Choisir entre trois modes Z

Très important : avant de changer de mode Z, la bague de verrouillage du ressort doit être dévissée.

Choisir entre les modes Z

1. Surface de la plaque : Régler : Visser la bague de verrouillage à ressort à fond vers le bas et poser l'outil sur le matériau. Si le nez est sur la broche, une gravure flottante peut être réalisée. Si le nez a été retiré avant de commencer la procédure de surfaçage, vous pouvez reverrouiller l'anneau de pression du ressort et graver des profondeurs absolues après avoir surfacé l'outil. Il faut ensuite saisir les profondeurs.
2. Surface de la plaque : Auto : Dans ce mode, la broche doit toujours être en mode flottant. Dans ce mode, ne verrouillez jamais la bague de pression du ressort, car cela pourrait endommager la machine.
3. Surface de la plaque : Relief : Vissez la bague de verrouillage du ressort à fond. Retirez la bague avec le nez de la broche. Placez la tige sphérique en option dans la broche. Positionnez la broche dans le coin supérieur gauche d'un rectangle imaginaire dont vous souhaitez digitaliser la surface, précisez la largeur et la hauteur de ce champ, les distances entre les points, etc. Une fois la surface digitalisée, vous pouvez remplacer la tige sphérique par une fraise, faites le surfaçage n'importe où sur le matériau, verrouillez l'anneau de pression à ressort et gravez votre travail. Vous pouvez choisir entre ces 3 options en cliquant sur le bouton correspondant dans le champ « Surface de la plaque » du pendentif virtuel Cyborg. Les options sont : - Surface de la plaque : définie - Surface de la plaque : auto - Surface de la plaque : relief

The 3 options

1. Plate surface : set





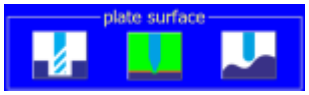
In this mode the system can use the "surface" proximity switch to determine the plate surface, both for **working with or without nosecone** How to use the "set" option: When using the "set" option, make sure the black knurled spring pressure ring is screwed all the way up. Make sure

you position the spindle above the area of your workpiece where you want to set surface. Do this before pushing the “set surface” key. Press the “set surface” key on the virtual pendent. You can now either push the Z down and the Z up keys to position the spindle to the level where you want Z to be 0, then press the Enter  key in the set surface window, or You can push the Z down  key till the spindle is still a little above the plate surface, then push the “Probe”



key in the “set surface” window. As long as you push the “probe” key the spindle will slowly move down and the Z=0 level will be set automatically.

2. Plate surface : auto



In this mode the system can only be used with nose cone, hence in the floating mode. With the first Z down move the spindle will travel down and reach the material. The nosecone will stop the spindle movement, whilst the Z-motor still continues to move the inner spring loaded Z-assembly down. Shortly after the nosecone reaches the material surface, an electronic proximity switch will be activated. That signal indicates to the machine that the Z-down movement has to stop, and the XY movements, in other words the engraving of the character, can start. After having engraved the first character (or vector) the cnc controller knows exactly where the plate surface is and will use this level for all remaining characters (or vectors). Note: When using the “Auto Z” option, make sure the black knurled spring pressure ring is screwed all the way up.

3. Plate surface : map



In this mode the system will digitize the surface of a non flat object. This scanning cycle results into a rectangular cloud of points, each with a particular X, Y, and Z coordinate. This cloud of points is automatically saved into the controller’s memory. The job(s) which is (are) engraved afterwards, are automatically projected onto this 3d relief. This makes it possible to engrave on uneven surfaces without the help of a nosecone.

Notes:

1. This system works for limited height differences and not for steep slopes. In any case, for safety reasons the Z safe lift has to be set higher than the height of the relief of the object to be mapped.
2. When using the “Map” option, make sure the black knurled spring pressure ring is screwed all the way up.
3. The images hereunder show the default map window when the surface button is hit with the “map” option active. The second image shows a typical set of data to perform a surface scan. In

this case a surface of 50mm x 50mm will be scanned with one scan point every 10 mm. the Z-down move speed to find the surface in this case is 30 mm/sec and after having found the surface at each scan point the spindle in this case moves up 5 mm before moving to the following scan point.



Continue to daily maintenance.
Continue to the table of contents.

From:
https://manuals.cyborg-engravers.com/ - **cyborg-engravers**

Permanent link:
https://manuals.cyborg-engravers.com/doku.php?id=fr:x300:choosing_z_modes&rev=1721121619

Last update: **2024/07/16 11:20**