Kies uit 3 verschillende Z modes



Uiterst belangrijk: Vooraleer de Z keuze te wijzigen draai je altijd de gekartelde veer drukring omhoog.

De Z mode veranderen

1. Plaat oppervlak : Stel in : Schroef de veerdruk blokkeerring helemaal omhoog en laat het spindeltje zakken tot tegen het graveermateriaal. Als de neusconus nog op de spindel zit is het mogelijk om vlottend (floating) te graveren. Als de neusconus verwijderd werd vooraleer met de procedure voor het instellen van het plaatoppervlak begonnen was, kun je je nu de veerdrukring terug omlaag schroeven om de veerdruk te blokkeren zodat de dieptes uit het graveerprogramma uitgevoerd kunnen worden.
2. Plaat oppervlak : Auto : In deze mode moet de spindel altijd vlottend (floating) gebruikt worden, dus met de veer drukring helemaal omhoog gedraaid.
3. Plaat oppervlak : Digitaliseer : Draai de veer drukring helemaal omhoog. Verwijder de neusconus houderring en de neusconus met het afzuigvoetje van de spindel. Plaats de optionele sferische staaf in de spindel. Plaats de spindel in de linker bovenhoek van een denkbeeldige rechthoek waarvan je het oppervlak wilt digitaliseren, specifieer de breedte en de hoogte van dat veld, de steekafstand, enz. Eenmaal het vlak gedigitaliseerd kun je de digitaliseerstaaf vervangen door een graveerfreesje, je stelt het plaatoppervlak in binnen die denkbeeldige rechthoek, je blokkeert de veerdrukring en je graveert de job.
You can switch between 3 options by clicking on the relevant button in the “Plate Surface” field in the Cyborg virtual pendent. The options are: - Plate surface : set - Plate surface : auto - Plate surface : map

The 3 options

1. Plate surface : set





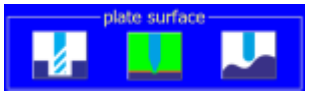
In this mode the system can use the “surface” proximity switch to determine the plate surface, both for **working with or without nosecone** How to use the “set” option: When using the “set” option, make sure the black knurled spring pressure ring is screwed all the way up. Make sure you position the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



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