series 30 Q Series 42 Q Series 54 Q Series 60 Q Series 64 Q Series 75 Oe60 Qe60+ R Series 19 R Series 24 R Series 31 R Series 39 R Series 44 ULTRA 24 ULTRA 30 R Series 53

ULTRA 40 ULTRA 50

**VvTek** 

GFM40 GFM54

WEEKE

▲Fräse

Wild-Leica

△TA 10 BL **△TA 10 BXL △TA** 10 **△TA 100** ▲TA 10 S **△TA 100 BL △TA 100 BXL △TA 100 S △TA 2** 

▲TA 2L **△TA 30** △TA 30 w/o Mat. Tr.

▲TA 40 △TA 40 TP **△**TA 400

△TA 400 G (Stop bef. Tr.)

△TA 400 (Stop bef. Tr.) **△TA 400 G** 

△TA 400 MC (Stop bef. Tr.) **△TA 400 TP** ▲TA 400 MC △TA 400 TP (Stop bef. Tr.) **△**TA 41 △TA 410 E / ES △TA 410 with suction bar **△**TA 500 **△TA 500 MC** 

**△**TA 510 ▲TA 510 S

WISSNER

△115 ( HPGL )

### E Driver List

_	••		
7	п	n	d

<b>△</b> 2XL-3000	△2XL-3000cv	△3XL-3000
△3XL-3000cv	<b>△</b> L-1200	△L-1200cv
<b>△</b> L-1600	▲L-1600cv	<b>△</b> L-2500
△L-2500cv	<b>△</b> L-3000	△L-3000cv
<b>△</b> L-800	<b>△</b> L-800cv	△LH-1600
△LR-1600	<b>△</b> M-1200	△M-1200cv
<b>△</b> M-1200s	△M-1600	△M-1600cv
<b>△</b> M-800	<b>△</b> M-800cv	<b>△</b> P-1200
<b>△</b> P-1600	<b>△</b> P-2000	<b>△</b> P-700
<b>△</b> S-800	<b>△</b> S-800cv	<b>△</b> XL-1200
△XL-1200cv	<b>△</b> XL-1600	△XL-1600cv
<b>△</b> XL-2500	△XL-2500cv	<b>△</b> XL-3000
∆XL-3000cv	<b>△</b> XL-800	∆XL-800cv

Drivers marked with  $\triangle$  are for flatbed milling and engraving machines and are only <u>basis</u> <u>drivers</u>.

## **F Dictionary of Technical Terms**

waiting in the queue for output.

Additional Programs Additional programs are program modules or stand-alone

programs that are part of the delivery.

Auto Import Plug-Ins Auto import plug-ins are used to automatically import

data from other programs - without intermediate steps.

**Automatic Contour Pen** 

Conversion

This feature means that before the data is transferred the software 'looks' for objects with the attribute 'contour'. If so, the user can decide whether the contour is to be converted or not. If the contour should be converted, then

a vector object with the width of the contour is

automatically generated!

**Bitmap Functions** Bitmaps are pixel images or photos. Bitmap

functions means all functions which are not vector tools like node editing, and which are only applicable on

bitmaps.

By Color This is a welding function, which deletes all

surfaces, which are covered by overlying colors.

CMX Data Transfer CMX data transfer means the handing over of data using

CoreIDRAW's CMX data format. CoreIDRAW had created this format in order to ensure the exchange of data within the Corel program families. CMX is a public data format and is used for the exchange of data. This has the advantage compared to EPS, that Corel specific types of data can be copied 1:1, without making a

conversion of the format.

Cap Height Setting Cap height is the typographical correct unit of capital

letters. The text editor uses this unit by default when

calculating the font size.

Circular Text Is a special feature of the text editor with that text

blocks can be placed on or in a circle.

Clipart Tab Cliparts are job-similar files - often logos or patterns -

which are useful for the design of an output job. The clipart tab is a sub-tab of the Sidebar, with that the

cliparts can be managed.

Clone This function is usually used when creating labels and

series. Changes at the control object are transferred to

all clone objects.

Close

Objects (Automatically)

When importing DXF or HPGL data, many or all objects are not closed. On a cutter only closed objects can be processed reasonable. This function will automatically close all vector objects. In the basic settings the threshold for the closing of objects can be changed.

Contour Line (Print & Cut)

Unlike the outline / inline bitmaps are here provided with a vector contour. This function is regularly needed in the creation of labels and stickers.

Create / Edit Text Block

Text blocks are blocks of text that can be used more frequently because they appear identical or similar in many jobs - such as your address. With the PhraseWriter arbitrary blocks of text can be created and modified as needed.

**Cut Out Region** 

Is a bitmap function which provides the tracing of parts of a bitmap. You can cut out any vector form out of a bitmap.

**Device Control** 

This section deals with device control functions on the output side.

**Digitize Mode** 

This feature means a drawing tool, that similar to digitizing tablet with a magnifier, draws nodes on the working sheet.

**Dongle Protection** 

A dongle is a hardware copy protection that is stuck on the USB port of the computer to make run the software. The dongle protects producers against unauthorized copying of its software and at the same time it protects the investment of the buyer, since its competitors do not get the software free of charge. Thus from dongle protection both sides benefit - producers and buyers.



**Drill Holes** 

Drill holes is a special drawing tool, that marks the position of a drill hole, using a crosshair cursor. If the connected machine is capable of producing drill holes, then the position is transmitted to the device driver.

Driver

Driver means device driver, which the post-processor uses for output. In the driver, the device-specific tools

and their parameters are defined.

Files Tab Is a sub-element of the Sidebar, with that Jobs can be

managed. Job is the file extension, which is used from

EuroCUT.

**Flatbed Cutter** All cutters that have a flatbed as a cutting surface.

**Folder Monitoring** This function means that the software monitors a

selected folder on hard disk or network. Every time when a change in the monitored folder occurs - by saving or

deleting of jobs - the thumbnail gets updated.

**Fontmanager** The Fontmanager manages fonts in databases. The

advantage of this method is that the database can be copied from one computer to another and thus the same

set of fonts is available on both computers.

Full Surface Is a welding function, which underfills objects in one

color, whose surfaces overlap another. The partially hidden objects are treated in a way, that they are

underlaying all overlying objects.

**Hatching** In this milling method the area, which should be

removed, is provided with a hatching. The area gets removed along the hatching using the milling tool.

Hotfolder Management A folder can be defined as a so-called hot folder. All

output jobs that are stored in this directory are supplied

to the output.

**Job Calculation** The Job Calculation means a function with that

preliminary costing can be done easily. This function is particularly well suited for calculating charges of material

costs.

**Job Info**The Job Info can - referring to each job - save additional

information such as order number, customer address.

material, time spent, a. s. o..

**Job Rerun** Any job that is still in the job history can be cut again

identically. The actual to the machine transmitted data is stored. All parameters are given out into the output file.

**Laser Engraver** Name for all devices which don't use an engraving

needle but a laser unit.

x - This device type is supported by the software suite

OptiScout. Full info at: www.optiscout.com

Layer Tab Is a sub-element of the Sidebar, with that layers can be

managed. Layers are color levels which determine and control output order and tool parameters - besides object

position.

Material Display Each color layer can be assigned a specific material with

an exact material description. The assigned material is displayed before the output in the Job Calculation, Job

Info and the layer itself.

Milling & Engraving

This rubric lists the specific functions and tools which

were implemented for milling and engraving.

**Monitor Output Process** With monitoring, we mean that the output process can be

suspended, stopped and continued. Active jobs can be switched to passive and if necessary be re-activated.

**Multi Inline** In this milling method the area, which should be

removed, is provided with multiple Inlines. The area gets removed along the inlines - from outside to inside.

Multi Port Support With this we mean that all ports on a given computer -

which are suitable for the issue - can be used. Typically,

these are all COM and USB ports.

**Multi User Versions** 

**Available** 

For every main license multi-user version can be purchased. The additional versions here have the same

serial number as the main license.

**Multi-functional Cutter** 

Multi-functional cutters are devices which can use various tool heads beside a cutting tool head. They are, for example, oscillating knives, spindles, and hemming

tools.

x - This device type is supported by the software suite

OptiScout. Full info at: www.optiscout.com

**Node Editing** Main tool for the creation and editing of vector objects.

Objects Tab Is an sub-element of the Sidebar with that objects can be

managed. A large number of object attributes such as visible / invisible, do not output, do not print, can be

individually defined for each object.

**Open Trimming** 

Is a welding function, which creates open vector objects, after they were separated at their intersections.

Optimization

Targets of the optimization are: diminishing of rejection rate, material saving, time saving, optimization and shortening of job preparation. The optimizing of objects can be done on the working sheet or in the output preview. The objects are sorted so that the material consumption, without nesting of objects, is minimized.

Outline / Inline

Outline is a special function, where vector object is contoured automatically with a contour in a predefined distance. In contrast to the contour line, the outline creates - in case of internal objects - so called Inlines.

Parallel Device Output

This function can simultaneously provide data on multiple machines, which are connected to a computer, if sufficient computing power on the PC is given.

**PhotoCUT** 

PhotoCUT is a program module which can convert halftone drafts into vector stripes. The so generated vector stripes can be cutted on each usual cutting plotter and, generate - with the appropriate viewing distance - one photo-like effect.

PhraseWriter |

The PhraseWriter is a program module for the management and use of text blocks. It is automatically started at startup and is accessible at any time using the right mouse button context menu. The specified text block is selected and then inserted and displayed on the desktop.

Plot Manager

The Plot Manager is a separate program module, which 'background' controls and monitors the output of the data on the selected device.

Plot Server Function (TCP/IP)

A computer at which multiple output devices are connected can act as a plot server. The data transfer can take place via the network using TCP / IP. Assuming the appropriate licenses, any number of client computers can give out on the plot server devices.

Plot to File

The output of the plot data can be redirected to a file. The user only has to activate the appropriate option in the output dialog.

**Posterize** Posterize is a bitmap function which performs a reduction

on any number of color hues per color layer.

Preview \*.CDR and \*.CMX The files tab can display besides \*.JOB also contents of

\*.CDR and \*.CMX files (CorelDRAW formats).

**Productivity Tools** Productivity tools are special tools, which - because of

their workings - enhance the productivity of sign making processes. These are usually such tools, which distinguish a cutting software from illustration programs

such as Illustrator and CorelDRAW.

Program Type This section summarizes certain criteria which

characterize the use of the program.

Reference Job (\*.JRF) In a so-called Reference Job the environment, the tool

parameters and the device drivers are stored. In this way, it is possible to output the job in an identical manner

as many times as wished.

**Register Mark** Is a special drawing tool, with that marks, for the making

of multi-colored foil signages, are drawn. This register marks can consist of a cut-through or a filled square and are positioned by the user to the desired position on the output job. While the output these registration marks are

always cutted at the same position on the vinyl (layer independently), so then the precise assembly of

various colors is possible.

Roll Cutter means all cutting plotters, which can only

handle material rolls.

Screen Printing Is a welding function, which allows the changing of the

color stack. Thus, the order of the colored vinyls can be

re-sorted - interactively - from light to dark.

**Segmentation with Overlap** Segmentation is always necessary when the job is larger

i.e. longer or wider than the connected device is able to plot. The overlap is necessary when the individual segments are to be completed to a whole again. Joining

otherwise would lead to undesired white gaps.

Sidebar Sidebar means a movable control element that can be

made visible on the desktop. The individual sub-elements

are activated by clicking so-called 'tabs'.

**Sort with Simulation** In this function, all objects are sorted according to a

certain criterion. For some output devices such as lasers

or milling machines the sequential processing of the objects is important. Therefore, the output can be simulated and the collation can be adapted to the requirements of the output device.

Space (1/1, 1/2, 1/4, 1/8)

Special function with that micro-typographical-correct spaces (keyword: em quad) and thus word / letter spacing can be generated. These special spaces can be directly entered via the keyboard.

**Spool Function** 

When the Plot Manager is activated with the parameter !SPOOL!, it runs independently without starting the main program. Output data can be activated and given out via Drag & Drop.

**Spot Colors Definable** 

Spot colors are color layers, which are defined in a way that color values are additionally given out. Some hybrid devices and RIPs use spot color values for the control of output processes. When printing the corresponding color plates are given out.

Stacking

Stacking means that at first as many objects are positioned adjacent as will fit on the material. The following objects are then positioned above it. This process is repeated until all objects are positioned on the material.

Stand-alone Software

"Stand-alone" means that this program can be used without any other so-called host program. It has all the tools that are needed for the design, layout, and the output of jobs.

Start Tool Paths

When milling and laser engraving it often happens that immersion traces are visible at the start point of an object. To ensure that the quality of the objects which are milled is not affected, the start point can be laid outside the object. This task is performed by so-called start tool paths.

Status Display Material Consumption

In the output preview at the bottom of the window is a status line where the material consumption of the job is displayed in square meters. Since this happens before the output, this feature can also be used to order exactly as much of a material as is required currently for the job.

Symmetrical Object

This is a tool that can create stars and polygons. With it the initial shape (circle, ellipse) and the number of edges can be specified. With its own drawing tool then the symmetric objects on the desktop are drawn.

**Templates (\*.JTP)** Templates or patterns are jobs which have no

name (untitled) when opened. Templates can always be created if they can serve as an example for other similar jobs. The advantage is that the working sheet and layout

are predefined.

**Test Run** Before the actual output a so-called test drive can be

carried out to examine whether, for example, the material is sufficient. During the test run the raised tool head

moves along the vectors.

**Text Editor** Text editor means program functions that include all the

tools necessary for professional capturing and editing texts. Typographic special tools that are essential for

signmaking were implemented.

Text Import (\*.TXT, \*.RTF,

\*.ECT)

External texts can be imported directly into the so-called text box, with the above formats being used. For formatted text the RTF format must be used. It can be saved from every professional word processing program.

**Thumbnail Preview** Thumbnails are small low-resolution pixel previews of file

contents. All in the selected folder located files will be by means of the thumbnail preview - visible and

manageable.

**Tool Parametrization**Means that specific settings for a tool can be done by the

user. This can be values for speed, drive, depth, angle, pressure, acceleration or other parameters. The device driver provides the parameter fields. The user can edit corresponding parameter values before the output on the

device.

**Tool Assignment** To each color layer a specific tool can be assigned. This

makes creation and processing of jobs much easier. The selected device driver provides all possible tools. The assignment itself can be done by the user individually.

**Track Logging** For each tool the distance will be recorded. In addition,

the date, time and device names are stored.

Trimming Is a welding function, which separates closed vector

objects using lines or curves. The resulting partial objects

are re-closed then automatically.

TrueType, Type 1 and BE

**Fonts** 

These 3 font formats can be managed with a font manager i. e. add, enable and disable.

**URW BE Fonts** The BE-type format was created by the company URW.

The BE-format is a vector font format that was shipped

with SIGNUS systems.

**Vectorization, Tracing** Vectorization means the conversion of bitmaps (pixel

images) to vector contours.

Video Marks (Print & Cut) Video marks are marks that can be detected by cutters

with optical sensors or cameras to compensate for inaccuracies of the print result. In the print and cut process they are used also for the contouring of print

objects.

Wait After Segment If a job has to be segmented, then the user receives this

option with the ability to re-equip the machine before the next segment is processed. By means of a message window the process can be continued at any time.

Weeding Lines horiz. / vert. In addition to the global weeding frame, which is

generated around the entire output job, individual weeding lines can be added horizontally or vertically in the output preview. Large, bulky jobs can thus be

divided.

**Welding** Welding functions are needed for the treatment of

overlapping of layers or vinyls. These functions are in the signmaking and screen printing department essential for

the processing of vinyls.

## **G** Glossary

**Additive color system** The ~ is based on mixing the additive, luminous spectral colors

red, green and blue (RGB), for example in color TVs or color

monitors

Adjustment Modification of the distance between two adjacent characters

so that a harmonic type face is being created. This is reached by correcting the character - or word distance. With distances below 100% you speak of kerning and with values above 100%

of spacing out.

Adjustment handles ~ are the 9 black squares that are drawn around the object and

in the middle when marking objects.

**Antialiasing** Edge smoothing with bitmaps

**Application tape** Foil that is used to apply the cut foil after the weeding on the

lettering area. The adhesive force must be strong enough so that the text - even the tiniest letters - can be released from the substrate without problems. After application, the ~ must also

be released without problems.

**Ascender** Term for the part of a character that extends above the middle

length.

Backup Data backup

Bit-depth also shade ~ is the mathematically possible number of colors with a

specific number of bits, for example:

1 bit color depth = 2<sup>1</sup> = 2 possible colors (black/white) 8 bit color depth = 2<sup>8</sup> = 256 possible colors/shades of gray 24 bit color depth = 2<sup>24</sup> = 16.8 millions possible colors

Bitmap Pixel-graphic

**Bold** Font that a bit thicker than the standard typeface.

**Byte** Smallest addressable unit in the computer memory, consisting

of 8 bits.

**Calibration** Adaptation of printer, monitor, cutter or adaptation to desired

values.

**Cap height** This is the height of the capital letters, the capitals. As

measurement usually the height of the letter "H" from the font

line to the top edge of the character is used.

**Center justification** A break justification where the text block is justified at the same

time on the left and on the right side. To do this, the word space within a text line is varied (usually extended) so that on

the left and right side a clean text edge is created. This is not

only applied for the the last line of a break.

compare also: forced block

**Clipart(s)** ~ are jobs or job parts that were added to the Clipart toolbar.

They are saved in a separate directory. (C:\Program Files\EUROSYSTEMS\EuroCUT Basic 7\CLIP)

**Clipboard** ~ is used for temporary storage in Windows.

The ~ is used to exchange data fast between applications.

**CMYK** Cyan, magenta, yellow, contrast (key, black) Standard colors

for the four-color printing.

**CMYK-color area** ~ is the total number of colors that can be displayed by the

colors used when printing (CMYK).

**Color depth** ~ is the number of possible color tones that can be recognized

by a scanner or reproduced on a color monitor.

**Container** A container - more exactly an image or text container - is a

vector object, that similar to a real container can take up arbitrary image data or texts. In conjunction with macro scripts

contents can be exchanged semi-automatically or

automatically.

Context menu Context menus are called so because the structure adapts and

changes depending on the number and type of the selected objects (context). Context menus are always activated with the right mouse button. They serve for the faster access to important functions and tools and also to those functions that

cannot be activated via the main menu.

**Contrast** Contrast; range of brightness between bright and dark parts of

a picture.

**Cursor** ~ is the blinking, vertical line in an editable field.

**Decoration** Accentuation of text parts by modification of the text attributes.

for example bold, italic.

**Descender** This is the part of a character that protrudes below the font line.

**Desktop** The area besides the working surface that can be used for the

draft. It is comparable to a desk on which are the tools.

**Digitalization** Conversion of a picture template into a digital form. The

capture is done point for point or line by line by means of a

digitalization tablet or by reading the template with a scanner.

Dongle

G Glossarv

Means the copyright that is part of the scope of delivery of EuroCUT. It is inserted in the USB interface of your computer.

Without ~ the software cannot be started.

**Download** Downloading applications or files from the internet to your

computer.

**DPI** Acronym for **Dots Per Inch**: resolution fineness (1 inch = 2.54

cm)

EPS Acronym for "Encapsulated Postscript Format". In this file

format the text and picture information is saved in the page description language postscript. This format also contains besides text and raster data also a preview bitmap which allows displaying a copy of the data on the screen

allows displaying a copy of the data on the screen.

Foil Two production processes are common: calendaring and

casting. Cast foil is created without drawing frame and thus has a lesser shrinking tendency. The costs are usually higher than with calendared foil. Calendared is cheaper, has a shorter

period of usage and shrinks more. Cutting foils are built in three layers: 1. Substrate: the lowest layer

2. Gluten layer; is between the foil and the substrate

3. the foil itself.

**Font** Type cut within a type face in digital form. Most type faces

have the fonts normal, bold, italic and bold-italic. Often, the font is used for the same type face. Correct would be that each cut

is a separate font.

Font line ~ is a thought line on which the characters of a row are

standing. Even if different font types and font sizes are used in a row, all characters must stand on a common font line.

Font size ~ is the size of a font. It corresponds to the block height, which

means it also comprises the ascender and descender as well

as a certain space above and below the characters.

Forced justification 
Justification where all text lines - also the last- are adapted to

the width of the column or the working area. In EuroCUT this

justification is called "force justification".

**Gamma correction** The ~ is a method for the correction of color graduation

considering the perception of the human eye if there are two

adjoining areas of different color.

**Group** Combination of arbitrarily many objects to a group. The

position of the objects itself does not change any more within

the group.

**Halftone image(s)** ~ are pictures which contain shades of gray or hues. The tonal

value between pure white and pure black is called halftone.

**Hotfolder** A Hotfolder is a directory monitored by the Plot-Manager. If a

file is copied into this directory, the Plot-Manager carries out

automatically specific configurable functions.

**Inch** Measurement unit for the length

1 Inch = 2.54 cm

**Job** File-ending of EuroCUT; name for EuroCUT file

**Justification** Alignment of a text block on the working area. EuroCUT offers

justification left-aligned, right-aligned, centered, center justification, forced center justification and adjust cap height.

**Kerning** If two characters stand closer together than it would

correspond to their standard thickness, you speak of ~. With character combinations as for example "Te" you have a

balanced type face.

**Laminating** Covering with transparent plastic films.

**Live-Update** Updating of software via the internet.

**Macro** A ~ automates program flows. The automation can thereby be

realized with the program's own commands or a macro

language.

Marking function ~ means marking objects by keeping pressed the left mouse

button, then drawing a frame around the objects to be marked and letting go the mouse button only if all objects to be marked

are completely within the frame.

**Process colors** Printing scale of colors for four-color-printing with cyan, yellow,

magenta and black (key). By mixing these colors, it is possible

to print all colors.

**Profile** The appearance of program surfaces is called ~. The shown

tools and menu items can be individually adjusted to the

user. Intention is to simplify the user interface.

Raster Image Processor short: RIP - Software that rasterizes vector data and controls

the printing on a large format printer.

**Resolution** Number of pixels per track unit. It is indicated in dpi (dots per

inch). Laser printers have a resolution from 600 to 1200 dpi.

**Scan resolution** Fineness of the resolution when scanning analogue images

Formula:

Resolution (in DPI) = printing length (L/cm) x 2 (quality factor) x

G Glossary

enlargement factor x 2.54 (when converting from cm into inch)

**Subsidiary line** These are lines for the virtual alignment of objects on the

working area or the desktop. Subsidiary lines are only visible on the monitor are neither plotted nor output on the printer.

**Superscript** The characters are set higher than the characters standing on

the baseline. They usually have a bit smaller font size than the

basic font.

**Toolbar** can be freely moved and positioned on the working area of an

application. Often, also the composition of the tools can be

defined.

**Trapping** A small overlapping zone at the limit of superposed colored

elements. This ~ guaranteed that no white gaps occur at the color borders. The overlapping can happen through overfilling

or underfilling.

**Upload** Upload is the sending of files or applications to a networked

server

Weeding means the removal of unnecessary foil parts after the cutting

with a cutting plotter.

White gaps ~ are the gaps on the edges of overlapping or abutting color or

foil areas. Disadvantageous especially with silk-screens or

when printing.

**x-height** Height of the lower case/character "x" respective the lower

case without the ascender of a font.

# **H** Imprint

Comment to the production:

This manual was created with our own document system.

Used font family: Arial

English version: Heidi Hansen, Peter Bettendorf RCS Systemsteuerungen GmbH

Date: 04/18/14

H Imprint

## Index

## Α

Access rights 22, 63, 64

Activate fonts 307

Active Jobs 157, 183, 255, 256, 257, 258, 261, 375, 378

Add fonts 307

Adjust curves 246

Adjust height of caps 190

Align 21, 71, 129, 168, 194, 223

Always print black 112

Anchor line 209

Attributes tab 20, 100, 105

Auto import plug-ins 24, 375

AutoCAD 13, 24, 39, 41, 42, 69, 145

Automatic welding 219, 232, 335

Automation 23, 291, 343, 387

Autosave 24, 117, 140

Autosave interval 140

Axial change 50

## В

Backup 2, 3, 11, 24, 140, 384

Backup file 24, 140

Bitmap fill 21, 236, 237

Bitmap fill 21, 236, 237

Block shadow 19, 197

В

BMP 22, 57, 61, 99, 135, 145, 238, 263

Break combination 50, 125

Break group 124

Bridges 21,77

Brightness 19, 236, 385

## C

Cap height 98, 170, 189, 190, 375, 384, 387

CCJ 22

CDR 20, 22, 26, 380

CDT 22, 26

Character spacing 23, 171, 172, 189, 209, 232, 304

Character table 23, 190, 210, 211, 320, 340

Circular Text 165, 190, 208, 375

Clipart 20, 50, 130, 167, 271, 282, 283, 284, 285, 286, 287, 288, 289, 290, 375, 385

Clipart group 20, 130, 282, 285, 286, 287

Clipart tab 130, 375

Clockwise 50, 129, 209, 225

Clone 23, 69, 124, 164, 165, 166, 178, 199, 375, 376

Close objects 23, 145, 197

CMX 20, 22, 61, 375, 380

CMYK 20, 151, 236, 279, 385

Color graduation 122, 141, 166, 234, 235, 240, 386

Color palette 151, 152, 229, 235, 276

Color reduction 244

Combine 24, 50, 124, 125, 146, 166, 193, 197

Context sensitive menu 217

Contour cutting 70, 145

Contour line 23, 50, 65, 67, 68, 69, 73, 126, 135, 165, 197, 248, 249, 250, 376, 379

Contour pen 126, 137, 141, 375

Contrast 19, 264, 269, 379, 385

Convert to bitmap 19

CorelDRAW 13, 15, 22, 24, 26, 33, 34, 35, 39, 40, 145, 271, 375, 380

CoRUN 39, 41, 42, 69, 145, 159, 184

Counterclockwise 50, 129, 225

Cross hair 239

Crossfade 19

Curve to line 21

Cusp 21

Cut region 19, 165

## D

Deactivate fonts 25, 308

Delete nodes 21, 193

Device driver 43, 52, 81, 82, 145, 337, 376, 382

Device Options 261

Device Options 261

Digitize mode 127, 128, 164, 376

Dimensioning 21, 203

Drag & Drop 20, 22, 282, 285, 381

Drill holes 19, 376

Driver 25, 37, 43, 52, 54, 56, 73, 75, 77, 79, 80, 81, 82, 85, 86, 88, 110, 143, 144, 145, 180, 181, 182, 200, 226, 254, 260, 280, 333, 334, 335, 337, 367, 376, 382

Duplicate 19, 25, 50, 123, 124, 140, 309, 321

Duplicate Fonts 25, 309

Duplicate objects 140

DXF 22, 42, 57, 145, 146, 376

## Ε

Edit program 136

EMF 22, 57

Encrypt document 63

Envelope 19

EPS 22, 61, 69, 76, 145, 146, 281, 336, 375, 386

Export Fonts 309

## F

File formats 118, 167, 307, 310

Files tab 377

Fills 41, 238

Filter contours 246

Foil optimization 91, 92, 93, 97, 179, 197

Font color 205

Font preview 25, 311, 320

Font size 23, 189, 190, 209, 337, 375, 386, 388

Font weight 24, 189

Fontmanager 24, 138, 139, 188, 303, 335, 377

Forward one 133

Freehand 13, 19, 24, 39, 41, 69, 127, 128, 164, 336

Full surface 19, 65, 67, 68, 98, 100, 102, 103, 105, 227, 228, 232, 233, 245, 250, 377

## G

Gamma correction 19, 386

GIF 22, 57, 99

Gradient fill 21, 234

Grid 24, 154, 187

Grouping 50, 92, 124, 203

GTP 22, 57

## Н

Hairline 67, 125, 166, 227, 228, 336

Hatch 22, 50, 165

Hatch fill 22, 50

Hatching 377

Horizontal mirror 123, 179, 197

Hot folder 377

HPGL 22, 57, 61, 145, 338, 369, 373, 376

HSB 20, 236, 279

## I

IK 22, 57

Illustrator 13, 24, 33, 34, 35, 39, 40, 69, 145, 336, 380

Import 20, 22, 24, 25, 39, 42, 50, 57, 59, 60, 99, 104, 145, 146, 147, 166, 167, 169, 187, 237, 238, 286, 300, 306, 310, 323, 336, 375, 382

Import filter 22, 60

Inline 22, 66, 137, 219, 376, 378, 379

Inner circle 249

Insert fill bitmaps 236

```
ı
```

Insert nodes 21

Insert program 119

Invert 19, 319

Invisible 121, 155, 162, 277, 378

Island fill 22

## J

Job info 117, 121, 142, 187, 243, 251, 377

Job-calculation 166

Join nodes 21, 193

JPG 22, 99, 145, 238

Justification 154, 189, 209, 384, 386, 387

## Κ

Keep reference point 87, 143

Kerning 23, 171, 172, 217, 304, 335, 384, 387

#### L

Laser 25, 65, 174, 377, 381, 387

Last version 117

Layer 15, 20, 24, 36, 37, 42, 50, 52, 53, 54, 55, 56, 66, 72, 76, 77, 89, 90, 112, 113, 121, 125, 126, 129, 136, 137, 144, 146, 151, 156, 166, 180, 200, 203, 221, 225, 226, 227, 228, 230, 233, 234, 239, 240, 245, 250, 251, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 292, 378, 382, 386

Line spacing 24, 170

Line to curve 21

Local device 79, 82, 85

## М

Macro 42, 98, 285, 291, 293, 385, 387

Macros 20, 23, 39, 271, 291

Macros Tab 20, 291

Magnifying glass 200, 201

Margins 24, 47, 71

Mask bitmap 165

Material consumption 25, 91, 379, 381

Max. width 190, 206

Maximum optimization 93

Measure 21, 50, 127, 136, 190, 201, 211, 241

Memo field 23, 121, 251

Meter 50, 91

Milling 35, 43, 46, 70, 79, 129, 130, 135, 144, 153, 174, 180, 181, 192, 374, 377, 378, 381

## Ν

Navigator 20

New origin 21, 88, 143, 192

Node editing 21, 50, 124, 164, 165, 174, 190, 191, 196, 335, 375, 378

Node editing tool 124

Not visible 277, 280

Number of copies 25, 74, 86, 87, 112

Number of outputs 25, 261

## 0

Object list 20, 129

Object names 21

0

Object preview 21

Object selection with preview 21

Object tree 21

Offset 24, 62, 87, 122, 140, 154, 219, 220, 233, 239, 249

Online help 24

Online support 159, 184

Open Job 20, 187

Open trimming 19, 137, 379

OpenType 304, 316, 328

OPI 22, 61, 69, 76

Optical sensor 34, 37, 69, 71, 72, 73, 75

Optimization 23, 25, 91, 92, 93, 96, 97, 179, 197, 379

Orientation 16, 23, 110, 140, 154, 203, 224, 225, 239, 246

Orthogonalize 194

Outline 21, 22, 25, 36, 37, 50, 65, 66, 67, 69, 73, 122, 135, 138, 166, 219, 220, 228, 229, 238, 239, 245, 248, 376, 379

Output preview 25, 87, 89, 90, 91, 94, 164, 179, 180, 181, 185, 200, 226, 379, 381, 383

Overlap 96, 144, 246, 329, 377, 380

## P

Passive Jobs 25, 255, 256, 257, 258, 375

Password Protection 22, 23, 63, 252

Password protection 22, 23, 63, 252

PCX 22, 57, 61, 99, 135, 145, 238, 263

PDF 5, 22, 57, 59, 63, 147

Pen attributes 65, 125, 126, 227, 228, 229

Pen thickness 228

Perspective 19

PhotoCUT 19, 135, 136, 263, 269, 379

PhraseWriter 25, 165, 295, 298, 300, 301, 376, 379

Plot Manager 80, 81, 85, 89, 119, 141, 143, 254, 255, 259, 261, 379, 381

Plot server 25, 80, 81, 82, 254, 257, 379

Plot to file 42, 87, 144, 256, 259, 262, 379

PLT 22, 42, 61, 260, 372

PNG 22, 99

Positioning 23, 50, 109, 124, 138, 154, 155, 190, 195, 204, 207, 211, 214, 239

Positioning assistance 154

Posterize 19, 165, 380

Prepare to cut 122

Print & Cut 23, 33, 34, 67, 69, 70, 372, 376, 383

Print and Cut marks 70

Print area 109, 115

Print on roll 22

Print to file 22, 112

Process management 291

Producer 1, 4, 13, 71, 72

## Q

Queue 25, 87, 375

#### R

Read out 47, 144, 338

Recalculate 164, 180

Rectangle 87, 126, 133

R

Redo 24, 50, 120, 141, 154, 166, 187, 216, 221, 222

Redo 24, 50, 120, 141, 154, 166, 187, 216, 221, 222

Reduce colors 19, 165

Reduce nodes 21, 130, 165, 174, 178, 191

Reference Job 23, 380

Reference Point 87, 143, 154

Reference point 87, 143, 154

Refresh screen 134, 166, 167

Register mark 19, 128, 380

Register marks 34, 69, 70, 90, 136, 380

Registration marks 380

Relief 338

Remote maintenance 24

Rename Fonts 308

Retain skew 209

Revectorize 24, 50, 165

Reverse cutting 96

RGB 20, 151, 236, 279, 384

Roll plotter 75

Round edges 174, 178

Rounding 21, 130, 178, 191, 196

Ruler 21, 161, 162, 163, 236

## S

Saturation 19, 236

Save as 50, 118, 179, 257, 258, 259, 262, 276, 295, 300

Scale with object 228

Scan 119, 187, 237, 334, 387

Screen printing 17, 20, 96, 137, 232, 233, 380, 383

Seamless tiling 238, 239

Search Fonts 309

Segment 23, 26, 87, 96, 97, 143, 144, 164, 383

Segment optimization 96

Segmentation 26, 87, 95, 96, 97, 380

Select layer objects 20

Send via eMail 24

Separate 95, 130, 146, 309, 322, 336, 379, 385, 386

Serial numbers 23

Shades of gray 265, 387

Sharp node 192

Sharpen edges 174, 178

Sharpness 19

Show object attributes 21

Smooth 9, 15, 21, 175, 192, 195, 247

Smooth curve 21, 192

SOR 22

Sort with simulation 23

Special characters 63, 190

Spooler 81, 260

Spot color 36, 281

Stack 86, 87, 89, 133, 143, 144, 221, 222, 380

Stack distance 144

Т

Stack processing 87, 143

Stack spacing 86, 144

Stacking preview 86

Start tool paths 174, 197, 381

Step by Step 20, 75

Stop watch 243

Stripe direction 19

Stripe distance 19

Stripe form 19

Stripe width 19

Subscript 24, 189

Subsidiary lines 112, 155, 388

Superscript 24, 189, 388

Symmetric node 192

Symmetric node 192

Symmetric objects 381

## Т

Tabulators 24, 190, 206, 207, 208

Template 96, 117, 208, 237, 264, 266, 269, 385

Test drive 89, 181, 382

Text editor 23, 50, 100, 138, 165, 168, 188, 205, 232, 308, 375, 382

Text export 24

Text in curves 336

Text modules 295, 296, 297, 298, 300, 301

Thumbnail 20, 283, 284, 286, 288, 377, 382

Thumbnails 287, 288, 382

TIF 22, 57, 61, 99, 135, 145, 238

Tiling 112, 114, 238, 239

To back 133, 217

To front 132

Tool assignment 20, 52, 54, 76, 144

Tool parameters 380

TrueType 25, 138, 188, 303, 306, 316, 317, 327, 328, 329, 382

Type 1 23, 25, 138, 188, 303, 304, 306, 314, 317, 327, 328, 382

Type size 136

Typeface 384

## U

 $Undo\ 24, 50, 120, 141, 154, 166, 187, 216, 221, 222, 244, 312, 334$ 

URW Signus 22

## ν

Vectorization 135, 244, 245, 334, 383

Vectorization 135, 244, 245, 334, 383

Vertical mirror 179, 197

Video marks 23, 70, 71, 136, 383

## W

Wait after segment 26, 87, 143

Weed border distance 92

Weeding frame 19, 25, 26, 89, 93, 94, 144, 164, 180, 181, 185, 383

Weeding lines 26, 93, 94, 95, 164, 180, 181, 383

Welding 19, 50, 66, 67, 137, 219, 220, 231, 232, 335, 375, 377, 379, 380, 382, 383

W

Wire frame mode 227, 228

WMF 22, 57

Word spacing 24, 171, 189

# Ζ

Zoom functions 196