





NEW FEATURES VERSION V13

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New tools





A new text function developed for all users who need, in a practical and functional way, to create several texts at once and positioned with reference to an arc. With the help of its user-friendly wizard, users in a variety of industries (ball bearings, clock making, coins, wheel rims etc.) will be able to compose text within one single dedicated interface. What is more, these multiple texts can be re-edited one by one or all together. The reference point for all the texts is a single centre point.

For each text, it is possible to define common settings or separate them by means of four attributes:

- the arc radius
- the start angle
- the direction of writing
- the deformation

Example of the back plate of a watch:





Operating principles:

- Write several free texts with all the associated settings (font type, size, alignment etc.) in any position in relation to the plate. These attributes will be saved during the conversion into an arc.
- Select text in sequence and click on the 🏾 🎘 Multiple arc texts icon. •
- A wizard appears on the right of the screen: .
- 1. Define the coordinates of the Centre of the arcs.
- 2. Tick Same radius if all the texts have a single radius. This radius corresponds to the vector base of the arc on which the text will be placed.
- 3. Tick Same start angle: all the texts will then have an identical start angle. This angle will be used to position the text(s) according to the previously defined alignment. In general, the angles will be different.
- 4. Tick Same direction: all the texts will then be orientated clockwise or anti-clockwise. In general, it is necessary to confirm this option.
- 5. Tick Same type: all the texts will have the same deformation (standard, radial or inclined). In general, it is necessary to confirm this option.

If one of the boxes is ticked in the wizard, then the settings become accessible on text no. 1. These same settings for the other texts will be greyed out according to the activations applied via these boxes.

If an option is not greyed out, then the setting in question is available and accessible for all the texts.

Angle of rotation: Each text can be pivoted on itself in relation to the centre of its bounding box. The axis of rotation corresponds to the centre of the bounding box.

The title of the text string appears to the right of Text no. XX and following. The associated settings with the Same type option ticked are shown below. The modifications applied are displayed for each text.



Example: all the texts have the **Same radius**, and also the **Same type** of deformation: **Simple**. The direction and the Start angle can be adjusted for each text. However, the Radius and the type of deformation can only be accessed on the first text. For the other texts, these settings are greyed out.



Center point of the arcs	1
Y 0.000 mm	
Same radius	
□ Same start angle	
□ Same direction	
⊠ Same type	
Rotation angle	
0.000 deg	_
Select the text for each arc:	L
Text 22D08AF3-66D7-4ADD-A41E-416A380F3FC3 +	
Text n°1 GRAVOTECH	
Radius	
50.000 mm	
Start angle	
0.000 deg	
Clockwise	
Standard 🔽 🥌	
Text n°2 TYPEEDIT	
Radius	
50.000 mm	
Start angle	
0.000 deg	
Preview 🧭 🛞	
$ \sim$ \sim	

Example of results according to the alignment of the flat text:

Start angle = 0°, Radius of 50 mm, Clockwise

Alignment of the flat text: left justified:

IOAT 50.0 mm

Alignment of the flat text: centre justified:





Alignment of the flat text: right justified:



Deformation options:

• **Simple:** there is no deformation. The text is simply placed on an arc. A single point on the curve is perpendicular to the support. The blue line represents the base radius. The green line represents the text height. The two black lines represent the radial radii in relation to the bottom of the text, starting from the centre of the multiple texts.



• **Radial**: the deformation concerns the horizontal lines of the flat text. These lines become arcs, but maintain the curvilinear distance.



o **Inclined**: this is a deformation that is double, radial and over the curvilinear distance.







A new geometric construction tool has been added to the **Geometric shapes** palette: the **Spiral**. This evolutive shape can be re-edited if the **Editable objects** option is ticked in the **General** tab in **Options** (F10).

A preview window allows the user to view the result prior to confirming.

To create the spiral, define:

- 1. the coordinates of the Centre of the spiral: X, Y, Z
- 2. the number of complete or incomplete **Revolutions** (unit value: 2, 4, 5 etc. or intermediate value: 0.5, 2.3, 4.85 etc. respectively)
- 3. the Start angle of the spiral
- 4. **clockwise** or anti-clockwise
- 5. the outer Radius

Spirale	×
Centre	
× 0.000 mm	
Y 0.000 mm	
Z 0.000 mm	_
Révolutions	
3	
Angle de départ	
45.000 deg	[((c))]
🗖 Dans le sens horair	
Rayon	
50.000 mm	
	og 😣

The spiral can subsequently be used as vectors, in order to design toolpaths, or even 3D shapes such as the one below, for example:







In the version V12, the user was able to extend a curve (via its ends) by using a tangent line touching the destination curve. If the end culminates in an arc, you cannot extend this tangentially. This is precisely the purpose of this new function: to extend an arc. The extension is possible <u>only</u> if the chosen end has previously been defined as an arc. If the end is a segment, an error message is displayed.

To extend an arc:

- 1. Enable the snap mode **Along the contour**.
- 2. Click on the 床 Extend an arc icon.
- 3. Click on the end of the contour (this must be an arc).
- 4. Move the mouse pointer. The arc extension is created dynamically.
- 5. Click on the receiving contour. The arc is extended as far as the contour.

Example of an arc extended as far as a vertical line:

- Enable the snap mode **Calong the contour**.
- \circ $\,$ The arc to be extended and the destination line are relatively close, in order to allow the extension to be created.

 \circ Click on the **J** Extend an arc icon, and then click on the end of the arc.

¶

• Move the mouse. The arc extension is created directly. The start curve is in red. The arc extension is in black.





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Snap up (F3)

0

Along the contour

ė

/iew grid

Keep the default setting

• Select the line. The arc extension stops at the position of the line.



Note: a message is displayed if no arc is detected on the selected end.



If you need to create engraving tool paths, it is advantageous to have several offsets in order to allow calculations of excess thickness, for example, and thus limit the areas to be engraved for the smallest tools. The ultimate intention is to minimise the machining area to be travelled by the finishing tools, thereby saving on time and reducing tool wear.



By removing a few unnecessary contours, you can obtain contours such as these:





This multiple offset function allows several offsets to be linked together, one after the other. You can quantify the **Number** and size of the **Offset** depending on the tool. All angle management options remain possible (radial, right angle or chamfered).



No fewer than eight new alignment tools appear in this latest version V13. The goal remains the same: to offer functions that simplify work and increase productivity.

The four alignments on the outside of the reference object:

The basic operation has not changed. The first object selected is the reference and this does not change. All subsequently selected objects will be aligned to the outside left/right/top or bottom of the first object selected.



Some illustrations are given below:

Start objects:



Here, the aim is to obtain the result below as rapidly as possible:



1. Select the text "Yosemite National Park", and then the pictogram with and click on . The pictogram drops into place on the left of the text bounding box.



2. Select the text "Yosemite National Park" again, and then the pictogram 2. The pictogram drops into place on the right of the text bounding box.





The four alignments referenced to the active surface:



Users very frequently need to rapidly drop/fix contours in relation to the definition of the active surface, in order to perform cutting or engraving by focusing on the origin of the machines.

Example:

Start objects:



The aim is to obtain the result below as rapidly as possible:

	Yosemite National Park				
1.	Select the text "Yosemite National Park", and then click on The text drops into place at the top of the active surface				
	Yosemite National Park				
2.	Select the pictogram and then click on . The pictogram drops into place on the right of the active surface.				
3.	Select the pictogram and then click on . The pictogram drops into place on the left of the active surface.				



TYPEEDIT/LASERTYPE V13 - What's new



4. Select all the pictograms, and then click on 🔽



The pictograms drop into place at the bottom of the active surface.

The final result, ready for machining, is shown below:



When defining the **Active surface**, if margins exist they will be taken to be the absolute origin of the machine.



The result of these same alignments with margins:









This is a key evolution in V13 for 1D barcodes. Enormous effort has been put into compiling the biggest barcode library on the market. Whereas the version V12 incorporated 11 types of barcode, V13 offers no fewer than 94!

The four key points to be emphasised:

- The user interface has completely changed, for greater ease of use.
- Numerous settings have been improved or added.
- 94 1D barcodes are available for all users.
- The barcode wizard can always be re-edited

Examples of 1D barcodes:





New 1D barcode interface:

1D barcode	Options	X
Barcode type Ext Code 39	27.000 mm	
Barcode data TYEEDIT V13	Use a variable	
Current character count:	11	
	31.836 mm Orientation 34.643 mm Normal	
Status: OK		

1D barcode tab

1. **Barcode type**: a dropdown list, in alphabetical order, allows you to select a barcode from among the 94 available.

Type de code-barres	
EAN-13	-
ITF-14	
ITF-6	
InfoMail A	
Intelligent Mail	
Japan Post	
Korean PA	
MSI	
Matrix 2/5	
PZN	
Planet 12	
Planet 14	
Plessey	
PostNet-A	
PostNet-C	
PostNet-Cp	=
Poste Italiane 25	=
Poste Italiane 39	
RM4SCC	
SSUL	
5WISS	-
Telepen	



2. Final size of the barcode: enter the width and height of the barcode according to the size of code required.



3. **Position and reference point of the barcode:** for positioning the barcode very precisely within the work space. The barcode is represented by the 9 points of its bounding box. Determine the strategic point and then its coordinates.

Example of a barcode, generated at the centre **XY** = 0 and the bottom left corner placed at the origin:



4. **Orientation:** orientate the barcode according to positioning and scanning criteria specific to the end product on which it will be placed.



Four orientations are offered, with the following results:

Normal



Inverted





Vertical, text on the left

Vertical, text on the right



5. Barcode data: input the numeric or alphanumeric value of the code according to the code.

Données du code-barres	
324523455	~
	-

A field indicates the number of characters input and, where applicable, the number of characters required for the code.

		Comptage caractères :	6	Comptage caractères requis :	13
--	--	-----------------------	---	------------------------------	----

6. Variables: In addition, it is always possible to use variables to generate barcodes.

Données du code-barres		
IVAR1	*	Utiliser une variable text
	Ŧ	VAR1 -

You can thus encode serial numbers generated by incrementation or by a list of names.

To select the variable to be inserted, click on its name in the dropdown list **Use a text variable** (**VAR1** by default). The name of the variable is displayed under **Barcode data**.

The status of the current code is displayed at the bottom of the window:

- Valid: the barcode can be created. All the settings are correctly defined.
- Insufficient data length: the user has not entered a sufficient number of characters.
- Invalid: the data does not correspond to the data which the barcode is capable of managing.
- Illegal characters: alphanumeric data for a purely numeric barcode, for example.





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Etat :	Invalid barcode data
Etat :	Invalid data length
Etat :	Illegal Character in data

If the status is **OK**, then the barcode can be confirmed. Click on

- 7. Invert colour: the barcode is displayed as a negative.



8. Vectorial: the barcode generated is no longer an image, but vectors



You can then define a colour and proceed to machining.





Options tab

You can refine the result of the barcode by defining advanced settings.

1D barcode			×
1D barcode		Options	
Font			
Arial 💌	12	Τ	1 1
Autocheck digit			
		Bar width reduction	0.000 %
Show autocheck		Character spacing	0.000 %
No background		Bar width	0.617 mm
Extend bearers		Border width	0.000 mm
Horizontal bearers		Border position	
Margin indicators			
j Extra 1 j Extra 2		Reset a	parameters
	Ø	8	



click on this icon to display the barcode text.



You can define a set of attributes:



- The font: list of TTF and OTF fonts installed on the computer
- The size of the text in pixels



- text in **Bold** or normal
- text in **Italics** or normal
- the alignment of the text in relation to the barcode: on the left, right or centre justified







- > Automatic digital verification: Tick this box to automatically obtain characters adapted to the barcode.
- > Display automatic digital verification: Tick this box to add the character to the initial text.
- No background: Tick this box to hide the background colour of the bars. Caution: occasionally the display will turn black in some cases.
- Extend supports: Tick this box to enlarge the guard bars used to calibrate a barcode reader. They are located at the centre and at each end of the code. Each zone contains a black bar, an empty bar and another black bar. The height of the guard bars is fixed, even when the initial text is present.
- > Horizontal supports: Tick this box to add guide zones according to the chosen standard.
- Margin indicators: Tick this box to end the barcode with the character ">". The tip of the arrow indicates the position of the right margin of the code. Depending on the chosen standard, the character "<" can be added to start the barcode. It is of course necessary to display the characters in advance.</p>



- > Extra 1 and Extra 2: Tick this box to add characters specific to the chosen standard.
- Bar reduction coefficient: reduces the thickness of the lines. 0% corresponds to no reduction and 100% corresponds to maximum reduction. Be sure to check that the code generated can still be read correctly. Enter a value between 0 and 100%.

0%

50%







Character spacing: defines the space between the characters if they are displayed. 0% corresponds to normal spacing.





Bar width: specifies the basic bar width. The value cannot be zero. It must be greater than 0. The total width of the barcode will be modified according to this value. Code width at creation = 70 mm, Bar width = 0.795 mm



With a **Bar width** = 0.5 mm, a total width = 36.75 mm is obtained.

|-20, | . . . |-15, | . . . |-10, | . . . |-5, . | . . . |0, . . ! . . . |5, . . ! . . . |10, . ! . . . |15, . ! . . .





No border:

> Border width: this is defined, together with the borders that will be affected.



With a 5 mm border left and right:



With a 5 mm border left and right and top and bottom:



Click on **Reset all settings** to restore the default settings.





V13 represents a significant evolution in the management of 2D barcodes. 11 types are available.

The four key points to be emphasised:

- The user interface has completely changed, for greater ease of use.
- Numerous settings have been improved or added.
- 11 2D barcodes are available for all users.
- The barcode wizard can always be re-edited.

Examples of 2D barcodes:



New 2D barcode interface:

2D barcode		×
2D barcode	Options	
Barcode type	Encoding mode Security level	
QR Code	Automatic	
Barcode data	Use a variable	
Types vis	VI VAR1	•
	0.000 mm Orientation	
Status: OK		
	<i>⊗</i> ⊗	



2D barcode tab

1. Barcode type: a dropdown list, in alphabetical order, allows you to select a barcode.



2. Start-up mode and Security level: depending on the chosen code, there are several Start-up mode and Security level options. The barcodes will be of differing dimensions.

The Security level determines how the standard reduces read errors in the final barcode.

Examples:

Barcode type	Encoding mode	Security level
QR Code	Automatic Automatic Automatic Alphanumeric Byte	▼ Level0 ▼ Level0 Level1 Level2
Barcode data	Barcode type Databar	Encoding mode Omnidirectional Truncated Limited Stacked Stacked Omnidirection Expanded Expanded Expanded Stacked
	Barcode type Code-16K Barcode data Type3 V13	Encoding mode Automatic Mode 0 Mode 1 Mode 2 Mode 3 Mode 4 Mode 5 Mode 6



3. Barcode data and confirmation: input the numeric or alphanumeric value of the code.

Barcode data	
Type3 V13	*
	-

The status of the current code is displayed at the bottom of the window:



4. **Position and reference point of the barcode:** for positioning the barcode very precisely within the work space. The barcode is represented by the 9 points of its bounding box. Determine the strategic point and then its coordinates.

Example of a barcode, generated at the centre **XY** = 0 and the bottom left corner placed at the origin:



5. **Orientation:** orientate the barcode according to positioning and scanning criteria specific to the end product on which it will be placed.

Orientation	
Nomal 💌	
Normal Vertical, text on left	
Reverse	



Four **Orientation** options are offered.

Examples:

• Normal



• Vertical, text on the right



6. Variables: In addition, it is always possible to use variables to generate barcodes.

Barcode data			
[VAR1]	*	Use a variable VAR1	
I	Ŧ		

You can thus encode serial numbers generated by incrementation or by a list of names.

To select the variable to be inserted, click on its name in the dropdown list **Use a text variable** (**VAR1** by default). The name of the variable is displayed under **Barcode data**.

7. Invert colour: the barcode is displayed as a negative.







8. Vectorial: the barcode generated is no longer an image, but vectors





You can then define a colour and proceed to machining.



Options tab

The settings in this tab vary according to the chosen barcode.

Example with the **QR Code** barcode selected in the **2D barcode** tab:

Border width 0.000 mm X • Bearer width 1.000 mm Y Multiplier 20 Advanced options Bar reduction 0.000 % Border thickness 0.000 mm	afe width 21.210 mm neight 21.210 mm
O Bearer width 1.000 mm S Safe Multiplier 20 Safe Advanced options Bar reduction 0.000 % Border thickness 0.000 mm	afe width 21.210 mm height 21.210 mm
Advanced options Bar reduction 0.000 % Border thickness 0.000 mm	
Columns 0	 Reverse video GS1 Flag Deutsche Post PostMatrix bars
Mask Automatic 👤	Aztec flag Encode as unicode



The details of each setting:

1. **Border width**: Enter a distance in mm representing the border around the code. The size of the barcode increases as a result.

Border set to 0 mm



at 4 mm







2. Tile width/Total width: the reference size for the 2D barcode is a square. The setting Tile width gives the basic size. The Total width of the barcode is modified as a result. If you tick Total width and enter a value, this will be the width of the barcode. The Tile width value will be modified. The Total height of the barcode is also modified as a result.

Modification by altering the Tile width:

X	• Bearer width	1.000 mm	🔘 Safe width	21.210 mm
V	Multiplier	20	Safe height	21.210 mm

Modification by altering the **Total width** of the barcode:

×	🔿 Bearer width	2.000 mm	Safe width	42.000 mm
Y	Multiplier	20	Safe height	42.000 mm

- 3. Multiplier/Total height: gives the associated Multiplier and Total height when the Tile width or Total width is modified.
- 4. **Bar reduction:** when set to 0%, the square is of standard size. By increasing the value, the size of the black squares is reduced, as shown in the figures below:







This new TypeArt function allows you to create domes on the basis of the position of the markers. There are three possible types of **Shape**: **Gaussian**, **Spherical** or **Quadratic Bézier**.

Select the marker(s) and then click on the *use icon*. A wizard appears on the right of the screen:

Dome out of markers	*
Select one or more markers:	
Marker 8BA527EF-2151-4980-98C6-DF90A7DB4782	^
Marker 5E410E34-88BF-4FE0-A43E-F3DAE911E3D4	Ŧ
۲	
Gaussian Gaussian Diar Spherical Quadratic Bezier 10.000 mm	
Height:	

- The list of markers appears in the wizard. The position of the marker is the centre of the dome created. They can all be deleted or deselected by right-clicking.
- Chose the **Shape** by clicking on an option in the dropdown list:
 - o Gaussian
 - o Spherical
 - o Quadratic Bézier
- For each strategy, defined two settings:
 - The **Diameter** represents the footprint of the dome at its base.
 - The **Height** corresponds to the final value along the positive Z axis of the dome.

Various shapes obtained according to the settings and strategies applied are shown below:





Improved tools



The LED function was introduced with the version V12 and so it has already been possible to position LEDs along the contours with numerous adjustment options, such as management of the distance between elements, precise positioning on angles etc.

V13 improves the LED function by integrating matrix filling.

Its applications are shown in the examples below:



TYPEEDIT/LASERTYPE V13 - What's new





The first part of the wizard remains unchanged:

- Choice of the start contours or text
- Choice of the basic shape of the LEDs:
 - o Circle
 - o Symbol
 - Selected object

An additional option has now been introduced, in
Arrangement of LEDs when you click on
LED array

	-
Select text or graphics (open or closed curves):	
Curve 84BECD58-F762-4EC9-98B6-640C45675242	
۲	
Geometry 🗢	
⊖ Circle	
Diamatar	
3.000 mm	
⊙ Symbol	
O Open or closed curve(s)	
Ignore bounding box	
LED array	
Positioning	
Fill matrix 🗢	
Start point of the duplication	Ŧ
Preview 🧭 😣	



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Click on \Rightarrow to the right of Matrix filling.

The wizard and the associated available settings are shown below:

Fill matrix 🔶
Start point of the duplication
☑ Included LEDs only
Assign a color to the LEDs

• Duplication start point

This is the reference for starting the duplication. In this example, in which the LEDs are illustrated by a circle, the result is displayed according to the selected start point.



Specifically, in the Bottom Left scenario, if the following settings are applied:

- **Circle** with a **Diameter** of 4 mm
- Centre distance of 5.2 mm along X and Y

Then the first circle will be positioned as follows:

The first distance between the edge and the object is equal to: Radius of the circle (2 mm) + distance between two LEDs (5.2 mm - 2 mm), which is 3.2 mm.





• Only LEDs included

By ticking this box, the result will only take account of the LEDs inside the selected contours. These contours represent boundaries which cannot be exceeded.



• Choose a colour

This setting allows you to assign a colour to the result, in preparation for machining according to the colours of the contours. The colour list window appears if you click on the coloured square:



Example with the colour green and with the fill colour display option selected:





• Spacing between two LEDs and duplication angle

The distance between LEDs along ${\bf X}$ and ${\bf Y}$ is the centre distance. It must be greater than the diameter of the LEDs.



To apply an effect to the arrangement of the LEDs, it is possible to orientate them at an angle.



Some results of these variants:









In the version V12, it was already possible to retrieve the shape of the offcut and save it in a symbols library in order to reuse the offcut at a later date. The user thus economised on raw material.

With V13, a new functionality allows you to manage the removal of offcuts. For cutting "heavy" material such as metal, removing the offcut can sometimes present considerable problems: shapes remaining undefined, not easy to handle, too heavy, sharp etc. Here, the idea is simple. Upon completion of nesting, the user will be able automatically to launch the creation of matrix cutting lines associated with colour machining.

He or she must define the matrices representing the **Spacing along X** and **along Y**.

Example involving a nesting of objects inside a square:





Result of the cutting lines:





The distance separating the objects from the cutting lines is equal to the diameter of the tool.



You can combine both and have this result : cutting line and remnant material







With V13, object selection is even simpler on circular contours. Now curves need only be "touched" in order to be automatically selected.



enabled. Then, simply create lines or curves that pass through the objects to be selected. Double-click to complete the selection.



Example: Selecting only the figures of a counter dial.



The dotted selection curve "touches" the objects, thereby confirming the selection. Subsequently, the machining sequence will be identical to the selection sequence. The toolpath will be optimal.

Note: the keyboard shortcut **CTRL+T** brings up the order of execution of the machining process.





If you click on when on o, when your mouse pointer enters the arc, it snaps the center of the arc.







Holding the Ctrl key down, click on 💜. The **Type of cropping** dialogue box appears.



Click on Standard cropping to keep only those open or closed curves that are within the first curve selected, and portions of open or closed curves "touching" the first closed curve selected.

Click on **Remove elements touching the frame** to keep only those open or closed curves that are within the first curve selected. Open or closed curves "touching" the first closed curve selected are deleted.



Click on **Keep elements touching the frame** to keep only those open or closed curves that are within the first curve selected, and the open or closed curves "touching" the first curve selected.

Enable the **Keep the selection** option to keep the first closed curve selected.







Click on **Standard perforation** to keep only those open or closed curves that are outside the first curve selected, and portions of open or closed curves "touching" the first closed curve selected.



Click on **Delete perforation elements** to keep only those open or closed curves that are outside the first curve selected. Open or closed curves "touching" the first closed curve selected are deleted..



Click on **Keep perforation elements** to keep only those open or closed curves that are outside the first curve selected, and the open or closed curves "touching" the first curve selected.

Enable the Keep the selection option to keep the first closed curve selected.





TypeEdit possesses unique know-how in the field of projections and mapping of shapes on simple or complex surfaces or on bas-relief. The algorithms prevent excessive deformations. The wizards help to position the expected engraving result precisely.

TypeEdit guarantees a considerable saving in machining time in the moulding trades.

In TypeEdit, all the projection and winding wizards offer access to the following settings:

Reduce the number of points

If this setting is enabled, select:

- a **Calculation mode** for optimisation from among three choices
- o a calculation **Precision**, corresponding to the discrepancy observed between the projected/mapped curve and the 3D optimised curve

Parameters of the surfaces	\$		
Surface accuracy:	0		
0.030 mm			
Optimization	÷		
Reduce number of points			Reduce number of points
Calculation mode 1 💌			Calculation mode 1 💌
Accuracy			Calculation mode 1 Calculation mode 2
0.030 mm		-	Calculation mode 3

The **Calculation mode 1** gives excellent results with a **Precision** of 0.02 mm. You can change the **Precision** according to the size of the model and the final quality required.

Note: For engravings with small dimensions, it is not recommended to **Reduce the number of points**.



The settings are available in the **CAM** tab, now not only via wizards but also:

• in the toolpaths windows, in the **Projection** tab (example with the **Plot** toolpath is shown below), or

Plotting
General Options Projection Specific parameters
Type of mapping
C Bottom
Accuracy
Curve accuracy Surface accuracy
0.100 mm 0.100 mm
Fil holes
Result of projection
Reduce number of points Calculation mode 1 Accuracy 0.100 mm

• in the mapping wizards, which can be enabled by double-clicking on the toolpath:

+ C Liste des parcours outil C C Liste des parcours outil c C Liste des parcours outil C C Liste des parcours	0	Paramètres du parcours outil Projeter en haut Précision 0.030 mm Paramètres des surfaces Précision de la surface :	÷
	4	0.030 mm Parcours projeté ✓ Réduire le nombre de points Mode de calcul 1 ▼ Précision 0.030 mm	 •





In this example of mapping located on the shoulder of a bottle, the table below summarises the number of points sent to the machine, according to the optimisation mode chosen:

The **Precision** applied is 0.1 mm:

No optimisation	With optimisation Mode 1	With optimisation Mode 2	With optimisation Mode 3
57,008 points	47,498 points	54,154 points	48,525 points



2.8. RAM memory optimisation and use of multicore processors

These new versions of TypeEdit and LaserType offer two significant improvements:

- Enhanced management of RAM memory: up to 3 gigabytes, which is up to three times more than previous versions.
- Use of multicore architectures, reducing the **Engraving** tool path calculation times in the **CAM** tab and also in the **TypeArt** tab, for the calculation of symmetrical curves for example.

The version V13 manages significantly more curves in 2D imports, during multi-copy calculations, wherever there is a large number of vectors and points. The management of several microprocessors provides a real time saving in the calculation of displays and renderings.

You can use this new option if your microprocessor has at least two cores (Core 2 Duo, Quad Core, etc.), by ticking in **Options** (F10)**General\Multicore processor optimisation**:

Options		×
General Display User tab		
Undo/Redo level:	Unit:	Millimeter 💌
Auto save every 0	minute(s) Speed unit :	mm/min 💌
Multi-core processor optimizatio	Time unit :	s 💌
Predictive text input	Language:	English 👻
Move import to origin		
Keep a .bak file	Axis system information i	n Sticky notes 📃
Enable quick start	Zoom on cursor positio	n 🔽
Editable objects		
VNX copy/paste	Fixed number of decim	al places
	Reset all parameters	
	1	



2.9. Networked tool database

For businesses with several users of TypeEdit and/or LaserType who wish to control the use of tools on their CNC machines, it is essential to have just one tool database.

Up to now, the tool databases were installed by default locally on each workstation. The files were named **"LtToolDataBase.Dbt"** and **"TeToolDataBase.Dbt"**. They are located in the \\CONFIG\ installation directory.

With V13, it is now possible to define a shared location on a corporate network which is, for example, accessible to all employees.

Example with TypeEdit:

To enable sharing, edit the file "TypeEdit.ini", which is also found in \\CINFIG\. Locate the [Path] section:

[Path]

Symbols=C:\TypeEdit_V13-LaserType_V13\SYMBOLS\ARROWS Marker=C:\TypeEdit_V13-LaserType_V13\SYMBOLS\MARKERS Import=C:\Users\ETT\Desktop Export=C:\TypeEdit_V13-LaserType_V13\DRAWS Doc=D:\NEW_VERSION\TYPE3\V13\TEST V13\LED Matrix VNA=C:\TypeEdit_V13-LaserType_V13\Rtrace\BumpMaps BatchProcess=C:\TypeEdit_V13-LaserType_V13\DRAWS\CabinetDesign FontTtf=C:\TypeEdit_V13-LaserType_V13\FONTS\TTF FontGii=C:\TypeEdit_V13-LaserType_V13\FONTS\GII FontVision=C:\TypeEdit_V13-LaserType_V13\FONTS\VISION Model=C:\TypeEdit_V13-LaserType_V13\MODELS RunDataKitConvertor=C:\TypeEdit_V13-LaserType_V13\DATAKIT\detk.exe FontSureGrave=

At the end of this list of paths, add the following line:

ToolDatabase=X:\Share\MyToolDatabase

X defines the shared network hard drive.

Note: It is necessary to copy the file to be shared, *ToolDataBase.dbt*, into this directory.



2.10. *i* Licence, key and driver update

In order to further simplify licence updating from the **About** window, a button has been added: **Licence update**. A functioning internet connection is required in order to be able to activate a new licence. The application automatically downloads the new file *.lic and copies it into the directory Users\[User Name]\.gravotech\licence.

ггош	: THONGSOUME Etienne	
Phone	:	1
Fax	:	
e-mail	:	
web site	:	
То	- Cravotech / TVDF3	-
Phone	: +33 (0) 4 74 70 80 00	
Fax	: +33 (0) 4 74 70 88 53	
e-mailHelp	: support@type3.com	
e-mailInfo	: sales@type3.com	
web site	: www.type3.com	
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As a reminder:

- 1. The licence is updated when there is:
 - a change of version (V11 to V12 or V12 to V13)
 - a change of options (addition of a new functionality, a new module, an additional machine, an expiry date etc.)
- 2. The key is updated when there is:
 - o a change of firmware
 - o a request for customisation
- 3. The key driver is updated when there is:
 - o a change of operating system
 - o a change of station

Link for downloading the latest driver:

<u>http://www.safenet-</u> <u>inc.com/sentineldownloads/?s=&c=End+User&p=Sentinel+LDK&o=Windows&t=Runtime+%26+D</u> <u>evice+Driver&l=all</u>

