



CAD/CAM software for creative packaging

User guide

PicCutting®



treeDiM

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WARNING

Read before using

- 1- THE INFORMATION CONTAINED IN THIS DOCUMENT CAN BE THE SUBJECT OF MODIFICATIONS WITHOUT NOTICE.
- 2- THIS DOCUMENT IS GIVEN TO THE READER WITH AN ONLY AIM OF FACILITATING THE KNOWLEDGE OF THE SYSTEM **PICADOR®**, OF WHICH IT ACQUIRED THE RIGHT OF USE.
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Welcome

Technical support

Getting ready for calling technical support

If you need assistance, contact Technical Support PICADOR. Before calling, you put in front of your computer with your drawing to the screen and the user guide of PICADOR at hand. Be ready to provide the following information:

:

- The exact wording of the messages that appeared on your screen when the problem occurred.
- A description of what happened and what you did at that time.
- What was attempted to troubleshoot the problem.

How to obtain technical support

For technical support, please contact the following numbers:

Phone : +33 1 41 42 19 36

Mail: support@picador.fr

Time of Monday at Friday:

Of 9H00 with 12H00 and 14H00 with 18H00
(France)

Remote-Maintenance

If the computer can access the internet, browse the following web site <http://www.treedim.com> and launch the remote assistance application using the link provided in the homepage.

Installation

Prerequisites

OS :

Microsoft Windows XP
Microsoft Windows Vista
Microsoft Windows Seven
Microsoft Windows 8

Hardware minimal configuration:

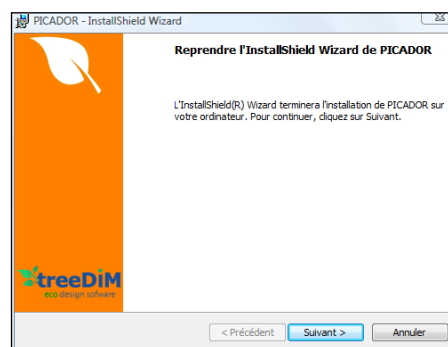
Pentium
512 MB RAM
SVGA 1024x768 monitor
if the cutting table is connected to the computer :
Serial Card : RS232 / COM Port

Install Picador

Installation

Insert the Picador ® CD-ROM.

The install program should launch automatically:

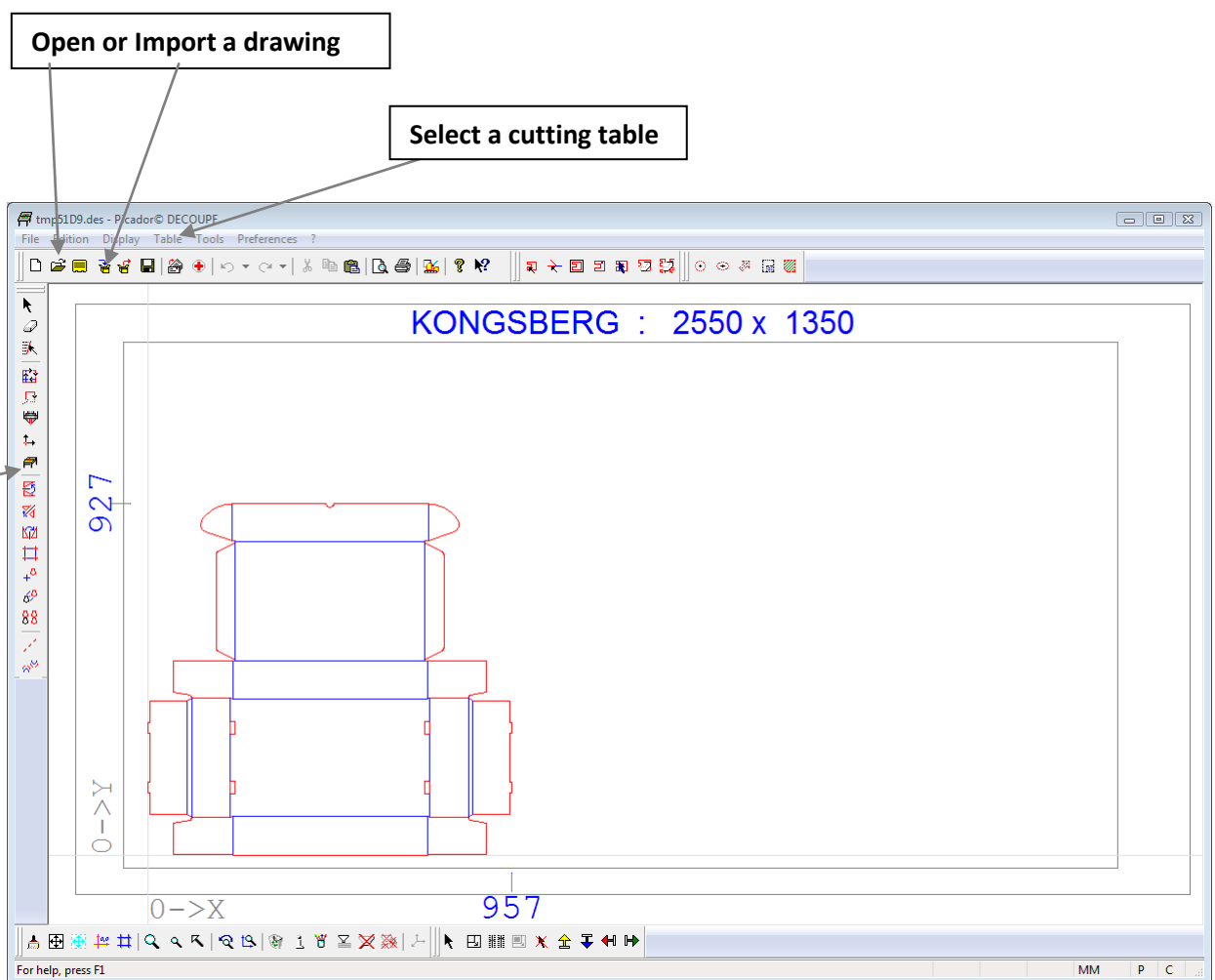


Uninstall

To uninstall PICADOR®, you must use the uninstall Picador entry in the "Program and features" panel.

PREPARE A DRAWING FOR CUTTING

First steps

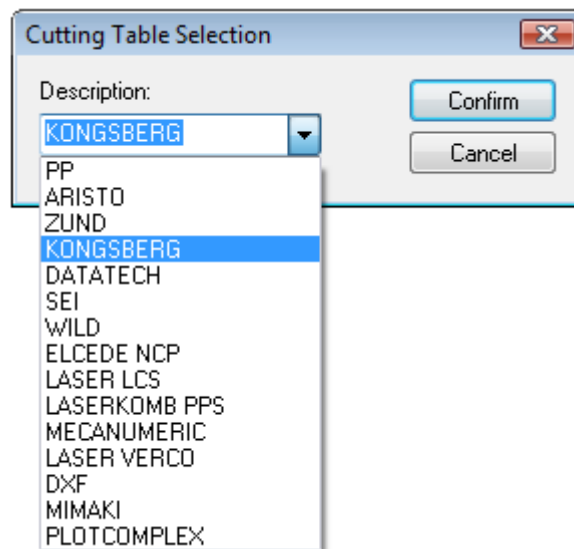
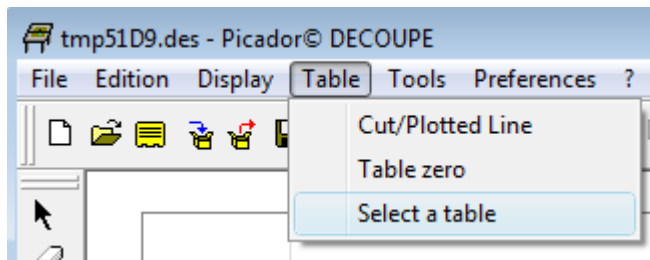


To configure the PicCutting module, you need first :

- Select a cutting table (Menu Table→Select a table)
- Open  (.des) or Import  (.dxf,.ai,.eps,.pdf, .cf2,.plt) drawing file
- Send data to the plotter 

Select a Cutting table

Menu Table → Select a table



Default settings are imported.

All the settings of the post-processor are saved in the following file:

Folder : **C:\WPicador**

Aristo : pparisto.ini

Zund : ppzund.ini

Kongsberg : ppkong.ini

Remark:

After the complete configuration save this file for a reinstallation.

Open or Import a drawing file

Open



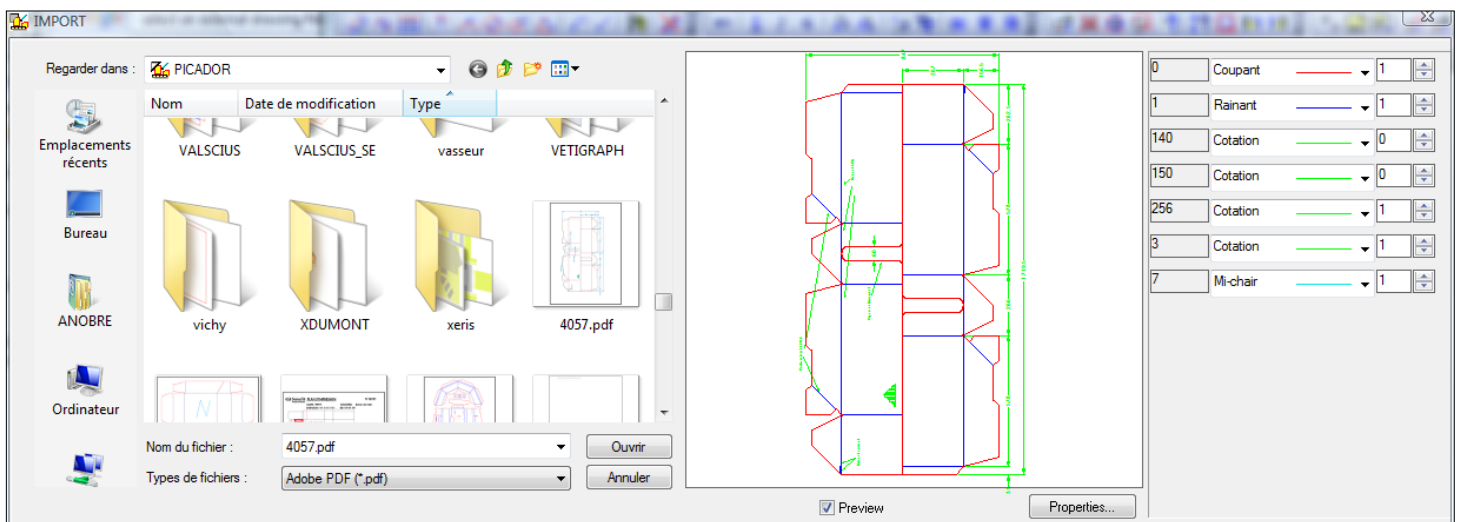
Ctrl+O

This command opens the dialog box *OPEN* to browse and select a drawing file (*.des) from the disks. The chosen design is then displayed on the screen.

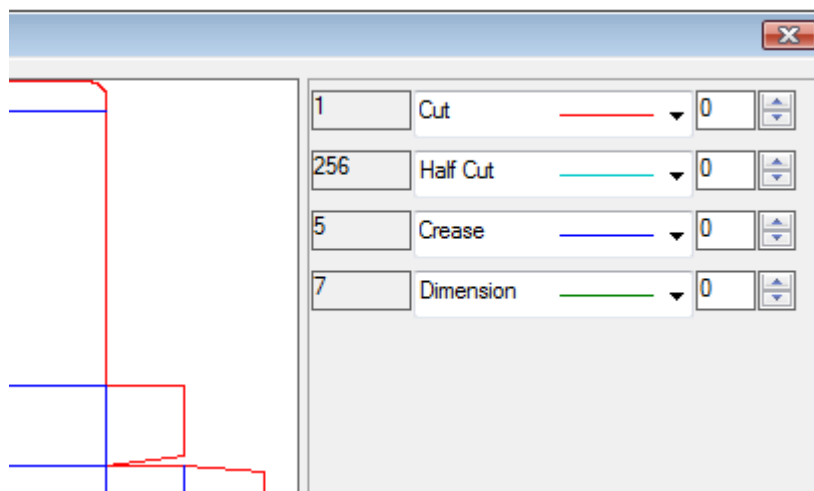
Import



This command displays the *IMPORT* dialog box that allows you to select an external drawing file from several types of formats (**PDF, EPS, AI, CFF2, DDES, DXF** (AutoCAD), **HPGL, IGES, N** (Diecad))



Important :



When you import a file you need to make the correspondance table between colors or layers of the imported file with the process associated (cut, crease, half-cut, pen, ...).

Send data to the cutting table

Use the icon



Table

Table: KONGSBERG Properties

Postprocessor: ppKONG

Sending

Type of sending: Cut Tools...

Send to:

☐ Table

☒ File

T:\CUTFILES\%AUTO%.acm ...

Cancel < Previous Next > SEND ----> TABLE

Post-Processor configuration :

Limits, data com (Com port)
Tools parameters (tool number, speed, ...), various parameters.

Select a process :

Cut, Draw, Counter-part, Dieboard

Select the tools for this process

Select how the data are transmitted:

- directly to the cutting table (COM port)
- in a file into a specified directory

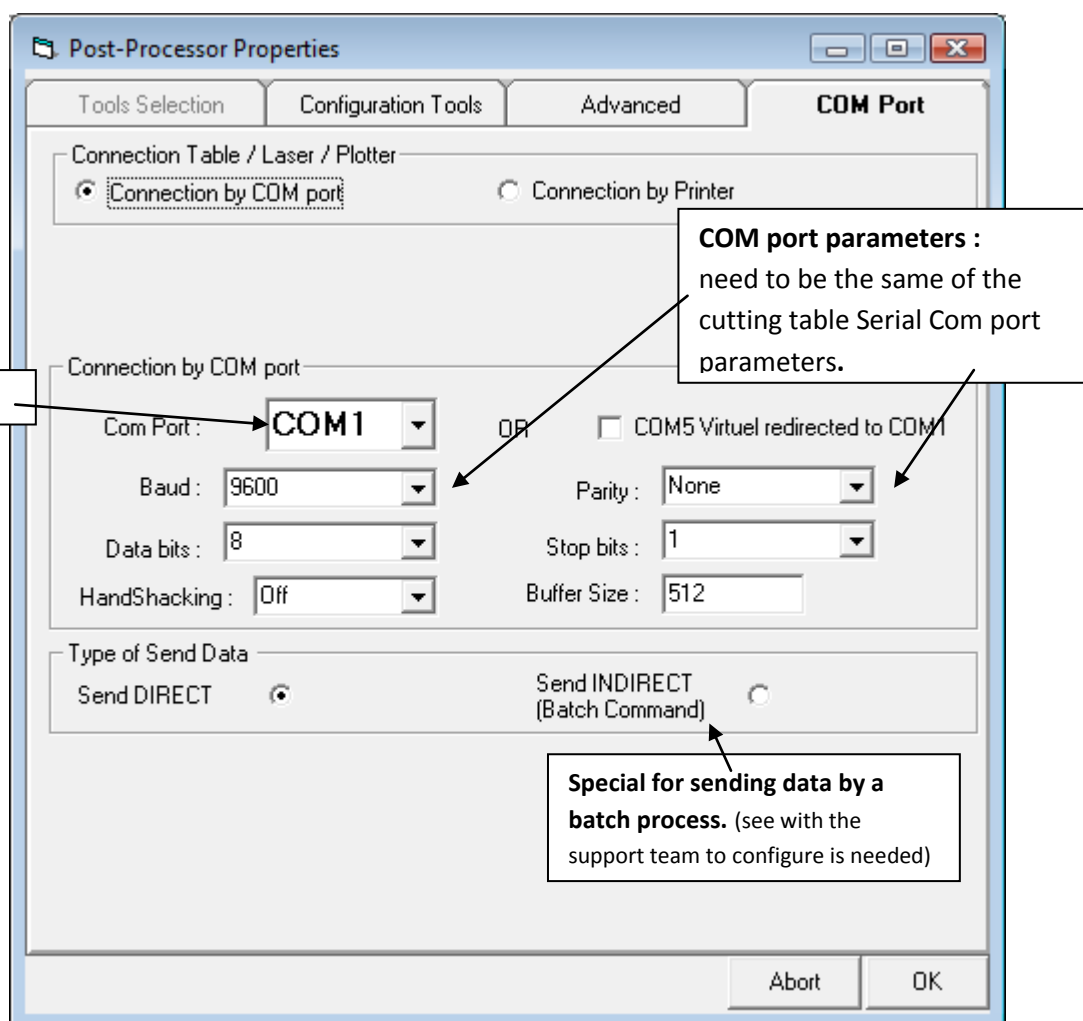
Remark :

When the configuration of the table is terminated, you only need to use the SEND→TABLE button to send the data to the plotter.

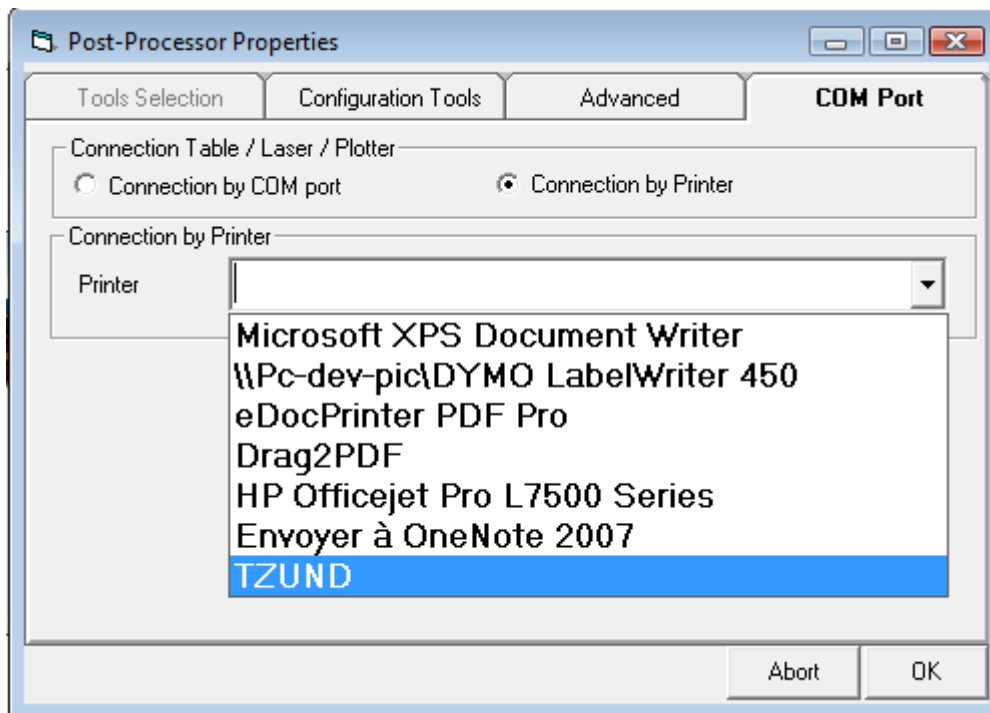
POST-PROCESSOR PROPERTIES

Data Communication with the cutting table

By a COM port



By a Printer



If the cutting table is connected via a printer to the computer or to the network (shared printer) you need to select the printer to send the data.

To configure a printer :

- Create a generic/text printer on the computer connected to the cutting table
- Define the COM Port setting corresponding to the cutting table
- Share this printer for the local network

Tools Configuration

Post-Processor Properties

Tools Selection | **Configuration Tools** | Advanced | COM Port

GENERAL FEATURES

Z Axis ☐ Auto Adjust ☒ Unit Conversion Factor Table 1

Description KONGSBERG PP Type

MATERIALS

List Materials Défaut Add Delete

TOOLS

Name: Oscillating Knife N° 2

Info: Instruction :

Type: OSCILLATING_PNEUMATIC_KNIFE

Delete this tool Add a tool

Tool Parameters

Cutting speed 0

Speed Max (fast forward) 0

Slow Speed (arc, text,...) 0

Ascent and Descent of the tool

Delay in Ascent (s) or Speed Ascent (mm/s) 0

Delay in Descent (s) or Speed Descent (mm/s) 0

Max height of the tool (or pressure X) 0 Min height of the tool (or pressure Y) 0

Abort OK

Unit Conversion

List of tools

Tool number
physic or logic

Tools parameters

The tools configuration is specific for each cutting table.

Auto Adjust : The parameters are not defined by the post-processor but by the machine controller.

Z Axis : define if the controller can move the Z axis of the tool

List Materials :

The user can define a list of materials and for each material define specific parameters for the tools.

MATERIALS

List Materials Défaut

- Défaut
- micro
- pc
- gc
- dd
- pcgc
- akylux
- pvc

Advanced post-processor settings

The screenshot shows the 'Post-Processor Properties' dialog box with the 'Advanced' tab selected. The dialog has four tabs: 'Tools Selection', 'Configuration Tools', 'Advanced', and 'COM Port'. The 'Advanced' tab contains several sections for configuring the post-processor. The 'PUMP' section has two checked options: 'Automatic Pump Start at the beginning' and 'Automatic Power off the pump at the end', with a pump icon. The 'END TOOLHEAD Position' section has a text box set to '2500'. The 'BLOCKS LIMIT' section has a text box for 'Number MAXI of blocks'. The 'HALF-CUT' section has an unchecked checkbox for 'Stop before Half-cutting for setting tool'. The 'ARCS' section has a text box for 'Max Radius to split' and an unchecked checkbox for 'Split all Arcs'. The 'CREASE - COUNTERMATE' section has a text box for 'Creasing length shortened at each end' set to '0' and a text box for 'Width for Counterterm' set to '0'. The 'LASER' section has a photo of a laser cutting head and three text boxes for 'Laser width for 4, 6, 8, 9 points', 'Speed 2 points', and 'Speed 3 points', all set to '0'. The 'CUTTING SURFACE' section has text boxes for 'Xmax' (2550) and 'Ymax' (1350), and radio buttons for 'flute orientation default' set to 'dir. Y'. The 'SEND TABLE / FILE' section has radio buttons for 'Automatic' (selected) and 'Manual'. At the bottom are 'Abort' and 'OK' buttons.

Post-Processor Properties

Tools Selection Configuration Tools **Advanced** COM Port

PUMP

Automatic Pump Start at the beginning ☒

Automatic Power off the pump at the end ☒

END TOOLHEAD Position

By the end of cutting move the toolhead at 2500

BLOCKS LIMIT

Number MAXI of blocks

HALF-CUT

Stop before Half-cutting for setting tool ☐

ARCS

Max Radius to split Split all Arcs ☐

CREASE - COUNTERMATE

Creasing length shortened at each end 0

Width for Counterterm 0

LASER

Laser width for 4, 6, 8, 9 points 0

Speed 2 points 0

Speed 3 points 0

CUTTING SURFACE

Xmax 2550 Ymax 1350

flute orientation default ☒ dir. Y ☐ dir. X

SEND TABLE / FILE

☒ Automatic ☐ Manual

Abort OK

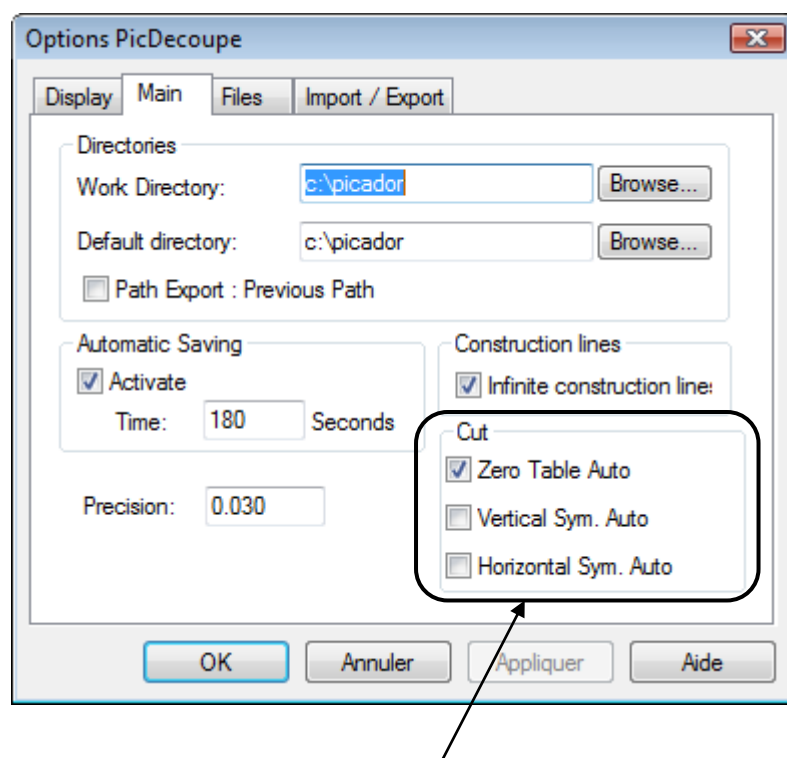
Special settings depending of the cutting machine controller.

Using PicCUTTING

Automatic cutting job positioning on the table area

The user can define how the opened or imported drawing will be positioned automatically on the cutting table.

Use Menu→Preferences→Options→Main



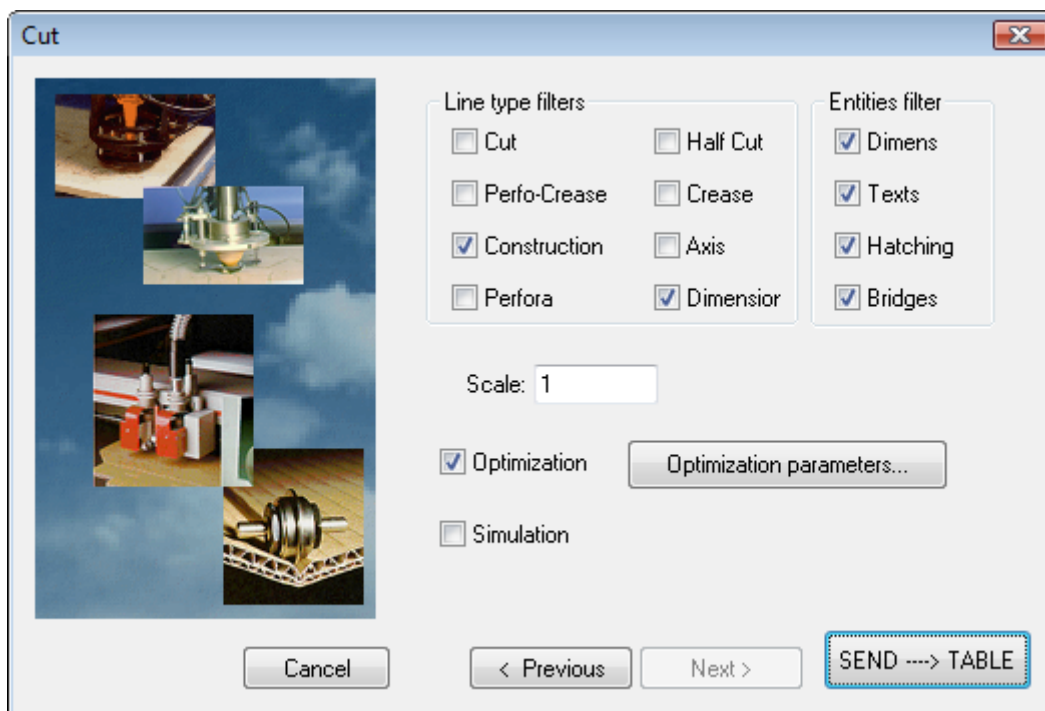
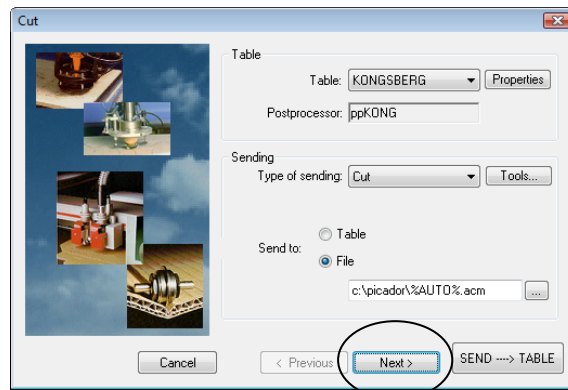
Zero Table Auto : The zero table is define automatically at the bottom left limit of the drawing.

Vertical Sym. Auto : A vertical symmetry is automatically performed when you open or import a drawing file.

Horizontal Sym. Auto : A horizontal symmetry is automatically performed when you open or import a drawing file.

Filter the entities before to send to the cutting table

Icon 
Button Next



Define the filters :

When the box is checked the entities are not sent to the machine.

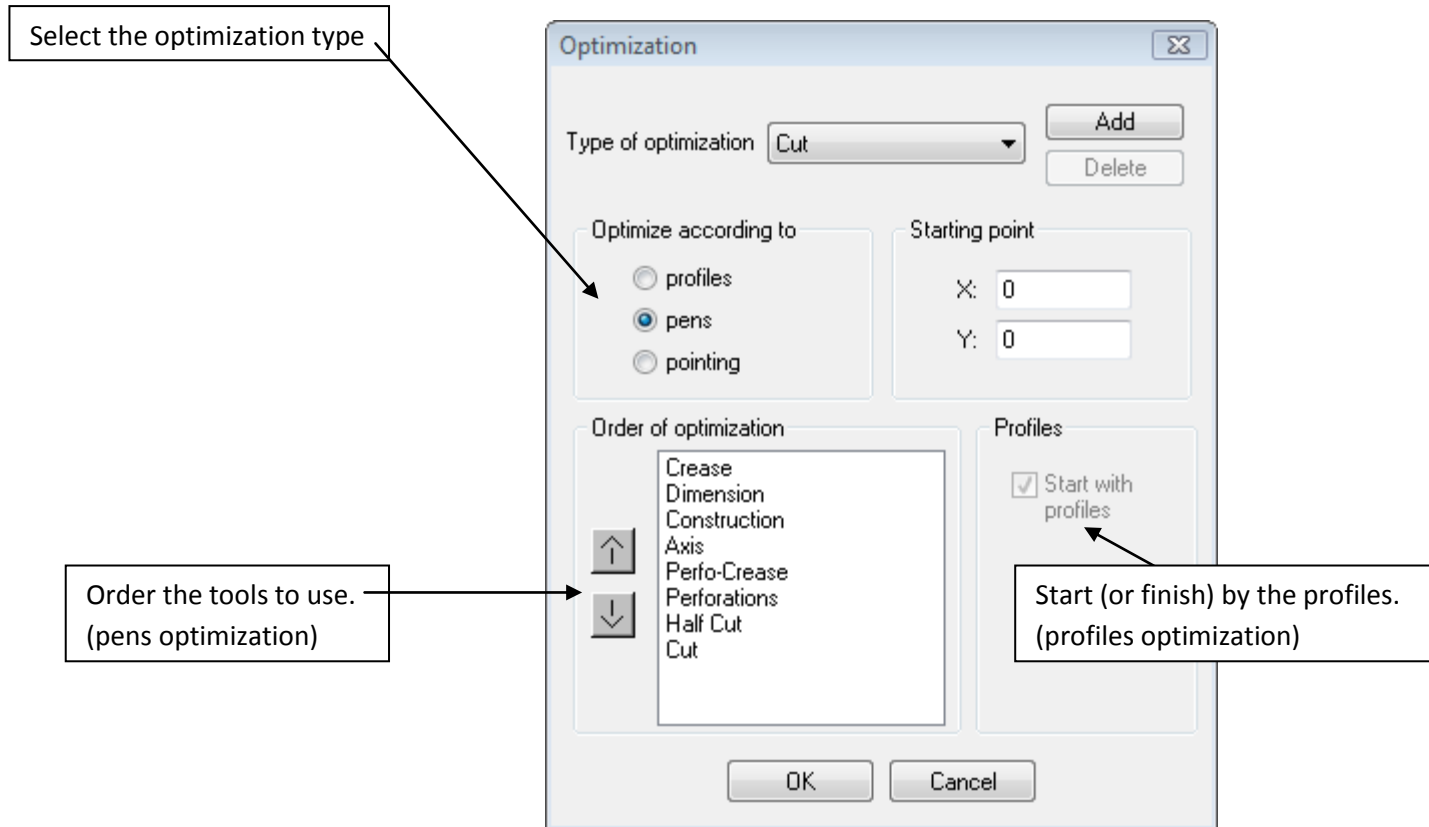
(On the image : dimensions, texts, cross hatching and construction lines are filtered.)

Remark:

- If you do not filter the bridges (box unchecked) the perfo lines are sent as continuous lines (laser cutting die for a perfo rules).
- Uncheck the simulation box to send the data to the controller.
- Automatic Optimization tool path is generated when the Optimization box is checked. (Use Optimization parameters button to control the optimizer).

Optimize the Tool Path

Use icon 



Optimization by pens (tools):

The tools path is optimized regarding the order of the tools. The optimizer search the the closest entity to process in order to minimize the displacement of the tool selected. The optimizer algorithm begin at the starting point.

Optimization by profiles:

If the user defined some profiles in the drawing, then the optimizer will begin or finish by the profiles depending of the check box "Start with profiles".

Use the Profiles toolbar  to generate the profiles contours.

Optimization by points size:

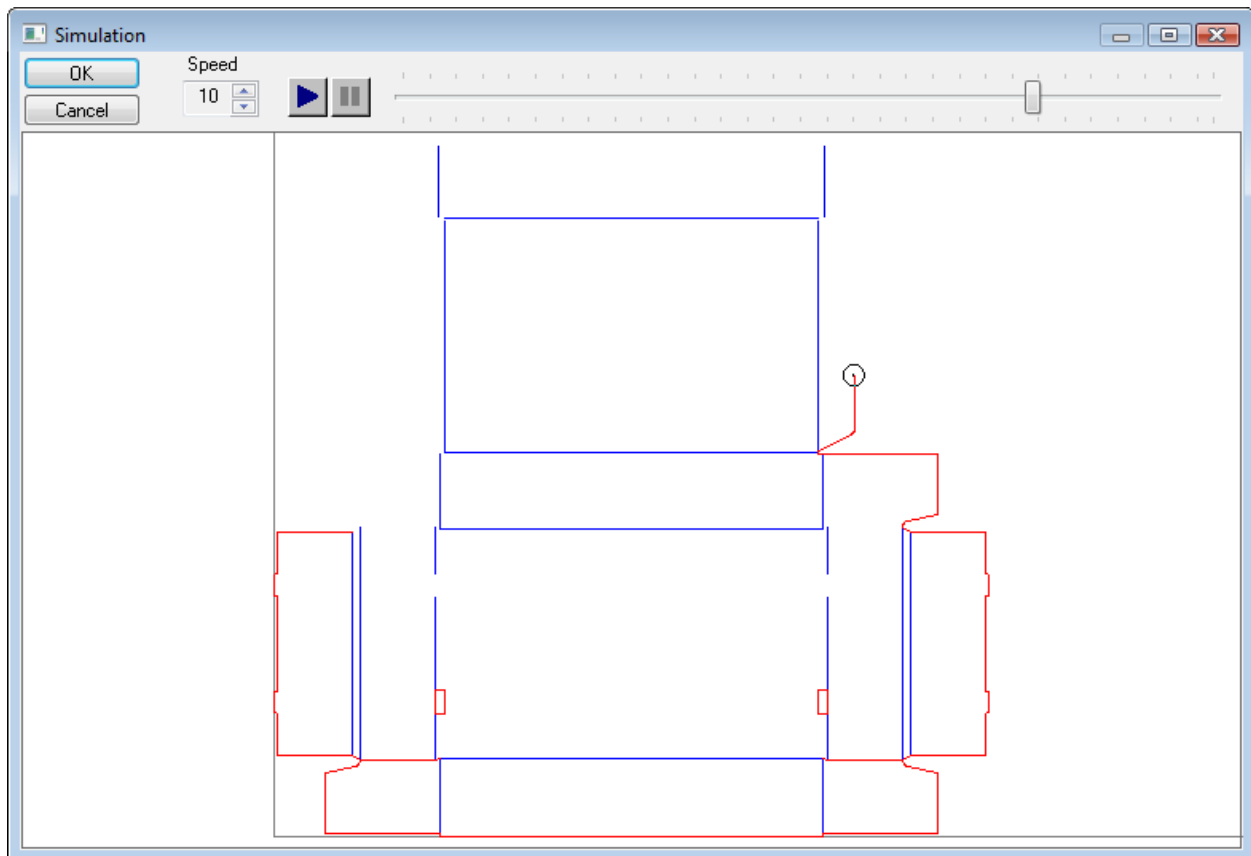
In laser cutting (die board) the user can select an optimization by points size.

Simulate the Tools Path

Use icon 

Before sending the data to the controller, the user can visualize the tool path.

Proceed to the desired optimization before to launch the simulation.



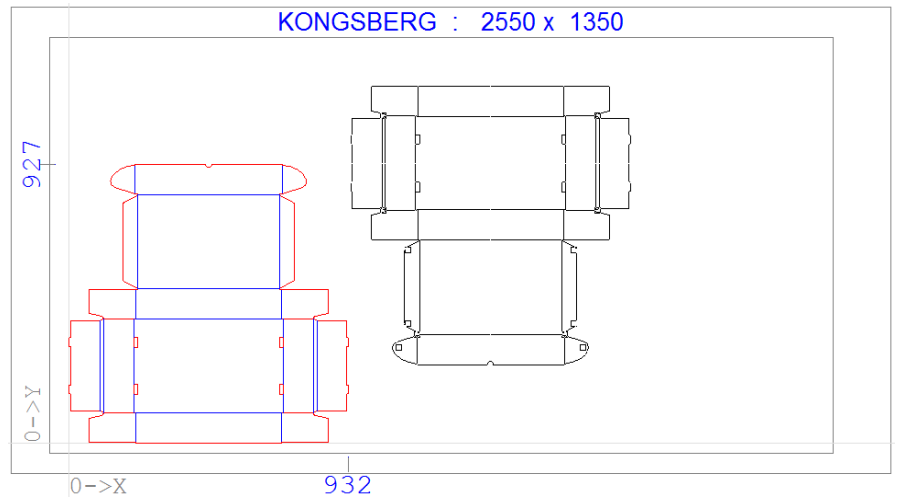
The user can select a speed for the animation.

In manual mode, the user can move the cursor to animate the simulation.

Duplicate the shape on the table area

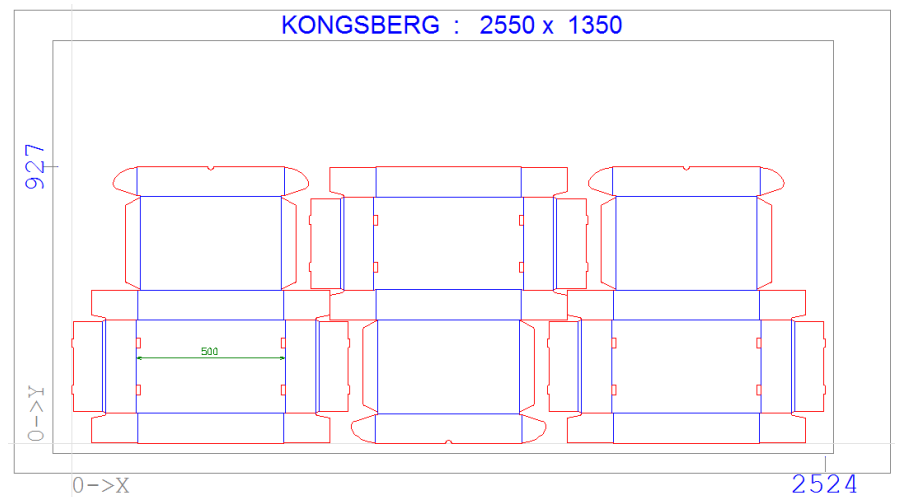
Use icon 

to duplicate the shape manually



Use icon 

To duplicate with layout



Use icon 

To add others shapes on the area

