

The Basics

Symmetry has been developed to rapidly enter simple or complex layouts to be engraved on one of the Cyborg engravers.

Understanding the basic characteristics will help you a lot when using this software. Please carefully read the explanations below.

The basic parameters which define every text line are explained in the image below.

The diagram shows the word 'Engraving' within a green rectangular plate border. A red dotted rectangle represents the layout line. Six numbered red arrows indicate the following parameters:

- 1. Plate height (vertical arrow on the left).
- 2. Plate width (horizontal arrow at the top).
- 3. Character height (vertical arrow inside the layout line, from baseline to top of 'E').
- 4. Baseline distance (vertical arrow on the right, from the bottom of the layout line to the baseline).
- 5. Left margin (horizontal arrow on the left, from the left plate border to the left side of the layout line).
- 6. Right margin (horizontal arrow on the right, from the right side of the layout line to the right plate border).

The green rectangle represents a plate border.

The dotted rectangle is a layout line, also called a text line. It is an imaginary box which will not be engraved.

The length of this imaginary rectangle defines the max space reserved for text.

1. This is the plate height.
2. This is the plate width.
3. This is the character height. This is in every font the height of the upper case "E".
4. This is the baseline distance. It is the distance between the top of the plate and the base of the layout line rectangle.
5. Left margin, this is the distance between the left plate border and the left side of the layout line rectangle.
6. Right margin, this is the distance between the right plate border and the right side of the layout line rectangle.

In the example on the left the text is centered in the layout line box.

Notes:

- * All sizes are normally expressed in millimeters. The software however can be set up to work in inches.
- * Every font contains characters which partially descend below the baseline, in the above example the lower case "g".
- * Every font also contains characters which are higher than the character height.
- * Inside a layout line the text can be centered, or left aligned, or right aligned. (see the examples on the right)
- * In the above example and the ones on the right the textlength is shorter than the length of the imaginary layout line box.

Three examples of the word 'Engraving' within a layout line box, demonstrating different alignment modes: centered, left-aligned, and right-aligned.

The diagram shows the phrase 'Engraving is fun' within a layout line box. The text is shown in its original width and then condensed to fit the box.

- * When the text gets longer, it will eventually reach the limits of the imaginary layout line rectangle.
- * From that point the text will be condensed, but only in its width. The height remains unchanged.
- * A non condensed textline is displayed at 100 %, condensed texts have a smaller than 100 % condensation percentage.
- * Both the characters and the inter-character spacing will be condensed equally.
- * When the condensation gets too big, the text becomes illegible.

Three different condensation modes.

CYBORG X-300 CNC ENGRAVER SYMMETRY CYBORG VIRTUAL PENDENT FAST AND ACCURATE ENVIRONMENT FRIENDLY	The plate on the left contains 6 text lines. The first two lines have the same character height. The last 4 text lines also have the same character height. None of the texts is so long that it touches the edges of the text line box. Because of that all text lines will be engraved at 100 % width The first 2 lines have been set up in the "Din1451 4-line" font. The last 4 lines have been set up in the "Din1451 1-line" font.
--	---

CYBORG X-300 & X-400 CNC ENGRAVER SYMMETRY ENGRAVING SOFTWARE WILL GET THE JOB DONE CYBORG VIRTUAL PENDENT FAST AND ACCURATE ENVIRONMENT FRIENDLY	Condensation mode: Equal Height Lines All text lines with the same character height also get the same width percentage. The first line was too long to fit into the text box and was condensed to 75.38 %. The second text line has the same height, and although the text was not too long, it also gets 75.38 % width. The 3rd text line has been condensed to 54.31 % to fit inside its text line box. The 4th, 5th and 6th lines have the same height as line 3, and hence get the same condensation percentage of 54.31 %.
---	--

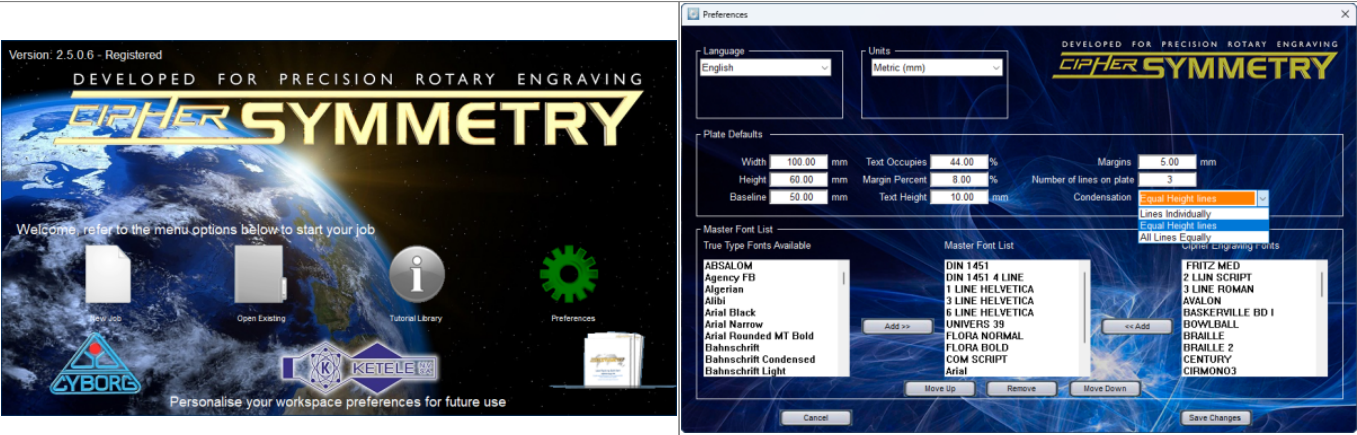
CYBORG X-300 & X-400 CNC ENGRAVER SYMMETRY ENGRAVING SOFTWARE WILL GET THE JOB DONE CYBORG VIRTUAL PENDENT FAST AND ACCURATE ENVIRONMENT FRIENDLY	Condensation mode: All lines equally All text lines, whatever their character heights, get the same width percentage. The third line was the longest of the 6 and had to be condensed to 54.31 % to fit into its text box. All other text lines, whatever their height, also get 54.31 % width.
---	---

	Condensation mode: Lines individually Of all the textlines on a plate only those which are too long are being condensed. The first line was too long to fit into its text box and was condensed to 75.38 %. The second text line has the same height, the text is not too long, so it keeps the 100 % width. The 3rd text line has been condensed to 54.31 %. The 4th, 5th and 6th lines have the same height as line 3, but were not too long and keep a width of 100 %.
---	--

How to set a specific condensation mode

Basically there are two possibilities, either you can set a specific option as default, or you can change the condensation option for any specific job.

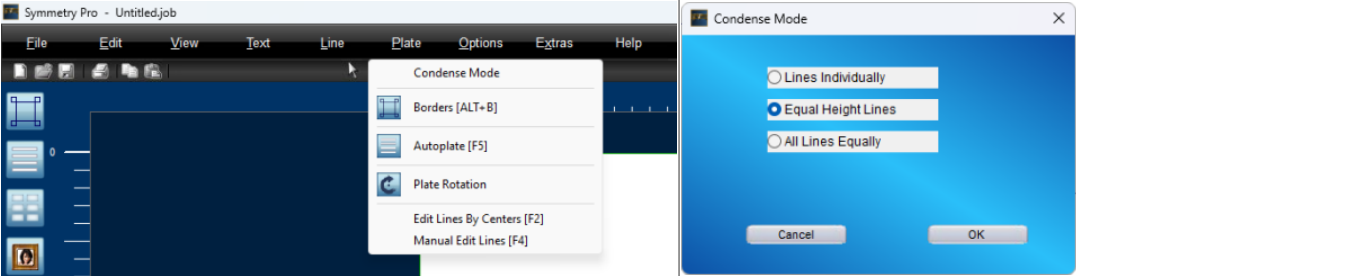
1. Set as default	
-------------------	--



When starting the Symmetry software this window will be displayed on your pc.
In this window you click on the gearwheel which gets a green colour when you hover over it.

When you click on this gearwheel the above window opens.
In the right part there is an option "Condensation".
Clicking in this option field you can choose any of 3 options, and save that option as default.

2. Temporarily change the setting for a job



In the Symmetry menu system select the option "Plate".

Clicking on the "Condens Mode" menu option the above window will open.
Select one of the 3 options and click on the "OK" button.

From:

<https://manuals.cyborg-engravers.com/> - **cyborg-engravers**

Permanent link:

https://manuals.cyborg-engravers.com/doku.php?id=en:symmetry:the_basics

Last update: 2025/04/03 11:35

