



User Manual

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Important Information for CoCut Clients

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

CoCut is available in two different versions: CoCut Professional, CoCut Standard

The single versions differ in the complexity of functions.

The scope of delivery of a CoCut version includes:

- Program CD (apart from download version)
- Manual on CD or as PDF file

Code number

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

System requirements

- Pentium 4 or newer with min. 1 GB RAM
- Windows 7 / 8 / 10 / 11
- Minimum graphic resolution: 1024 x 768 pixels
- Host program: CorelDRAW Version from X3, alternatively Illustrator, InDesign, CorelDesigner or Inkscape

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

www.eurosystems.lu

under the category Support / FAQ

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- Version-No.: e.g. CoCut Professional 21.002
- Dongle or serial number of respective product

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CoCut uses the OpenCV

(Open Source Computer Vision Library)

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CoCut 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.

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About This Manual

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

In chapter "Quickstart and installation" the installation of CoCut 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 CoCut.

The chapter "*How to work with CoCut?*" 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 display 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 "Tools" are described.

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

CoCut[™] is add-on software for cutting vinyl from CorelDRAW[™], Illustrator, InDesign, CorelDesigner and Inkscape. In conjunction with one of these professional illustration programs CoCut cuts your designs at the push of a button.

Its sophisticated vinyl processing possibilities allow direct control of cutting speed, knife pressure and output precision. Cut by color, multi copies, weeding frames and material optimization are additional features of this exceptional plug-in.

1.1 What CoCut Standard XT Can Do?

- CoCut Standard XT is able to work with many different cutters and adapt to their particular features. Among these are cutters of well-known manufacturers such as Summa, Mimaki, Roland, Graphtec, Zünd etc.
- CoCut Standard XT automatically converts lines to cutable contours.
- Cutting by color
- Cutting preview of vinyl width and display of the amount of vinyl used.
- Positioning, resizing, duplicating, etc. of objects.
- CoCut Standard XT evaluates the data produced by the host program and prepares it for cutting on the selected cutter.
- CoCut Standard XT can cut even extremely large drawings without any difficulty. You can resize and segment your drawings to any scale you wish, no matter what the size of the drawing in the host program.
- If the drawing is too wide for your cutter, it will be automatically sectioned, i.e. divided so that your cutter can cut it.
- You can set up default values for printing and speed for different materials.
 These values can be stored in a material database for reuse at any time.
- While your cutter is cutting, you can continue working with CorelDRAW or any other Windows program. The cutter works in the background.

1.1 What CoCut Standard XT Can Do?

2 Quickstart and Installation

2.1 Copy Protection / Dongle

2.1.1 Copy Protection

CoCut is a copy protected program. Various licensing types are used for the protection of rights.

2.1.1.1 Dongle

For licensing, a hardware copy protection (dongle) is used in conjunction with a code number.

2.1.1.2 Soft Code

A soft code with the following format is used for licensing.

Example: CCXT-0000-0000-0000-0000

2.1.1.3 Activation Key

An activation key is used for licensing. Unlike the soft code, the license is additionally activated on a **license server**.

Example: CCXT:00000-00000-00000-00000

2.2 Licensing

2.2.1 Online Activation / Deactivation

2.2.1.1 Differences to the soft code method

Instead of the previously used serial numbers, **activation keys** are now used. After installation, the license must be activated on our **license server**.

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2.2.1 Online Activation / Deactivation

Name / Company:	Max Mustermann		
eMail:	max@eurosystems.lu		
		4 LI0A0C 4710D CC0D IT	
Activation Key:		CC21D:BPG50-J2P00-71714-H8A86-4Z1QD-S68RJT	
Computer ID:	1608813257025		
Computer Key:	VIGI0R2U0071714M8Z8K4	F1Q6WEF	
	✓ Accept privacy police	У	
	Activate license	Deactivate license	License File
	Your license expires on	7/23/2020.	
✓ Register software			
	0K	₽ C	ancel

Fig. 2.2-1: Licensing dialog

2.2.1.2 Activation

Note: Activation or deactivation is also possible offline; there is no online constraint.

If the customer's computer has access to the Internet, the **activation** or **deactivation** of the license on our server takes place automatically. At the first start of the software, the customer must enter his **activation key**.

Important note: Only after the acceptance of the privacy policy, the software will be activated by clicking on the Activate license button.

Alternatively, the licensing can also be done by means of a **license file** (*.**ECFN**). A click on the *License file* button opens the *Import license file* dialog.

▶ please refer to 2.2.4: Licensing using ECFN file

2.2.1.3 Deactivation

Note: The deactivation of the license is done with the same activation key.

In order to get to the *Deactivate license* button of the *Licensing* dialog, the *License...* button must be clicked via the *Help / About...* menu item. Then you can deactivate the license by clicking the *License deactivate* button.

Note: Before activating on a new computer, the old license must be deactivated.

2.2.1.4 License Info

A click on the *Info* button provides detailed information about the status of the license, namely the validity of the license, computer ID, computer name, activation time and list of computers where the license is activated.



Fig. 2.2-2: Info button

2.2.2 Offline Activation / Deactivation

2.2.2.1 Activation

If no Internet access is available on the customer's computer, the software automatically switches to **offline activation**. After clicking on the **Activate Software button**, a **QR code** is displayed.



Fig. 2.2-3: QR code for offline activation of the license

After scanning the smartphone code, a so-called computer key for this computer is displayed on the mobile phone.

Note: The computer key is only valid on the computer in use.

Alternatively, the activation can also be done via a web page from another computer. Follow the information in the window and on the website.

2.2.2.2 Deactivation

Deactivation requires a *deactivation* key that confirms the deactivation of the license to the license server. After scanning the QR code, the activation key is released again at our license server. This allows the activation key to be used again for activation on another computer.

To get to the *Deactivate license* button of the *licensing* dialog, you have to click on the *License...* button via the *Help / About...* menu item. Then you can deactivate the license by clicking the *Deactivate license* button.

Alternatively, the deactivation can be done via a web page from another computer. Follow instructions in the window and on the website.

Important note: If the computer is defective, please contact your dealer or send an e-mail to support@eurosystems.lu.

2.2.3 Conversion Trial Version to Full Version

Note: No reinstallation necessary!

Enter the license data via the menu - *Help / About... /* . A click on the *license* button opens the *licensing* window.

2.2.4 Licensing using ECFN file

As an alternative to entering the license data manually, licensing can also be carried out by means of a license file. A **double click** on the *.ECFN file is confirmed by the message "Your license has been installed". The ECFN file has been copied into the program folder of CoCut Standard XT and the licensing dialog will be pre-filled the next time the program is started. Now the license can be activated by clicking on the **Activate License** button.

Note: Activating the license is only possible if the privacy policy is accepted.

2.3 Quickstart

2.3.1 How to Install CoCut?

2.3.1.1 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

2.3.1.2 Step 2: Installation

Insert the CoCut 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 CoCut Standard XT and start installation.

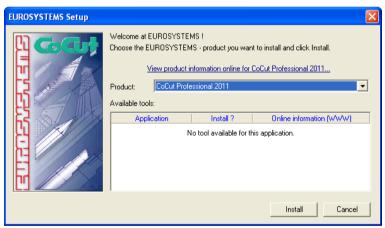


Fig. 2.3-1: Autorun window

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

2.3.1 How to Install CoCut?

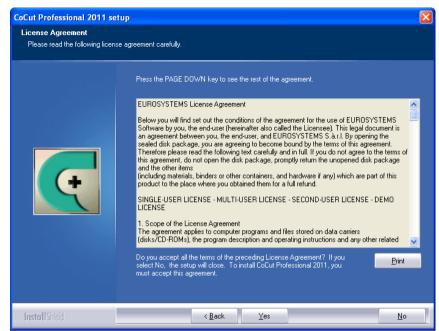


Fig. 2.3-2: EUROSYSTEMS Software License Agreement

In this dialog the installation folder for CoCut Standard XT is chosen. By default the folder C:\Program Files\EUROSYSTEMS\CoCut Standard XT is suggested.

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

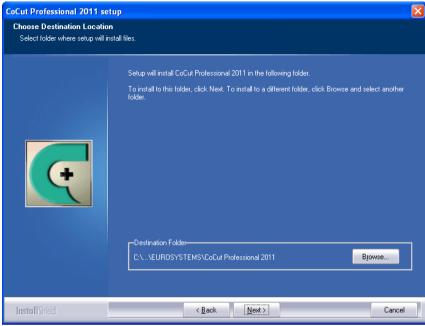


Fig. 2.3-3: Selection of destination folder

Hint: To install additional drivers select custom setup.

2.3.1 How to Install CoCut?

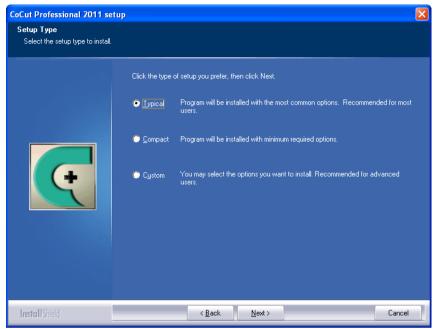


Fig. 2.3-4: Selection of setup type

Default program folder in the start menu is EUROSYSTEMS\CoCut Standard XT.

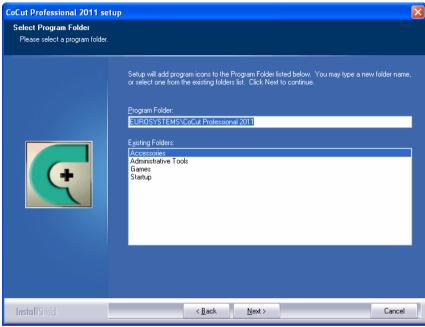


Fig. 2.3-5: Position in start menu

2.4 The Cut Toolbar

All object functions of the Cut Toolbar act directly on the host program's (CorelDRAW or Illustrator) objects. This extends host program's functionality with these tools. Of course, CoCut Standard XT can be started without a host program.

Important note: The functionality described here is only possible with CorelDRAW X3-X8 & 2017-2024 and Illustrator CS3-CS6 & CC!

2.4.1 The Cut Toolbar in CorelDRAW X3-X8 and 2017-2024



Fig. 2.4-1: Toolbar in CorelDRAW X3-X8 and 2017-2024

2.4.2 The File Menu Entries in Illustrator CS3-CS6 and CC



Fig. 2.4-2: Illustrator sub menu CoCut Standard XT

2.4.2.1 Buttons of the Cut Toolbar

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

1 The Multi Copy Button



Fig. 2.4-3: Multi Copy Icon

▶ please refer to 6.4: The *Object Parameter* Toolbar

2 The Cut Button



Fig. 2.4-4: Cut Icon

▶ please refer to 3.5: Cutting - Milling - Creasing - Drawing ...

3 The Direct Cutting Button



Fig. 2.4-5: Direct cutting Icon

Activating this button ensures that **no** window appears before the data output. The output data is sent directly to the connected device.

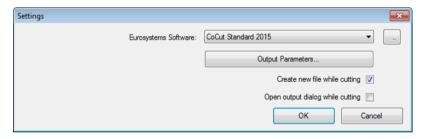
4 The Settings Button



Fig. 2.4-6: Settings Icon

A click on the Settings Button opens the Settings window.

2.4.2.2 The Settings Dialog



Eurosystems Software Field



Fig. 2.4-7: 2 Point Icon

A click on the 2 point button enables the selected program and allows changing of settings.

The Output Parameters... Button



Activating the *Output Parameters* button opens the cutting dialog and allows you to set individual settings when cutting.

Create New File While Cutting Option

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

Open Output Dialog While Cutting Option

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

2.5 Autoexport - Scripts

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

2.5.1 Corun Installer

With the Corun Installer you can install CoCut the plugins. In the *Name* column all host programs are listed, in which the plug-ins can be implemented. In the *Plugin path* column is displayed in which the folder the plug-in files are located after installation. In the *Eurosystem software* list all programs are listed that have a plug-in functionality. Select the appropriate program from the list. Activating the *Install* button starts the process.

Note: The Corun Installer is required if the host application was installed BEFORE the EUROSYSTEMS program or if plugins must be re-installed.

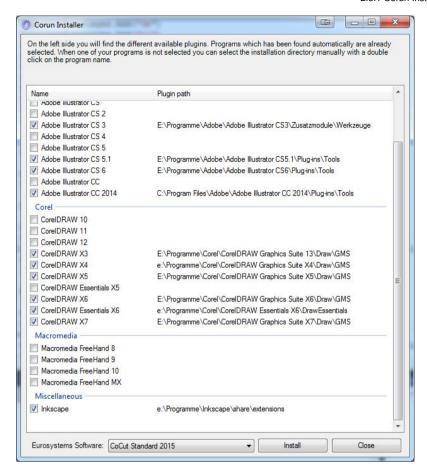


Fig. 2.5-1: Corun Installer dialog window with detected host programs and path indicators.

2.5.2 Insert CoCut Icon in CorelDRAW Toolbar

2.5.2.1 CoreIDRAW X3-X8 and 2017-2024

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

This option can be installed as follows:

Insert CoreIDRAW 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 CoCut you have to link the CoCut 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.
- Activate the tab Appearance. Here, press the Import-button and select any symbol.
- Select the option *Workspace/Customization/Command Bars* in the left option bar .
- Change the name of the toolbar "New ToolBar 1" to CoCut.
- · Click on OK.

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

2.5.3 CoCut Script in Inkscape

The CoCut - script for Inkscape is located in the *Extensions* menu. The output routine is activated using the *cutting* menu entry in the CoCut Standard XT sub menu.

Important note: The plugin only works with the non-portable version of Inkscape.

2.5.4 CoCut Script in Adobe Illustrator 8-10, CS-CS6, CC

CoCut 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 CoCut take place?

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

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

Indication: Special process color fills are not passed on.

2.5.5 CoCut Script in Adobe InDesign CS4-CS6, CC

The CoCut script is in the *Plug-ins* menu, under the following sub-menu: EUROSYSTEMS, *Auto Export*. From the function list, select the appropriate function with a click

2.6 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.

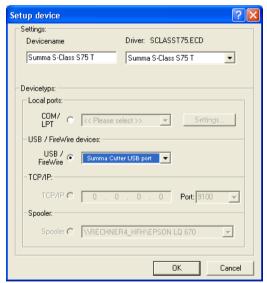


Fig. 2.6-1: Dialog for the selection of the device driver

Detailed information for the setting of the *local interface* is here: please refer to 3.5: Cutting - Milling - Creasing - Drawing ...

2.6 Selection of The Device Driver

3 How to work with CoCut

3.1 Desktop and Working Sheet

3.1.1 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.

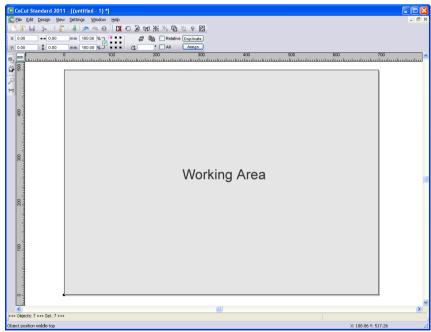


Fig. 3.1-1: Desktop with working sheet (here: gray), Background (here: white), Toolbars, Sidebar, Rulers, Statusbar

3.1.2 II. Working Area

The workspace is a subset of the CoCut desktop. The workspace is usually in the format that will later be output on a machine. In addition to the known DIN formats, any formats can be applied, e.g. for different table sizes.

3.1.2 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 3.5: Cutting - Milling - Creasing - Drawing ...

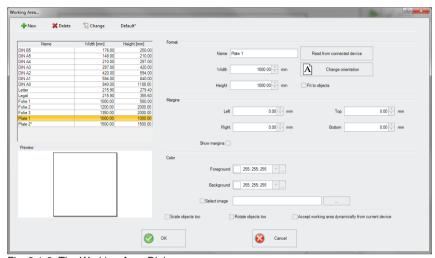


Fig. 3.1-2: The Working Area Dialog

3.1.2.1 The Buttons

The New Button 🕆

The **New** button creates a new format. The values for width and height of the selected line are transferred to the new row.

The Delete Button X

The **Delete** button removes the marked row.

The Change Button [3]

This button saves all changed parameters and options.

The Default* Button

This button marks the name with a * (star). The star-marked format is used every time CoCut is started.

The Read from connected device Button

By means of this button - if the read-out command of the driver is processed by the machine controller - the width value can be read from the connected device and inserted into the width field.

The Change orientation Button

This button changes the orientation of the working space from portrait to landscape and vice versa.

The OK Button

The OK button accepts the changed values and closes the dialog.

The Cancel Button

This button closes the dialog without saving any changes.

3.1.2.2 The Areas

The Preview Area

In this area, the worksheet, the desktop background, their colors, as well as the orientation are displayed proportionally reduced.

The Format Area

Name

The name of the format is entered in this field and the name of the selected one is displayed.

Width

In this field, the width of the format is determined.

Height

In this field, the height of the format is set.

The Margins Area

Left, Right, Top, Unten

These 4 fields define the distance of the borders from the edge of the working area.

Note: Negative values are also allowed.

The Color Area

Foreground

Here, the color of the worksheet can be defined as RGB value.

Background

Here the color of the background desktop can be defined as RGB value.

3.1.2.3 The Options

The Fit to objects Option

This option captures the objects outside the working sheet and extends the sheet by the amount necessary to accommodate all the objects on the working sheet.

The Show margins Option

This option displays the defined borders as dashed lines in front of the working sheet.

The Select image Option

This option displays the selected bitmap in the preview and later on the working sheet. The ... button opens the file dialog for selecting the desired bitmap.

The Scale Objects too Option

If the height or width of the working sheet is changed, all objects on the working sheet are reduced or enlarged by the same amount.

The Rotate Objects too Option

This option determines whether the objects on the working sheet and on the desktop background will also be rotated when the orientation is changed.

The Accept working area dynamically from current device Option

This option ensures that the width and height values of the working area are read from the connected device and used. For each device, a format is created with the name of the device in the list.

3.2 Job Preparation

3.2.1 Import

With this command the graphics that have *not* been saved in the CoCut-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).

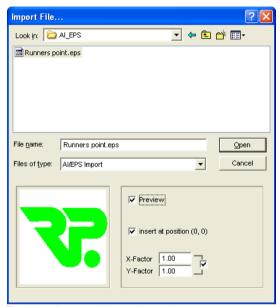


Fig. 3.2-1: Import window with preview

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, *.svg
```

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

3.2.1.1 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

in the following article. Please refer to 4.5.1.5: The Import Setup

3.2.1.2 PDF Import

3.2.1.2.1 Additional Options

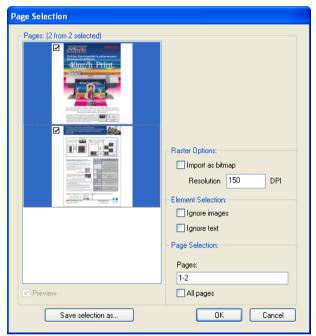


Fig. 3.2-2: Options concerning import of data

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.

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 CoCut-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.

3.3 The CoCut 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 CoCut layer-toolbar in the main window.

3.3 The CoCut Layer dialog

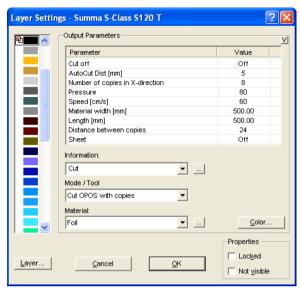


Fig. 3.3-1: Layer setup with adjustment of output parameters

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.

3.4 The Output

3.4.1 Device Setting - Interface Setup (Local Device)

The CoCut 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. 3.4-1: The output button

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



Fig. 3.4-2: 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 CoCut. In the left list an individual name for the driver can be distributed. This name will be used in the output dialogs of CoCut.

Enable as server

Requirements are at least 2 licenses of CoCut.

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.

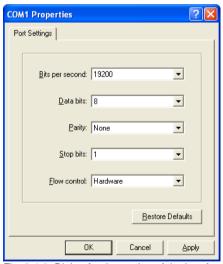


Fig. 3.4-3: Dialog for the setting of the interface parameters

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.

3.4.2 Device Setting (Network Device)

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

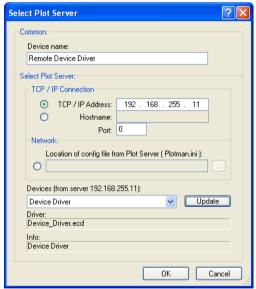


Fig. 3.4-4: Dialog for the configuration of a plot server

A *network device* enables the output of CoCut 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.

3.4.3 Start Output from the CoCut Working Surface

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.

3.4.3 Start Output from the CoCut Working Surface

The output is started using the plotter icon 35.

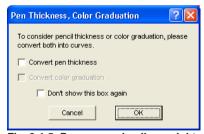


Fig. 3.4-5: Pre-processing line weight and color gradient

If a CoCut job contains objects with the attributes *pen thickness* and/or *color graduation* a preceding dialog appears. 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.

3.4.3.1 Output to Device

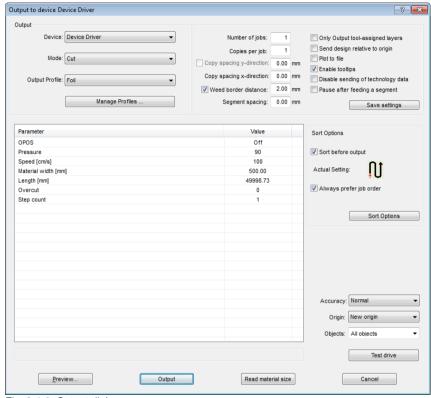


Fig. 3.4-6: Output dialog

Output

In the area named *output* of the *output to device* dialog you can control most of the parameters that are directly or indirectly in contact with the output device.

Device

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

Mode

In the *mode* field the required output mode is preset.

3.4.3 Start Output from the CoCut Working Surface

Output Profile

In the field *output profile* the required profile with individual settings and values is selected.

Manage Profiles Button

Clicking on the Manage Profiles ... button opens the following popup menu:

Add...

Save profile

Profile defaults

Mode / Tool defaults

Add

Activating the *Add* menu item writes a new data record into the profile database.

Save Profile

Selecting the menu item *Save profile* the prior to this edited and changed values are written into the profile database.

Profile Defaults

Activating the menu item **Profile defaults** resets all **Values** to the default value. The profile values are reread.

Mode / Tool Defaults

Activating the menu item *Mode / Tool defaults* resets all **Parameters** to the **internal driver values**.

Number of Jobs

The value in the field *number of jobs* repeats the last output *without* the reading of the video marks with identical output parameters such as scaling, etc. Only layers with tools are given out. This variant protects against the fact that layers are output with no tool assignment. This means that there is no error output due to the use of the last active tool.

Copies per Job

In the field *copies per job* you define how often the *selected* objects shall be cut. After the cutting this value is automatically reset to 1.

Copy Spacing Y-Direction

The value in the field *Copy spacing y-direction* 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 preview the first object is shown "normally". Each further object of the stack is shown dashed in blue.

Copy Spacing X-Direction

The value in the field *Copy spacing x-direction* defines the space between the copies that were entered in the field *Copies per job*.

Weed Border Distance

With the option **Weed border distance** 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.

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.

Only Output Tool-Assigned Layers

By activating this option, only objects from a layer with an assigned tool are transferred to the **Plot-Manager**.

Send Design Relative to Origin

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

If the *Send design relative to origin* option is active the physical zero point is moved relatively to the offset coordinate of the reference point. The coordinates of the reference point corresponds to the position of the down left corner of the object to be cut

3.4.3 Start Output from the CoCut Working Surface

on the CoCut working surface.

Plot to File

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

Enable Tool Tips

If this option is enabled, explanatory texts regarding parameters, values or options are displayed, if the mouse cursor is located directly above.

Pause after Feeding a Segment

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

If the option **Pause after feeding a segment** is active the output is interrupted after each segment and the material can be re-adjusted if necessary.

Save Settings Button

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

3.4.3.2 Sort Options

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*.

Actual Setting

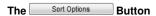


Fig. 3.4-7: Main direction icon

The icon shows which main direction is selected in the output to device dialog.

Always Prefer Job Order

This option ensures, that the sorting that was made before, is not changed through an alternative sortation.



The **sort options** button opens the **output settings** dialog.

▶ please refer to 7.4.4.1: The Sort Settings Tab

Accuracy

The *Accuracy* field offers the following settings: *very low, low, normal*, *high* and *very high*. As default, the value *normal* is set.

The accuracy defines of how many vector parts an object should consist. This is only relevant with objects whose size range in ten thousands of a millimeter. Other object sizes are calculated *automatically* by CoCut.

Feed / Origin

Depending on the selected driver the field name 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.

Objects

The field *Objects* allows the selection of the objects to be output. Besides the modes *all objects* and *selected objects* CoCut 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*".

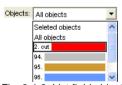


Fig. 3.4-8: List field objects with selection modes.

3.4.3.3 Parameter / Value Table

The table *Parameter / Value* allows the access to the parameters of 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 **Edit...** is displayed in the *value* column a double-click opens the corresponding window for the setup of a *group of parameters*.

3.4.3 Start Output from the CoCut Working Surface

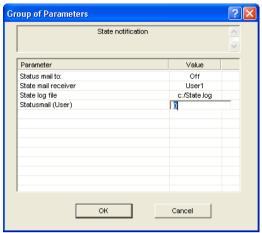


Fig. 3.4-9: Example for an opened parameter group

Info Line

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

Test Drive

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

Preview or Direct Output

The *Preview* button opens the *output* preview. **Direct output** suppresses the **preview** window. After pressing the output button, the plotter commands are transferred to the plotter together with the data.

Output

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

Read Material Size

The *Read material size* 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.

3.4.3.4 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.

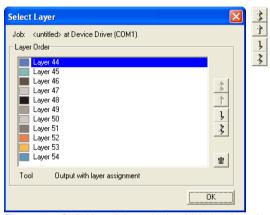


Fig. 3.4-10: Definition of the order in which the single layers shall be processed by up / down buttons

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 independently from the used color.

3.5 Cutting - Milling - Creasing - Drawing ...

3.5.1 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 CoCut



3.5.1 The Output Preview

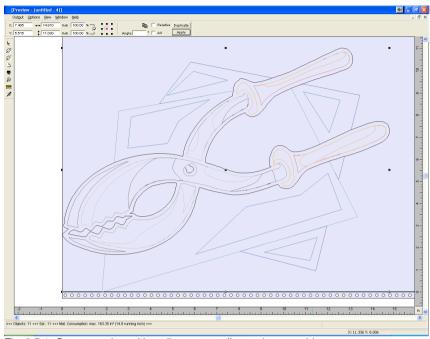


Fig. 3.5-1: Output preview with toolbars, status line and output objects

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 6.7: The Preview Tools Toolbar
- please refer to 6.8: The Preview Object Parameters Toolbar

3.5.1.1 Material optimization

The material consumption can be reduced by using the module **Box nesting**. The **Box nesting** ensures that all objects are arranged in such a way that they take up as little space as possible during output. Rotating or not rotating objects ensures that material consumption can be reduced.

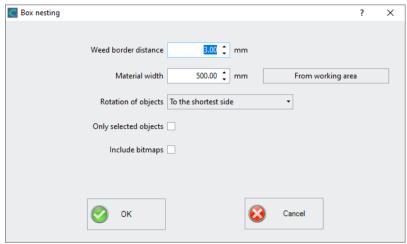


Fig. 3.5-2: Parameter dialog for the material optimization

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.

Material width

This value determines to which maximum material width the optimization should be applied. If the working area is to be used, just click on the *From working area* button to enter the corresponding width value.

Rotation of objects

none

With this option, no objects are rotated; they are only optimized for the **weed** boarder distance.

to the shortest side

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

as required

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

3.5.1 The Output Preview

Only selected objects

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

Include bitmaps

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

3.5.1.2 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.

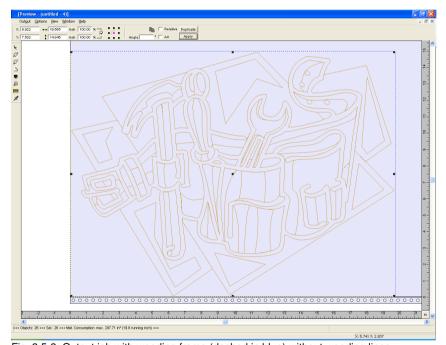


Fig. 3.5-3: Output job with weeding frame (dashed in blue) without weeding lines

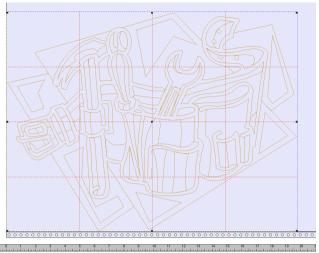


Fig. 3.5-4: Example with 3 horizontal and 3 vertical weeding lines (dashed in red)

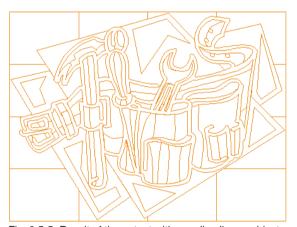


Fig. 3.5-5: Result of the output with weeding lines - objects not! cut

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

3.5.1 The Output Preview

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.

3.5.1.3 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 *..job 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:

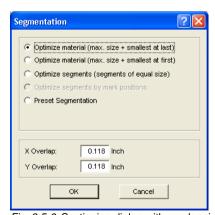


Fig. 3.5-6: Sectioning dialog with overlapping of 3 mm

Optimize material (max. size + smallest at last)

Optimize ... smallest at last) causes CoCut 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 CoCut 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 CoCut "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.

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.

3.5.1 The Output Preview

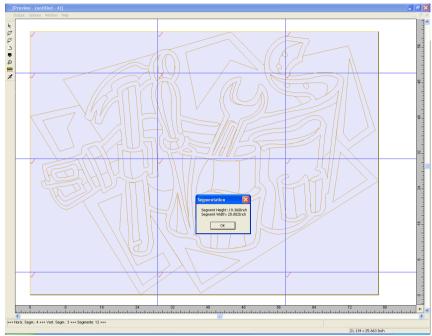


Fig. 3.5-7: Foil optimization in the sectioning preview with 8 segments and information on segment sizes

Selection and deselection of the segments

Selection and deselection of the segments is done by clicking into the segment. The red checkmark indicates 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 CoCut 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 Reference Part

The menu items in chronological order:

4.1 The File Menu

4.1.1 The New... Command

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



4.1.2 The *Open*... Command

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



4.1.3 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.

4.1.4 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.



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.

4.1.5 The Import... Command

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

CTRL+I

4.1.6 The Output... Command

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



4.1.7 The Quit Command

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



4.1.8 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.

4.2 The Edit Menu

4.2.1 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.

● F5

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

4.2.2 The Redo Command

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



4.2.3 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.

4.2.4 The Copy Command

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



4.2.5 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.

4.2.6 The Paste Special... Command

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

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

4.2.7 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.



4.2.8 The Reverse Selection Command

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

4.2.9 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 6.4: The Object Parameter Toolbar

4.3 The Design Menu

4.3.1 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.



4.3.2 The Rotate Axis With Page Command

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



4.3.3 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.



4.3.4 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.



4.3.5 The *Delete* Command

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



4.3.6 The Mirror on the X Axis Command

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



4.3.7 The Mirror on the Y Axis Command

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



4.3.8 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.



4.3.8 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.

please refer to 6.4: The Object Parameter Toolbar

4.3.9 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.

4.3.10 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

4.3.11 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.



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.

4.3.12 The Break Combination Command

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



4.3.13 The Align... Command

With this function objects are aligned - relative to the working sheet or other objects 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 sheet.

Indication: If not aligned to the worksheet, then aligned to the last selection.

4.3.14 The Sort With Simulation... Command

This command opens the object sort function with which the output order 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.

4.3.15 The Delete double lines command

This function combines the Welding function with the Close objects function. All vector objects whose distance from the start and end point lies within the closing tolerance are automatically closed or connected.



Note: This function is particularly useful when outputting data on a laser, as double traverse paths are avoided. The output time is also reduced for cutting plotters and milling machines.

4.3.16 The Convert to Grid Lines Command

This function converts a grid of rectangles lying exactly on top of each other into a sorted line grid without double lines. All double lines are removed and merged into one continuous line. Ideally, the travel paths are optimized and the cutting direction is alternating.

Example: please refer to 7.2: Convert into Grid Lines (Example)

4.3.17 The Insert Bridge Command

Bridges are intended to prevent milled parts from falling out. Parts of the milling contour remain, the **length** and **number** of which can be specified individually. The position of the **manual bridges** can also be changed. Bridges are inserted for all selected objects.

Note: In the node mode, bridges can be added precisely to a point.

4.3.18 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.

4.4 The View Menu

4.4.1 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.

4.4.2 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.



4.4.3 The Full Page Command

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



4.4.4 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.

4.4.5 The Show Selected Objects Command

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



4.4.6 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.



4.4.7 The To Back Command

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

4.4.8 The Forward One Command

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

🕡 PgUp

4.4.9 The Back One Command

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



4.4.10 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



4.4.11 The Change Order Command

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



Note: If all contours are to be taken into account, the grouping of the objects must be broken or the combination of the objects must be broken as well.

4.4.12 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.



4.4.13 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.

4.4.14 The Always on top Command

The CoCut window remains always in the foreground.

CTRL+Y

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

4.4.15 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.

4.5 The Settings Menu

4.5.1 The Standard Settings Menu

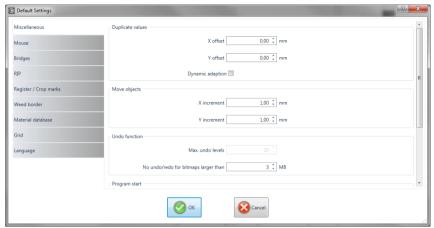


Fig. 4.5-1: Default Settings dialog - here: Miscellaneous tab is active

4.5.1.1 The Miscellaneous... Setup



4.5.1.1.1 Duplicate values

- 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.

- Dynamic adaptation Option

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.

4.5.1.1.2 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.

4.5.1.1.3 Undo function

- 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.

4.5.1.1.4 Program start

- Info window

When the program is started, an information window is displayed in front of the workspace, which informs about news, updates, etc., if there is a connection to the Internet.

The 3 options are: Display always, Do not show again, Only display when new.

Recommendation: With "Only display when new" you do not miss any important information regarding CoCut.

4.5.1.2 The *Mouse...* Setup

4.5.1.2.1 Mouse action

- <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.

- Click Delay

This option increases the accuracy 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.

- Scroll window automatically Option

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.

4.5.1.2.2 Mouse Wheel

These options ease the navigation on the CoCut desktop with computer mice, which are equipped with a mid-wheel button.

- <Shift> toggles these modes

Two modes are possible: **Zoom** or **Vert. Scroll**.

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.

- Resolution

The sensitivity of the wheel can be adapted to individual requirements. The range is from 1 (coarse) to 10 (fine).

4.5.1.3 The Weed Border Setup

This command creates a frame around one or more selected objects. An additional frame facilitates the release of the cut objects from the carrier material (Weeding).

4.5.1.3.1 Manual Weed Border

Manual, because by selection is determined, around which which objects a frame is placed.

- Uniformly Page Distance

Here, a **uniform** distance from all 4 object sides to the weed border is established.

- Different Page Distance

Here, a **non-uniform** distance from all 4 object sides to the weed border is established.

- One Frame For Each Used Layer

In each layer in which objects are located, a weed border around all objects therein is placed.

4.5.1.4 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

All currently connected output devices can be selected in this window. The **driver** name, **file** name, and the **port** interface are displayed. **Mode** and **material** from the material database can be determined

The ... button enables the creation, modification and deletion of the settings.

Port

Indicates with which computer interface the output device is connected.

4.5.1 The Standard Settings Menu

Default Settings

Keep reference point

This option takes care that no new origin is set after the output of a job. The next 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 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.

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.

Enable output for objects larger than page size

This option causes objects to be passed to the output module that are larger than the dimensions of the working area.

4.5.1.5 The Import Setup

The **setup import dialog** is used to preset all import filters implemented in CoCut. The settings are divided into 4 categories for the sake of clarity. Settings made in the **General tab** apply to all import filter file formats listed in the left column. **Default settings** are already activated. Settings other than the standard can be activated by clicking on the respective **file format tab**. The **filter-specific settings** can be activated or deactivated as required.

4.5.1 The Standard Settings Menu

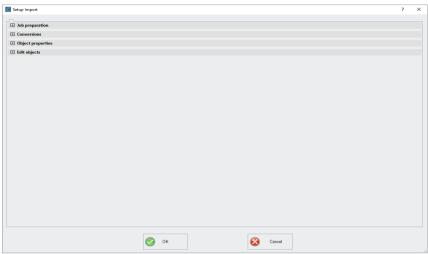


Fig. 4.5-2: Import dialog with closed category structure and import filter file formats

+

Fig. 4.5-3: Plus sign control

-

Fig. 4.5-4: Minus sign control

Fig. 4.5-5: Check control

A click on the *plus sign* control opens the desired category. A click on the *minus sign* control closes the desired category. Clicking on the *check* control activates or deactivates the corresponding option.

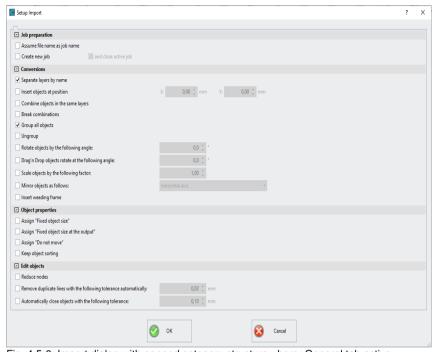


Fig. 4.5-6: Import dialog with opened category structure - here: General tab active

4.5.1.5.1 The Settings

4.5.1.5.1.1 Job preparation

- Assume file name as job name

This option takes the name of the **import file** for the job file. This makes it easier to assign source file to job file.

- Create new job

(Default: set) - When importing foreign data, the data is imported into a job without a name (untitled.job).

and

- close active job

The active job is closed during import. This prevents the job history becoming very large and confusing when importing many files.

4.5.1 The Standard Settings Menu

4.5.1.5.1.2 Conversions

- Separate layers by name

When importing external data, it may happen that several layers have an identical color value. If they are assigned different names, CoCut can separate them during import and place the corresponding objects in separate layers.

- Insert objects at position

If this option is activated, it is possible to determine the position in X and Y in which the data is stored on the work surface.

- Combine objects in the same layers

If this option is activated, all closed objects that are in the same layer are combined during the import.

- Break Combinations

If this option is activated, all object combinations are exploded during the import, with the result that only individual objects are available.

- Group all objects

If this option is activated, all objects are grouped during import. *Advantage*: The position of the objects remains unchanged when the objects are moved because only one group object is moved.

- Ungroup

If this option is activated, all object groups are broken during import.

- Rotate objects by the following angle:

The value specifies the angle at which the objects are rotated when they are imported. Negative values are allowed.

- Drag'n Drop objects rotate at the following angle:

If objects are dragged to the CoCut work surface, they are rotated by the entered value when released.

- Scale objects by the following factor:

The value specifies the extent to which the objects are scaled, i.e. enlarged or reduced, during import. Negative values are allowed.

- Mirror objects as follows:

This option allows the objects to be mirrored when they are imported: Possible settings are: horizontal axis, vertical axis, both axes.

- Insert weeding frame:

This option adds a weeding frame around the imported objects. The distance is based on the settings for the weeding frame.

4.5.1.5.1.3 Object properties

- Assign "Fixed object size"

If this option is activated, all imported objects are marked with the **object attribute** "fixed object size"; Thus size change is deactivated

- Assign "Fixed object size at the output"

If this option is activated, all imported objects are marked with the **object attribute** "fixed object size at the output". If this option is active, then no size compensation takes place during output. The objects are placed and rotated only after the marks have been imported.

- Assign "Do not move"

If this option is activated, all imported objects are marked with the **object attribute** "Do not move". The **Do not move** option prevents the selected object from being moved. The position is locked.

- Keep object sorting

If this option is active, the object sorting is not changed during the import. The sequence of objects will remain.

4.5.1.5.1.4 Edit objects

- Reduce nodes

Enabling this option removes all superfluous nodes. The vector object is reduced by those nodes whose removal does not influence the curve trajectory.

- Remove duplicate lines with the following tolerance automatically:

If this option is activated, all identical, overlapping lines are automatically removed.

- Automatically close objects with the following tolerance:

If this option is activated, all vector objects are automatically closed or connected during import, whose distance from the start and end point is within the closing tolerance.

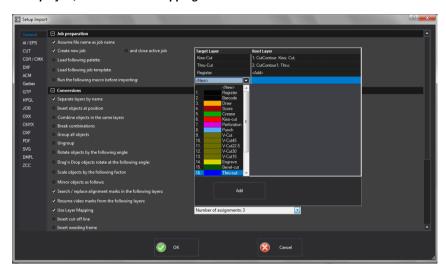
4.5.1.5.2 Layer Mapping - Example

Why Layer Mapping?

The mapping ensures that **imported layer names**, **tools**, **methods** are integrated into the database structure. The purpose of the layer mapping is the **manual assignment** of unknown layer names to tools or methods existing in the CoCut database.

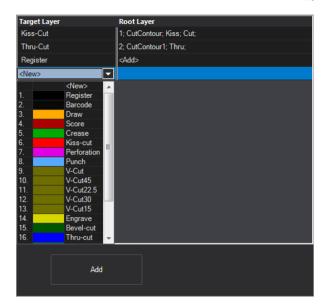
Note: The assignment applies to all filters. Multiple assignments (mappings) are allowed.

Important note: If there are no names in the import palette, then there will be no selection in the root layer column. If the column is empty, the "Sample Layer Entry" is displayed, i.e. there is no mapping.



Example:

This option can be found under: **Settings, Standard Settings, Import..., Conversions, Use Layer Mapping**. A click into the **Number of assignments field** opens the following dialog:



Target layer column

In the *Target layer* column, select the desired database layer(s) on which the mapping is to act. Here: **Kiss-Cut** and/or **Thru-Cut** (see figure above).

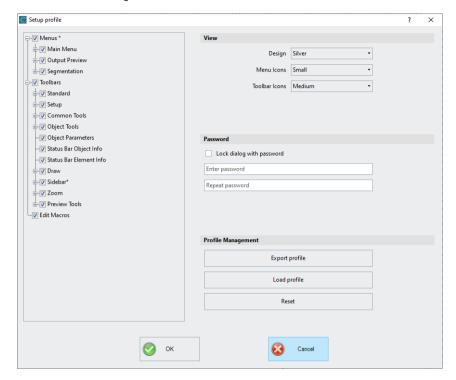
Root layer column

The layer name from the import file is to be entered in the *Root layer* column. Here: CutContour; Kiss; Cut; is assigned to the Kiss-Cut *Target Layer* (see figure above).

4.5.1.6 The Profile... Setup

The **Profile...** setup serves the customization of the desktop. The user or administrator can adapt the CoCut 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.

4.5.1 The Standard Settings Menu



4.5.1.6.1 View

Design

The following options are possible: *Black, Silver, Blue and Dark.* Changes are previewed directly in the dialog.

Menu Icons

Possible sizes are: Small, Medium and Large.

Toolbar Icons

Possible sizes are: Small, Medium and Large.

Password

Lock dialog with password Option

If this option is activated, this password will be requested when activating the **profile** menu. This prevents unwanted or unintended changes to the view.

Note: Changing the view is now only possible with a known password.

4.5.1.6.2 Profile Management

Export Profile Button

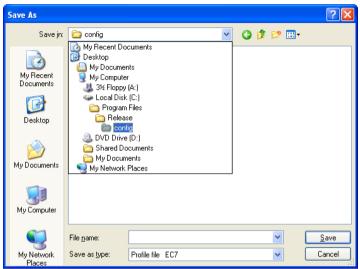


Fig. 4.5-7: Save profile dialog with default path

Enabling of the *Export Profile* button allows saving of customize CoCut profiles. The used file extension is *.EC7. As default *.EC7 files are saved in the folder, where the program data are located.

Load Profile button

A click on this button opens the Windows *Open* dialog.

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.

4.5.1.6.3 System Menu

A click on the icon in the upper left corner of the program window opens the following dialog.



Fig. 4.5-8: System menu with *Profile... sub menu*

4.5.2 The Working Area... Command

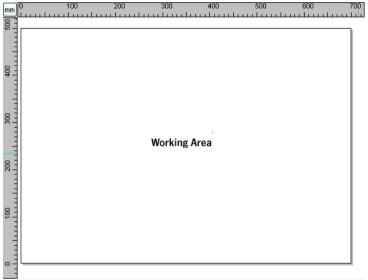


Fig. 4.5-9: Working area with shadows and rulers

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.

4.5.3 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.



4.5.4 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.

4.5.5 The Origin Function

This function shows a zero point (origin) in the lower left corner or the lower right corner of the working area. It is used for orientation on the working area. Which view is preferred depends mostly on the zero point of the connected machine. The view on the working area then corresponds to the real conditions.

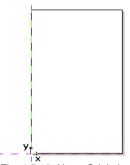


Fig. 4.5-10: Here: Origin bottom left

4.5.5.1 The Settings Origin Menu

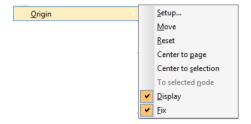


Fig. 4.5-11: The Origin Options

4.5.5.1.1 Setup...



Fig. 4.5-12: The origin dialog box

New Position (X / Y)

This option allows you to set the zero point using specific values.

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.

Y Field + Measuring Unit

In the Y field, the absolute coordinate of the zero point on the Y-axis can be specified.

4.5.5 The Origin Function

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. If the option is deactivated, the position of the zero point is only taken into account in the rulers.

Bottom Left Option

This option places the zero point in the lower left corner of the working area.

Bottom Right Option

This option places the zero point in the lower right corner of the working area.

4.5.5.1.2 Move

This command serves to move the ruler origin. The *Move* option activates a crosshair as a mouse cursor. With the help of this, the zero point can be moved to any individual position.

4.5.5.1.3 Reset

The **Reset** option returns the zero point to the original position (lower left or lower right).

4.5.5.1.4 Center to page

This command serves to move the origin point to the center of the working area (center of page).

4.5.5.1.5 Center to selection

The *Center to selection* option sets the zero point to the position of the middle handle located at the center of a selected object.

Note: This command is selectable only, if one or more objects are selected on the desktop.

4.5.5.1.6 To selected node

The *To selected node* option sets the zero point to the position of a marked (selected) node.

Note: This command is selectable only, if one or more objects are selected on the desktop.

4.5.5.1.7 Display

This option displays the zero point or makes it invisible.

Note: Only visible, if the Display as Cross-Option is active.

4.5.5.1.8 Fix

This option makes the zero point moveable or fixes it at the current position.

4.5.6 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.

4.5.7 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.



4.5.8 The Choose Language... Command

This option sets the language for user interface and help file.

4.5.8.1 Program Language

The user interface language is set here.

4.5.8.2 Language for the Help File

The language for the help is determined here.

4.6 The Window Menu

4.6.1 The New Window Command

Activating this instruction opens a new CoCut window.

4.6.2 The Tile Horizontally Command

The activation of this instruction places all open windows diminished - one above the other - horizontally.

4.6.3 The Tile Vertically Command

The activation of this instruction positions all opened windows diminished - side by side - vertically.

4.6.4 The Cascade Command

The confirmation of this instruction displays all windows diminished and cascaded (diagonally displaced).

4.6.5 The Close Command

Clicking this instruction closes the momentarily active window after prior safety query.

4.6.6 The Close All Command

Clicking this instruction closes all open windows after prior safety query.

4.6.7 The Standard Command

This command switches the *tool*-toolbar on the desktop or makes it disappear.



4 6 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.



4.6.9 The Setup Command

This instruction switches the *setup* toolbar on the desktop or makes it disappear.

CTRL+3

4.6.10 The Common Tools Command

This instruction switches the *common tools* toolbar on the desktop or makes it disappear.

CTRL+4

4.6.11 The Object Tools Command

This instruction switches the *object tools* toolbar on the desktop or makes it CTRL+6 disappear.

4.6.12 The Object Parameters Command

This instruction switches the *object parameters* toolbar on the desktop or makes it disappear.

CTRL+7

4.6.13 The Status Bar Object Info Command

This instruction switches the **status bar object info** toolbar on the desktop or makes it disappear.

CTRL+8

4.6.14 The Status Bar Element Info Command

This instruction switches the *status bar element info* on the desktop or makes it disappear.

CTRL+9

4.7 The Help Menu

4.7.1 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 CoCut version you can fix them the fastest, if this list is made available to our support staff.

4.7.2 The Help... Command

This option starts the CoCut help.



4.7.3 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**.

4.7.4 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.

▶ please refer to 2.5.1: Corun Installer

4.7.5 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. - www.eurosystems.lu.

4.7.6 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 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.

4.7.7 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.

4.8 Context Menu Left Mouse Button

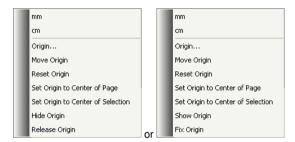
4.8.1 Context Menu Ruler

4.8.1.1 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.



4.8.1.1.1 Origin...

please refer to 4.5.5: The *Origin* Function

4.8.1.1.2 Move Origin

This command serves to move the ruler origin to any position on the desktop.

4.8.1.1.3 Reset Origin

This command serves to move the origin point into the lower left corner of the working area.

4.8.1.1.4 Set Origin to Center of Page

This command serves to move the origin point to the center of the working area (center of page).

4.8.1.1.5 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.

4.8.1.1.6 Hide Origin

This command serves to switch the ruler zero point to invisible.

4.8.1.1.7 Release Origin

This command serves to release the fixation of the ruler origin in order to move it with the mouse.

4.8.1.1.8 Show Origin

This command serves to switch the ruler zero point to visible.

4.8.1.1.9 Fix Origin

This command serves to anchor the ruler zero point at a definite point.

4.9 Context Menus Right Mouse Button

4.9.1 Context Menu on Empty Working Area



Fig. 4.9-1: This menu appears if no objects lie on the desktop

Job Properties...

This command opens the following Job properties dialog:

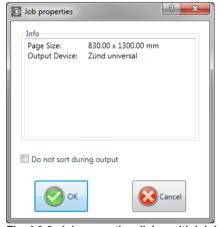


Fig. 4.9-2: Job properties dialog with job infos

Do not sort during output

This option prevents, if activated, the objects being sorted before or during output. In other words, the original object sorting is retained.

Note: If this option is activated, the "Do not sort during output" option located in the output dialog is automatically deactivated.

Refresh screen

This instruction refreshes the active 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 CoCut working area.

Working area

This menu entry opens the dialog for the pre-setting of the parameters of the working area.

Fit Page to Objects

This option scales the working area proportionally in relation to the object size.

4.9.1 Context Menu on Empty Working Area

5 Reference Part Output Preview

5.1 The Output Menu

5.1.1 The Output Command

Starts the *output* on the connected device with the settings of the *output to device* dialog.

5.2 The Options Menu

5.2.1 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 4.1.4: The Save as... Command

5.2.2 The Rotate Axis Command

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

▶ please refer to 4.3.1: The Rotate Axis Command



5.2.3 The Horizontal Mirror Command

The selected object is mirrored at the horizontal through its center-point.

▶ please refer to 4.3.3: The Horizontal Mirror Command



5.2.4 The Vertical Mirror Command

The selected object is mirrored at the vertical through its center-point.

please refer to 4.3.4: The Vertical Mirror Command



5.2.5 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 3.5.1.1: Material optimization

5.2.6 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 4.3.14: The Sort With Simulation... Command

In detail: Please refer to 7.4: The Sort with Simulation... Tool

5.2.7 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.

5.2.8 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.



5.2.9 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 3.5.1.2: Weeding lines

5.2.10 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 3.5.1.2: Weeding lines

5.2.11 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 3.4.3: Start Output</u> from the CoCut Working Surface

5.3 The View Menu

5.3.1 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.



5.3.2 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 the SHIFT key is pressed while activating this command, only the selected objects are zoomed to maximum.

5.3.3 The Selected Objects Command

If this command is activated only the **selected objects** from the **output** preview are displayed as large as possible.



5.3.4 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.

5.4 The Window Menu

5.4.1 The New Window Command

Activating this instruction opens a new CoCut window.

5.4.2 The Tile Horizontally Command

The activation of this instruction places all open windows diminished - one above the other - horizontally.

5.4.3 The Tile Vertically Command

The activation of this instruction positions all opened windows diminished - side by side - vertically.

5.4.4 The Cascade Command

The confirmation of this instruction displays all windows diminished and cascaded (diagonally displaced).

5.4.5 The Close Command

Clicking this instruction closes the momentarily active window after prior safety query.

5.4.6 The Close All Command

Clicking this instruction closes all open windows after prior safety guery.

5.4.7 The Common Tools Command

This instruction swithes the Common Tools toolbar on or off.

CTRL+4

5.4.8 The Object Parameters Command

This instruction switches the object parameters toolbar on the desktop or makes it disappear.

5.4.9 The Status Bar Object Info Command

This instruction switches the **status bar object info** toolbar on the desktop or makes it disappear.

5.4.10 The Status Bar Element Info Command

This instruction switches the status bar element-info on the desktop or makes it disappear.



5.5 The Help Menu

5.5.1 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 CoCut version you can fix them the fastest, if this list is made available to our support staff.

5.5.2 The Help... Command

This option starts the CoCut help.



5.5.3 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.

please refer to 2.5.1: Corun Installer

5.5.4 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. - www.eurosystems.lu.

5.5.5 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

5.5.5 The Remote Support... Command

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

5.5.6 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.

5.6 Context Menu of The Right Mouse Button

5.6.1 Context Menu Output Preview

Material Optimization Change axis Hor. Mirror Vert. Mirror Weed border Group

Fig. 5.6-1: 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 Toolbars

6.1 The Standard Toolbar

The **standard** toolbar is switched on or off via the *window* menu.





Fig. 6.1-1: Freely placeable toolbar - Collection of standard tools



Fig. 6.1-2: 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

6.2 The Setup Toolbar

The **Setup** toolbar is switched on or off via the **Window** menus.





Fig. 6.2-1: Free placeable Setup toolbar



Fig. 6.2-2: Fixed Tool Bar

BUTTONS FROM 1 TO 2

- 1. Contour mode on/off
- 2. Desktop Setup

Indication: Alternatively the work area can be defined by doubleclick on the shades beside the work surface.

6.3 The Object Tools Toolbar

The *Object Tools* toolbar is switched on or off via the *Window* menu.



Indication: Depending on the used EUROSYSTEMS software some of the listed tools can be missing (n. a.).



Fig. 6.3-1: Freely placeable toolbar - collection of object tools



Fig. 6.3-2: Anchored toolbar

BUTTONS FROM 1 TO 21

1. Delete Objects	<i>12.</i> n. a.
2. Do Axis Change with Objects	<i>13.</i> n. a.
3. Horizontal Mirror of Selected Objects	<i>14.</i> n. a.
4. Vertical Mirror of Selected Objects	<i>15.</i> n. a.
5. Group Objects	<i>16.</i> n. a.
6. Ungroup Objects	<i>17.</i> n. a.
7. Combine Objects	<i>18.</i> n. a.
8. Release Combination of Objects	<i>19.</i> n. a.
9. n. a.	20. n. a.
10. Align Objects	21. n. a.
11. n. a.	

6.4 The Object Parameter Toolbar



Fig. 6.4-1: Freely placeable toolbar - collection of object parameters

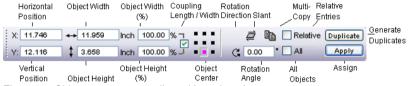


Fig. 6.4-2: Object parameters toolbar with explanations

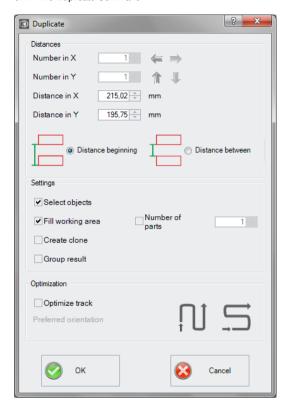
6.4.1 The Duplicate Command

Definition: Multi Copy = Multiple copies of selected objects (Duplicates)

6.4.1.1 The Multi Copy Button

Pressing the button opens the following dialog:

6.4.1 The Duplicate Command



6.4.1.2 The Arrows



Clicking on the desired arrow determines whether duplication is from **right to left**, **left to right**, **bottom to top**, or **top to bottom**.

6.4.1.3 Distance beginning



The *Distance beginning* option specifies that the object distance, starting from the bounding box, is to be calculated from the *bottom left* box node in each case.

6.4.1.4 Distance between



The *Distance Between* option specifies that the object distance, starting from the bounding box, should be calculated from the box node at the *top left* and *bottom left*.

6.4.1.5 Fill Working Area

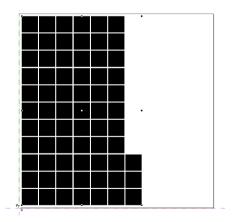
If this option is activated, then you can specify the *number of parts* with which the working area will be filled.

6.4.1.6 Number of parts

An additional function to the *Fill Working Area* option, a certain number of parts can be defined. If the *Fill Working Area* option is activated, then the maximum number of objects is calculated under **Number in X** and **Number in Y**. The total number of parts is then displayed in the *Number of parts* field. The number can be changed at any time.

Example:

For example, if 10 in X and 11 in Y = 110 are calculated - but only 69 parts are to be duplicated and placed - then the user can set the number to 69. The preferred direction should therefore be Y in columns. In this example, an incomplete column is created at the end.



Note: This option applies only to the Fill working area option.

6.4.1.7 Create clone option

If this option is activated, then no identical vector objects are duplicated, but so-called clones. These are objects that reference the original and carry its properties. The processing of a large number of objects on the desktop is significantly accelerated by using clones!

6.4.1.8 Group result option

If this option is enabled, then after duplicating the individual objects, a group object is created from all of them.

6.4.1.9 Optimization

Preferred optimization



The button sorts the benefits preferably in X-axis direction - "row by row".

6.5 The Status Line Object Info

This status line informs about the properties and attributes of objects on the CoCut desktop. This information comprises number, type of object, color model, color value and many other data important for the evaluation.

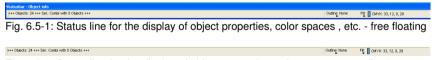


Fig. 6.5-2: Status line for the display of object properties, color spaces, etc. - fixed

6.6 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. 6.6-1: Status line element with subsidiary texts and element information, here coordinates

6.7 The Preview Tools Toolbar



The Magnifying Glass+

F2 or

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.



The Magnifying Glass-

F3 or

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



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

SHIFT +

The "dotted loupe" button displays all selected objects as big as possible.

The Output Command

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The activation of this button gives the data to the Plot-Manager for the output to the connected device.

6.8 The Preview Object Parameters Toolbar

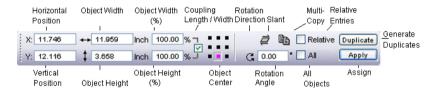
The *preview object parameters* toolbar is activated with the following shortcut.



Indication: It is identical with not variable part of the object parameters toolbar in previous CoCut versions.



Fig. 6.8-1: 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!

7 Tools

7.1 The Desktop

After starting CoCut the desktop with the working area appears as follows:

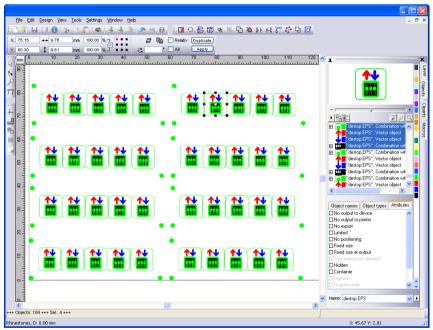


Fig. 7.1-1: CoCut Desktop with working area and shown tool-toolbar, rulers, Object Manager and status lines

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.

7.1.1 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)

7.2 Convert into Grid Lines (Example)

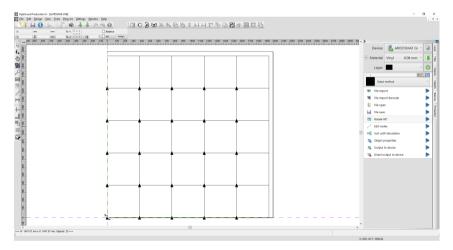
7.2.1 What does the Function do?

The *Convert into Grid Lines* function converts an array of adjacent rectangles in a sorted line grid without double lines.

7.2.2 Example

Initial situation:

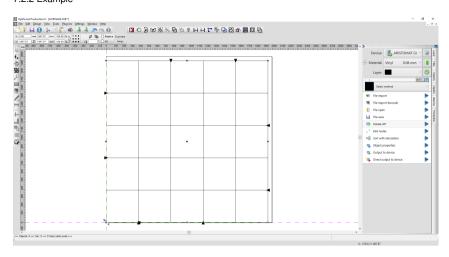
A grid of rectangles that are exactly on top of each other. This has the consequence that each two lines are superimposed. This results in the problem that every line would be processed twice. To fix this, the "Convert to gridlines" function has been implemented in CoCut Standard XT.



Applied to the example above, the result is the following:

- 1. All duplicate lines have been removed, and
- 2. are welded into a coherent line.
- 3. The routing paths are optimized.
- 4. The cutting direction is now alternating.

7.2.2 Example



This powerful feature creates an output-optimized line grid.

7.3 The Align Function



Fig. 7.3-1: The Align button

This function aligns two or more marked objects to each other or to the working area.

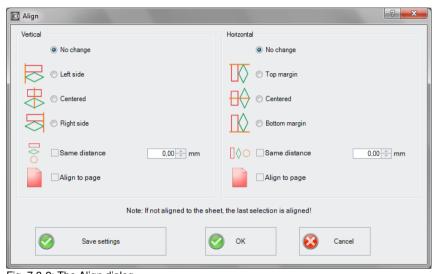


Fig. 7.3-2: The Align dialog

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.

7.4 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.

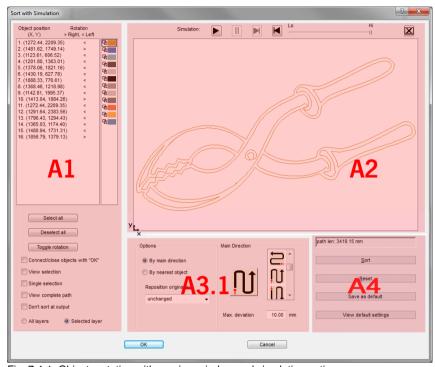


Fig. 7.4-1: Object sortation with preview window and simulation option

7.4.1 Zone A1 - Object Position, Color Bar, ...

Object Position and Rotation

The object position column indicates the object number and the coordinates of the objects on the work surface in the X / Y direction. The rotation column indicates whether the object contour is rotated clockwise ">" or counterclockwise "<".

Color Bar

A click on the wanted color bar selects the respective color layer.

The Select All Button

Clicking on this button selects all objects in the list.

The Deselect all Button

Clicking on this button deselects all objects of the list.

The Toggle rotation Button

This option modifies the orientation from clockwise (right) to counterclockwise (left) and vice versa.

Connect / close objects with "OK" Option

This option ensures that open objects are automatically closed when the dialog is closed with the "OK" button.

View selection Option

Shows the selected objects in the preview window

Single selection Option

In the list only one object can be selected; the multi-selection (standard) is deactivated.

View complete path Option

A blue dashed line shows the track that the tool head covers.

Don't sort at output Option

This option prevents object sorting at output.

7.4.1.1 Layer-dependent Sorting

All Layer Option

This option will include all layers in the sort if **layer-dependent sorting** is enabled.

Note: This option is disabled in the output preview, depending on the driver setting.

Selected Layer Option

This option only applies the selected layer to the sort, if **layer-dependent sorting** has been activated.

7.4.2 Zone A2 - The Simulator

The simulator is used to test and evaluate all settings before output. 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.

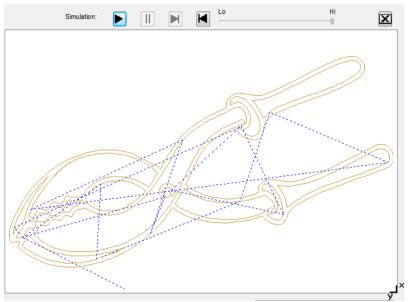


Fig. 7.4-2: Option View complete path activated (blue dashed lines)

7.4.3 Zone A3

7.4.3.1 Options

By Main Direction

If this option is activated, the main direction (area) is visible.

By Nearest Object

If this option is activated, the nearest object (area) becomes visible.

Reposition origins to

In this option the start point is set: Possible settings are: unchanged, lower left, upper left, lower right, upper right.

7.4.3.2 Zone A3.1 - Main Direction (Area)



Main Direction

16 methods can be activated as main direction for the sortation. The icon shows with a red arrow where sortation begins.

Max. deviation in ... mm

In the input field can be entered the value for the maximum deviation of the imaginary vertical respective horizontal line that an object may have in order to be sorted.

7.4.3.3 Zone A3.2 - Nearest Object (Area)

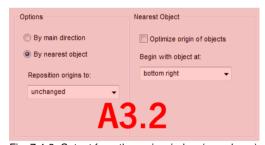


Fig. 7.4-3: Cutout from the main window (see above)

Optimize origin of objects Option

The aim of this option is to minimize empty runs. Enabling this option checks, which node of the following object is closest to the first start point. The first is established; Then it is examined which node of the following object is closest to the start point.

The simulator can be used to check whether the desired optimization is achieved. Usually the variant, which has the shortest travel distance, is to be regarded as optimal. In

7.4.4 Zone A4 - Sorting, Settings, ...

individual cases, however, other criteria can also be decisive.

Note: If this option is active, the "Reposition origins to" option in the Options (area) is disabled.

Begin with object at Option

This option determines which **start object** is taken into account during sorting. Possible choices: **lower left, upper left, upper right, lower right**.

Focus: Simulation with start point optimization

In addition to the other traverse path optimizations, the starting point of the objects can be moved automatically so that the tool head shifts as little as possible. The figure on the right shows the starting points of the contour objects, represented by an arrow, before and after the optimization. The direction of the arrow shows the orientation - clockwise or counterclockwise.

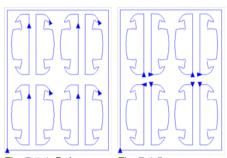


Fig. 7.4-4: Before origin optimization

Fig. 7.4-5: After origin optimization

7.4.4 Zone A4 - Sorting, Settings, ...

Path length Field

This field displays the realistic **traverse path length** of the tool measured during the simulation.

The Sort Button

Only the *Sort* button activates the object sorting. You can then check in the simulation whether the sorting meets your requirements.

The Reset Button

Resets the objects in the sort-list to the initial values

The Apply settings for output Button

This option saves the changes made in the **Sorting with simulation dialog**.

The Settings for output Button

Clicking on the **Settings for output button** opens the following dialog:

Note: The settings made here are job-spanning and are the default settings for output.

▶ please refer to 3.4.3: Start Output from the CoCut Working Surface

7.4.4.1 The Sort Settings Tab

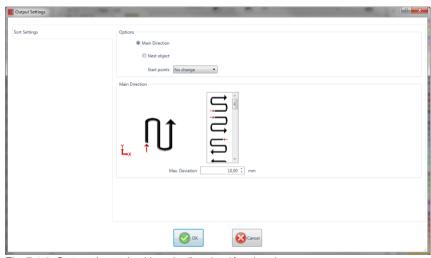


Fig. 7.4-6: Sort settings tab with main direction (Area) active

7.4.4.2 Options (Area)

Main direction Option

If this option is activated, the **main direction (area)** is visible. The desired main direction is selected via mouse click. (See figure above)

Next object Option

If this option is activated, the nearest object (area) becomes visible.

7.4.4 Zone A4 - Sorting, Settings, ...

Nearest object (Area)

Start point optimization Option

See above: Focus: Simulation with start point optimization

Start object Option

In this option the start point is defined: Possible settings are: unchanged, lower left, upper left, upper right, lower right.

Note: The selection of the starting point has an effect on the traverse path length. In the simulator, the shortest path can be evaluated.

7.4.4.3 Main direction (Area)

In this area, all possible preferential directions are displayed graphically. The desired preferential direction is selected by mouse click. The icon shows a red arrow where the sorting is started.

Max. deviation in ... mm

In the input field can be entered the value for the maximum deviation of the imaginary vertical respective horizontal line that an object may have in order to be sorted.



When outputting to a connected device, the safety instructions of the machine manufacturer must always be observed strictly. No liability is assumed for infringement.



7.5 The Plot Manager

The Plot Manager has the following tasks:

7.5.1 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 CoCut, these devices then can be used for the output of the graphics. It is possible, to output simultaneously at several devices.

7.5.2 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.

7.5.3 Output of Data to Local Ports

The serial and parallel ports of the computer are identified and can be used for the file output.

7.5.4 Administration of Hotfolders

A function independent of CoCut 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.

7.5.5 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.

7.5.5 Plot Server Function

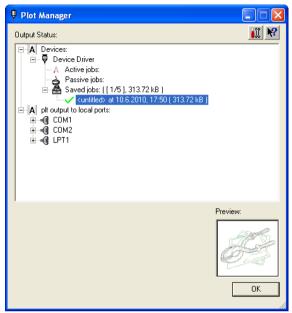


Fig. 7.5-1: Plot Manager main window with job preview down left

7.5.6 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

→ 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

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.

7.5.6.1 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 Johs

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.

7.5.6 Devices Folder

Save as

Save job data into file before cut data processing.

7.5.6.2 Jobs at Plot Servers

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 iob

The job is deleted.

Save as

Save job data into file before cut data processing.

7.5.6.3 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.

7.5.6.4 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.

7.5.7 Settings of the Plot Manager

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.

7.5.7 Settings of the Plot Manager

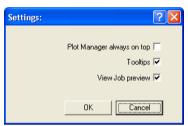


Fig. 7.5-2: Optional parameters for the Plot-Manager

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:

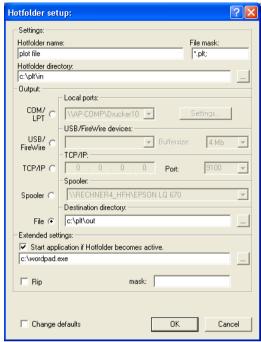


Fig. 7.5-3: Example for setup devices of a Hotfolder

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.

7.5.7 Settings of the Plot Manager

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-%m-%d_%H-%M-%S year/month/day: hour/minute/second

Change defaults: prevents that the user modifies the output parameters accidentally.

7.5.7.1 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. 7.5-4: 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.

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

Movement.

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 button.

The Movement... Button

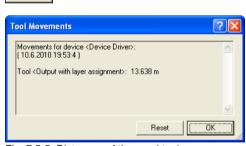


Fig. 7.5-5: Distances of the used tools

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.

7.5.7.2 Context-sensitive Buttons

Context-sensitive buttons are displayed for functions that would otherwise only be accessible via the right mouse button or a context menu.

7.5.7 Settings of the Plot Manager

Options Button

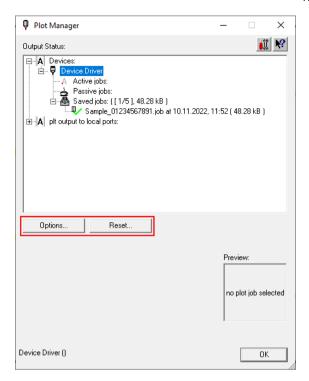
A click on the **Options** button opens the following dialog:



Reset Button

Prerequisite: The driver is selected - here: Device Driver. Clicking the **Reset button** ensures that all temporary files of this driver are deleted from the queue of the machine.

Note: The cutters have buffer memories that must be emptied on the machine itself if it is to be ensured that all data has been deleted.



Activate / Delete Buttons

These buttons become visible when a job is selected. This can be an **active**, a **passive** or a **saved** job.

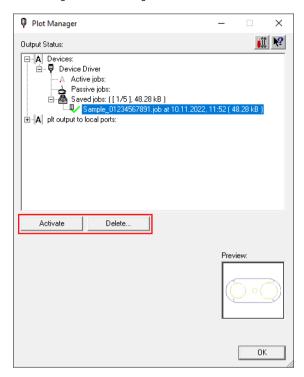
Activate Button

Clicking the *Activate* button activates a passive job or a job that has already been given out. Jobs that have already been given out can be repeated identically as often as desired.

Delete Button

The **Delete** button deletes the selected job from the list.

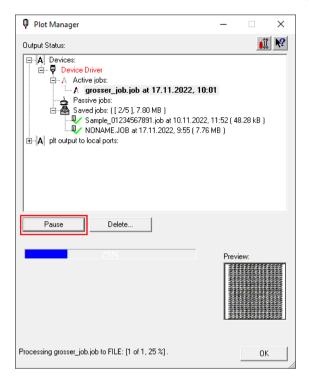
7.5.7 Settings of the Plot Manager



Pause Button

A click on the **Pause** button interrupts the data flow of the selected job to the device.

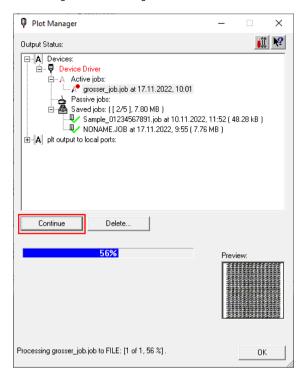
Note: The output devices have buffer memories that ensure that data transfer can take place without interruption. Only when the buffer memory has been manually emptied at the machine output is actually stopped.



Continue Button

Clicking the Continue button continues the data transfer.

7.5.7 Settings of the Plot Manager



Summary: Depending on what was **selected** in the *Output Status* area, additional appropriate buttons appear.

8 The Sidebar

The **Sidebar** is switched on or off via the **Window** menu.



8.1 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**.

8.2 The Anchorage Control



Fig. 8.2-1: 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.

8.2 The Anchorage Control

The Tab Bar



Fig. 8.2-2: 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.

8.3 The Objects Tab

8.3.1 The Object Manager

Basically, the *Object Manager* is used to list and display the elements in the job layout. This means, for example, that objects listed at the top are also superordinate to the elements below them in the layout. The listing in the docking window thus also reflects the arrangement of the layers in the layout.

The *Object Manager* gives you access to and an overview of all the elements present in the job. The *Object Manager* helps you to keep everything at hand and well sorted. From here, all elements can be selected, *object types* assigned or *object names* assigned. Groups and combinations of objects are broken down.

The *Sidebar* is switched on or off via the *Window* menu. Selection is done using the *Objects* Tab.





8.3.1.1 Components Of The Object Manager

8.3.1.1.1 The Navigator

Tasks

- Object preview
- Navigation on the desktop and on the working sheet
- Zoom in and zoom out of the desktop and the working sheet

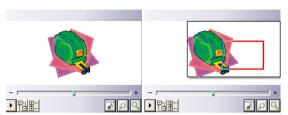


Fig. 8.3-1: Navigator with zoom slider, controls, vavigation area and to move rectangle (red)

The Zoom Slider



The *Zoom Slider* serves to diminish or enlarge the desktop's view. Every click to the left or right of the slider button enlarges or shrinks the view. The button can also be slided using the mouse cursor. When the 100% view is exceeded a **red rectangle** appears additionally in the preview window. This rectangle can be moved using the mouse cursor.

The Drop-Out Menu



Invert Selection

Reverts the selection in the objects list, i. e. what was previously selected is deselected.

Show Attributes

Displays all of the selected options of the *Options* tab in the status bar.

Options...



Fig. 8.3-2: Restriktions for the object list in the Objekt Manager

The Tree Buttons



- 1. Unfold branches
- 2. Collapse branches

The Zoom Buttons



- 1. Show whole sheet Hotkey B
- 2. Show all objects Hotkey F4
- 3. Show selected objects Hotkey SHIFT+F4

8.3.1.1.2 The Color Bar



Fig. 8.3-3: Section of the color bar of the object manager

Tasks of the color bar

- color variation and assignment (Layer)

8.3.1.1.3 The Area Object List - Object Tree

Selection with mouse click

- 1. One click selects
- 2. SHIFT+Click selects several in sequence
- 3. CTRL+Click selects several not immediately contiguous objects

A click on plus / minus opens or closes the tree (cf. Windows Explorer)

8.3.1.1.4 Object Type And Object List's Attributes Selection

Task: Definition of the objects which should be displayed in the object list.

8.3.1.1.5 The Name Field

Task: Define alias or field name

Purpose: Apply macros or scripts on field value e. g. substitute objects, properties, ...

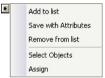


Fig. 8.3-4: Context menu name field

Add To List Menu Item

Adds the entry from the *Name* field to the name suggestion list.

Save With Attributs Menu Item

Saves additionally to the names the selected attributes (object properties).

Delete From List Menu Item

Deletes the selected entry from the name suggestion list.

Select Objekts Menu Item

Selects all objects with this name that are located on the working sheet.

Assign Menu Item

Assigns name from the name field to all selected objects.

8.3.2 The Object Types Tab



Note: Any selection or multiple selection of the restricting attributes is possible at any time.

ΑII

Shows all object types in the object list.

Vector objects

Shows all resp. only vector objects in the object list.

Text objects

Shows all resp. only text objects in the object list.

Bitmaps

Shows all resp. only bitmaps in the object list.

Combinations

Shows all resp. only combinations in the object list.

Groups

Shows all resp. only groups in the object list.

Container

Shows all resp. only containers in the object list.

Register marks

Shows all resp. only jog marks in the object list.

8.3.3 The Object Names Tab

Drill holes

Shows all resp. only drill holes in the object list.

Video marks

Shows all resp. only video marks in the object list.

Print marks

Shows all resp. only print marks in the object list.

Jog marks

Shows all resp. only Jog marks in the object list.

Die Forward / Backward button

The button appears automatically if the column width gets to narrow to display all tabs at once. By means of the buttons can be scrolled back and forth between the tabs.

8.3.3 The Object Names Tab

The *Object Names* Tab list all defined names which were assigned to particular objects using the *Name* field. Names can be used in order to individualize objects and to apply macros.

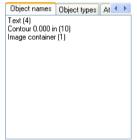


Fig. 8.3-5: List of all object names

The Forward / Backward Button

The button appears automatically if the column width gets to narrow to display all tabs at once. By means of the buttons can be scrolled back and forth between the tabs.

8.3.4 The Attributes Tab

The *Attributes* tab lists all restrictions, limitations that can be assigned to an arbitrary object.



Fig. 8.3-6: List of all possible object restrictions

Note: Any selection or multiple selection of the restricting attributes is possible at any time.

No output on device

The *No output on device* option prohibits that the selected object is given out on a connected device (cutter, milling machine).

Note: Device means in that coherence devices that can be controlled from the Plot Manager.

No output on printer

The **No output on printer** option prohibits that the selected object is given out on a connected printer.

No Export

The **No Export** option prevents that the selected object is exported.

Limited

The *Limited* option marks the object with red handles. The number of object manipulations is restricted.

The following object properties are not accessible after setting the attribute:

- Change layer
- Change rotation direction
- Delete object
- Round object
- Edit nodes
- Insert bridges

8.3.4 The Attributes Tab

- Any bitmap manipulations
- Cut out a region
- Convert text to curves / into lines
- Set start tool paths
- Outline
- Welding
- Perform object manipulations from "Object" menu that change the object
- Replace marks

Important note: The object can only be selected individually, not as a group or combination; neither via CTRL-A nor via layer selection or similar.

Do not move

The **Do not move** option prevents that the selected object can be moved. The position is locked.

Fixed size

The *Fixed size* option prevents that the selected object can be scaled (enlarged or decreased). The size is locked.

Fixed size during output

The *Fixed size during output* option prevents that the selected object was unintentional scaled (enlarged or decreased) before output.

Text not editable

The *Text not editable* option prevents that the selected object is unintentional edited. The Text is not changeable.

Invisible

The *Invisible* option makes that the selected object is not visible on the working sheet. This option is useful every time when there is a lack of clarity.

Container

The *Container* option transfers an object into a container or back into the generic object. Container:

Video mark

Special attribute resp. object which is used when camera based recognition is used. The camera module drives the tool head with camera to the so marked objects.

Register mark

Register mark is a special object that is always cut at the same position when output on a cutting plotter, regardless of the layer color. The purpose is the subsequent, precision-fit assembly of the

different colored materials.

Drill hole

Drill hole is a special attribute for milling applications. The object has no expansion and can not be scaled.

Note: Drill holes can be drawn using the drawing tool

Print mark

Print or cut marks are printed additionally to the print data while printing.

Jog mark

Special objects which are required while the output on cutters with optical sensors for a precise contour cutting. Each producer uses specific jog marks. The selection can be done using the *properties* menu.

The forward / backward button

The button appears automatically if the column width gets to narrow to display all tabs at once. By means of the buttons can be scrolled back and forth between the tabs.

8.3.4 The Attributes Tab

9 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.

9.1 Code is not accepted with Windows 7, 8, 10 or 11 (No Dongle)

Error message: Invalid code or after each program start the code must be entered again

Tip 1

The program must be executed once with **aministrator** rights. Click with the right mouse button in the program menu on CoCut Standard XT and select "Execute as administrator".

Note: Don't change anything on the given activation data resp. license data.

9.2 Buffer Overflow Serial Port

The cutter cuts the first characters neatly and then starts to draw indefinable curves.

Tip 2

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

9.3 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 3

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 CoCut 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.

9.4 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 4

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".

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 undo your selection.

Step 4: Press (PAUSE) key in order to cancel the PAUSE mode.

In the case of controlling the plotter from CoCut, the value of the step size must be set to 0.025. This is the resolution which is preconfigured in the drivers.

9.5 Calibration of the Output Size

Problem: The size entered in the software and the output size of the objects do not match.

Tip 5

Solution: Calibration must be performed on the connected cutter. Calibration means: checking and, if necessary, changing the values stored in the driver to the values you have measured.

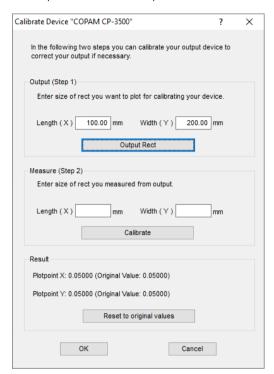
Method:

Activate the following dialog in the Settings / Standard Settings / Output Devices... menu.



Clicking the Calibrate button opens the Calibrate Device dialog.

9.6 Computer without serial COM port



Now carry out the calibration step by step.

Step 1: Specify the size of the rectangle to be output. Get the cutter ready for output. Start the output by clicking on the *Rectangle* button.

Step 2: Weed the rectangle and measure it with a ruler. Enter the measured values in the *Length* (X) and *Width* (Y) fields under *Measure* (*Step 2*). Then click on the *Calibrate* button. The new values are now entered into the driver.

Note: You can repeat this process. The maximum accuracy to be achieved depends only on the connected device. Low-cost devices often only achieve an accuracy of \pm /- 0.5 mm. Professional vinyl cutters achieve an accuracy of $\ge \pm$ /- 0.1 mm.

9.6 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 6

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.

9.7 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 CoCut cutting dialog

Tip 7

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. CoCut "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.

9.8 Buffer Overflow

The cutter reports "buffer overflow" or does not cut the whole job

Tip 8

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*.

9.9 Data Import From Apple Computers

Data import from Apple computers in CoCut

Tip 9

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, ...)

9.9 Data Import From Apple Computers

- 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)
- As file name extension *.EPS should be used and you should not use umlauts as ä, ö, ü.

9.10 Typical Sources of Errors When Cutting

a) The foil is clamped too loose

Tip 10

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.

9.11 Plotter Via USB Is Not Working!

Error message: Cannot open interface!

Tip 11

Check first, if your cutter is listed in the **Device Manager** (Control Panel / System / Device Manager). If not, reinstall the device driver as described in the plotter manual.

Check then, if the USB port for your cutter is selected in the CoCut *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.

9.12 Summa Plotter Does Not Read Out!

Error message: Waiting for response... Cannot open interface...

Tip 12

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.

9.13 The Values for Cutting Pressure And Speed Are Not Saved

After changing the values it is often forgottten to confirm the values. Please Tip 13 press the ___ button beside the *Enter Material* field and enable the *Save Material Data* option.

9.14 Error Message While Output into File

Error message: "Error for CreateFile"

Tip 14

This error message is given out, if the access right *Write* for the *program folder* of CoCut is not set.

Relief: Enable write rights for the program folder.

Annex

A 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 50 Signline AG 600 AG 75 Signline AG 75 Signline ABS

GL_TL

Artsign

Artsign

ASC365

ASC365

Automated Cutting Systems

ACS Design Studio Eagle

Calcomp

Classic

Coai

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

A Driver List

PCUT CT1200 PCUT CT1300 PCUT CT1600 PCUT CT630 PCUT CT635 PCUT CT900 PCUT CTN1080E PCUT CTN1200E PCUT CTN1500 PCUT CTN630 PCUT CTN630E PCUT CTN900 PCUT CTN900F

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 CT760 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-150 Omega OM-130 Omega OM-40 Omega OM-60 Omega OM-70 Omega OM-80

Emblem

FC 120 FC 60

Encad

NovaCut Series

Foison

C24 C48 C12 CT-1200 CT-630 FS-24 FS-48 S24

GCC

AR 24 Bengal BN-60 Bobcat BI-60 Expert 24 LX Expert 24 Expert 52 Expert 52 LX Expert II 24 Expert II 24 LX Expert II 52 LX Expert Pro-132S Expert II 52 Expert Pro-60 i-Craft 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 76S Jaguar V 101 Jaguar JG 61 Jaguar V 101 LX Jaguar V 132 Jaguar V 132 LX

Jaguar V 160 Jaguar V 183 LX Puma II 132 Puma III 60 Puma IV 60 Puma SP 30 RX II-132S RX II-61-CR RX-183S SignPal GRC Series SignPal LYNX S-60 Ultra GRC-50	Jaguar V 160 LX Jaguar V 61 Puma II 60 Puma IV 132 Puma IV 60 LX Puma SP 60 RX II-183S RX-101S RX-61 SignPal LYNX S-132S Ultra GRC-101S Ultra GRC-61	Jaguar V 183 Jaguar V 61 LX Puma III 132 Puma IV 132 LX Puma SP 132S RX II-101S RX II-61 RX-132S Sable SB-60 SignPal LYNX S-30 Ultra GRC-132S Ultra GRC-76S
Gerber EmbossTrack FasTrack FasTrack 650 Odyssey P2C 1400 Tangential P2C 600 Sprint/4B new	Envision 375 FasTrack 1300 GS15 P2C 1200 P2C 1600 Sprint/4B old	Envision 750 FasTrack 550 HS 15 /750 P2C 1400 P2C 1600 Tangential Sprint/4B Fastboard
Grafityp CSR	CSR Ecom 92	CSRTurboDMPL
Graphtec (HPGL) old CE 3000-40 (+USB) CE 5000-120 CE 6000-120 CE 7000-130 CE 7000-60 FC Series (GPGL) FC4100-75 (HPGL) FC5100-75 (HPGL) FC7000-160 FC8000-100 FC8000-130 FC8600-75 FC9000-160 JX 1130 (HPGL)	CE 1000-60 (HPGL) CE 3000-60 (+USB) CE 5000-40 CE 6000-40 CE 7000-160 Craft ROBO FC4100-100 (HPGL) FC5100-100 (HPGL) FC7000-100 FC7000-60 FC8000-130 FC8000-75 FC8600-160 FC9000-100 FC9000-75 w/o perforation old	CE 3000-120 (+USB) CE 3000Mk2 CE 5000-60 CE 6000-60 CE 7000-40 Craft ROBO PRO II FC4100-130 (HPGL) FC5100-130 (HPGL) FC7000-75 FC8000-160 FC8600-100 FC8600-60 FC9000-140 JX 1060 (HPGL) Sign Jet Series
Helo HSP 1360	HSP 360	HSP 720
Hengxing Rabbit HX-1000 Rabbit HX-630 Rabbit HX-960	Rabbit HX-1120 Rabbit HX-720	Rabbit HX-1360 Rabbit HX-800

A Driver List

HobbyCut

ABH-1351 ABH-361 ABH-721

Houston

100C DMPL 69C DMPL

HP

Latex 54 Latex 54B Latex 64

loline

Ioline Artpro 3500 Artpro 3700 Artpro 4000 Classic Signmaker 5000 SmarTrac I/S 110 SmarTrac I/S 130 SmarTrac I/S 60 Studio 8

SmarTrac I/S 85 Studio 7 Super 88

Jiachen

JC-1100E JC-1100DS JC-1100H JC-1350DS JC-1350E JC-1350H JC-720DS JC-720E JC-850DS

JC-850E JC-850H

Kimoto

Freecut 130 Freecut 150 Freecut 60

Freecut 75

LG Palopoli

MLP-24

Liyu

HC 1201 HC 751 HC 901 MC 631 MC 801 SC 1261 SC 801

SC 631

Master

XP-300P XP-380P XP-450P

XP-540P XP-660P

Masterplot Masterplot

MAX

CM-200

Mimaki

CG-100AR CG-100EX CG-100 CG-100Lx CG-100SR II CG-100SR III CG-101 CG-12 CG-121 CG-130 FX II CG-130AR CG-130EX CG-130FX CG-130Lx CG-130SR II

CG-130SR III	CG-160 FX	CG-160 FX II
CG-45	CG-5	CG-50
CG-51	CG-6	CG-60AR
CG-60EX	CG-60i	CG-60SR
CG-60SR II	CG-60SR III	CG-60st
CG-61	CG-75 FX	CG-75 FX II
CG-9	CG-90i	CG-90SD
CJV-30-100	CJV-30-130	CJV-30-160
CJV-30-60	ME 500	ME 650
MY CLIT		

MY CUT

Mutoh

Junior 24 Kona 1400 Kona 1650 Kona 760 MC-1000 MC-1000S MC-1300 MC-1300S MC-1650 MC-650S MC-750S SC Series SC-1000E SC-1300E SC-550 SC-750E TC-1000 SC-650E TC-1300 TC-650 TC-750

Ultima SC 1400D ValueCut VC-1300 ValueCut VC-1800

ValueCut VC-600 XP-1251C XP-521C XP-941C

XP-621C

New Star

Omega OM-100 Omega OM-130 Omega OM-150 Omega OM-40 Omega OM-60 Omega OM-70 Omega OM-80

ORXYZ

HX-Series Flite JML-Series

I X-Series **OR-Series**

Pericut

1000 1000/1300 IT (Transfer) 1300

901 901/1000/1300

PERITEC

1000/1200

Redsail

RS1120C RS1360C RS720C

RS800C

Refine

PixMax PME 720 EH-1101 EH-1351 EH-721 EH-871 MH-1101 MH-1351 MH-721 MH-871

A Driver List

Rol	land

CJ-500	CM 12	CM 24
CM 300	CM 400	CM 500
CX 12	CX 24	CX-300
CX-400	CX-500	EGX-350
GR-420	GR-540	GR-640
GR2-540	GR2-640	GS-24
GX-24	GX-300	GX-400
GX-500	GX-640	PC 50
PC 60	PNC 1000	PNC 1100
PNC 1200	PNC 1210	PNC 1410
PNC 1800	PNC 1850	PNC 1860
PNC 2100	PNC 2300	PNC 2700
PNC 5000	PNC 900	PNC 910
PNC 950	PNC 960	SP-300 (USB)
SP-300 (USB) Print & Cut	SP-540	SP-540 Print & Cut

Secabo

C120	C40	C60
C60 II	S120	S160
S60		

Seiki Tech

SK-1100H	SK-1100T	SK-1350H
SK-1350T	SK-720H	SK-720T
SK-850H	SK-850T	SK-870T

Silhouette

Cameo

Summa

S One D120	S One D140	S One D140 FX
S One D160	S One D60	S One D75
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 3 S120 D	S-Class 3 S120 T	S-Class 3 S140 D
S-Class 3 S140 T	S-Class 3 S160 D	S-Class 3 S160 T
S-Class 3 S160 TC	S-Class 3 S75 D	S-Class 3 S75 T
S-Class 3 S75 TC	S-Class S120 D	S-Class S120 T
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 D75R	SummaCut D760	SummaSign Pro D-Series

SummaSign Pro D1010 SummaSign Pro D1600 SL SummaSign Pro T 750 SummaSign Pro T1300 SummaSign T 1600 Pro SL

SummaSign Pro D1300 SummaSign Pro D610 SummaSign Pro T-Series SummaSign Pro T610 SummaSign T1010A SummaSign Pro D1400 SummaSign Pro D750 SummaSign Pro T1010 SummaSign T 1400 Pro SummaSign T600

HPGL 0.025

Summagraphics

D1000 T1000

Technoplot

Millennium T 610 Pro Millennium T 750 Pro

Universal Drivers

DMPL 0.025 HPGL 0.01 HPGL 0.05 HPGL/2

USCutter

MH-1101 MH-1351 MH-721

Vinyl Express

Bobcat Panther I 24 Lvnx Panther I 30 Panther I 40 Panther I 50 Panther II 40 Panther II 24 Panther II 30 Panther II 50 Panther III 24 Panther III 30 Panther III 40 Panther III 50 Puma I Q Series 100 Puma II 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 R Series 53 ULTRA 24 ULTRA 30 ULTRA 40 ULTRA 50

VULCAN

FC-500VC

VyTek

GEM40 GEM54

B 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.

Bypass Cutting Direct cutting - without window - before output on the

cutter

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.

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

Multiple Cutting Option to cut easier thick and resistant materials

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

B Dictionary of Technical Terms

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 FileThe 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 CutterRoll 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

B Dictionary of Technical Terms

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 ParametrizationMeans 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, OpenType, Type

1, BE Fonts

These 4 font formats can be managed with the

Fontmanager 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.

Weed-Ex Driver Option It is a specially laminated flex or flock material of Witpac

GmbH. First, the actual vector lines are cut. In the second step, the components that need to be weeded, are cut out in a way, that they 'fall out' automatically at the end. So you have already reached the entire plot result after peeling off the medium and you don't have

to weed manually.

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.

 $\textbf{Additive color system} \qquad \text{The \sim is based on mixing the additive, luminous spectral colors}$

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 = 21 = 2 possible colors (black/white) 8 bit color depth = 28 = 256 possible colors/shades of gray 24 bit color depth = 224 = 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\CoCut Standard XT\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

Means the copyright that is part of the scope of delivery of CoCut. 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 **D**ots **P**er **I**nch; 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.

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 CoCut 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 CoCut; name for CoCut file

Justification Alignment of a text block on the working area. CoCut 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

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.

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