

## **Addition to CNC-Milling Machine High-Z / T Series with recirculation ball screw**

### Setting within the parametrics and additional maintenance

Congratulations for the purchase of this powerful CNC - Machine

Following we have listed several additional important points in regards to the product.

Please refer to the manual of the High – Z milling machine as a basis.

- **Never use compressed air** for cleaning of this fine mechanical component.
- Try to avoid using cooling agent in conjunction with the machine. The oil within the dust-protected installed ball-bearing is to be washed.
- Never overstress the retaining moment of the stepping motor
- When running in the machine, be aware of collision conflicts with all machine mechanics.

### **Additional points for maintenance of the High – Z T-Series**

*Note: The recirculating ball screws require special maintenance of regular greasing of the attached nuts.*

*If there is no oil-film visible on the spindles, the spindle will run dry. This will consequently lead towards a high grade of wear and tear of the spindle.*

*According to the manufacturer the life expectancy is around 80.000 hours.*

*Therefore early wear and tear of nuts and spindles is the result of inattentive maintenance and hence not subject to a claim under warranty.*

*When using the machine on a daily basis, maintenance intercalars of 7 days are recommended.*

*All ball nuts need to be degreased. This ought to be done through the so called 'grease drilling' with a specifically designed fat press and standard light bearing grease until excess oil appears on inlet and outlet of the spindle.*

*The covering-plate (position B) needs to be removed in order to grease the nut located at the Y-axis.*

*Figure. no. 3 and 4 show the grease drill-hole at axis X1, X2 and Y (fig. 4)*

Fig. 3

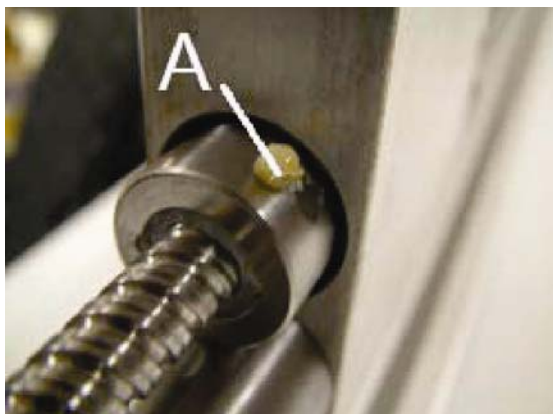
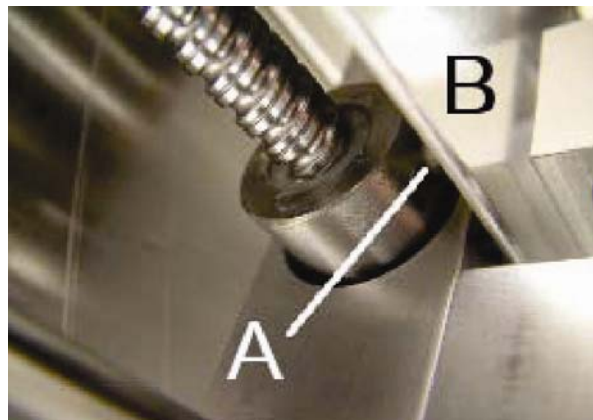


Fig. 4



## Change of Parametrics within the software WIN PCNC

**Note:** Parameters which have been installed by default, within the purchased software WIN PCNC and WIN PCNC Economy as well as the Professional Version, have to be adjusted for use with the T-Variation of our High – Z- CNC Milling Machine. Please see fig. 1 for settings within the 'Parameters – Machine' window.

- Dissolution of axis stays as is: X=1600, Y=1600, Z=1600
- Path per revolution is in: X=10mm, Y=10mm, Z=6mm
- Maximum speed for the machine: X=90mm, X=90mm, Z=30mm  
Please note that the milling speed should not exceed 50 – 60 mm / min.
- Maximum start – stop speed: X=6, Y=6, Z=4mm / min.
- Ramp profile: All axis to be set at 700

An alternative possibility is as follows:

Within the installation folder for Win PCNC replace the file which has been provided with the original software with the file **WCNCCON2.SYS**.

Note: Despite a safe replacement process, make sure to update all existing files.

All information given is subject to technical changes.

Screenshot of Setting window in WIN PCNC

Fig. 1

