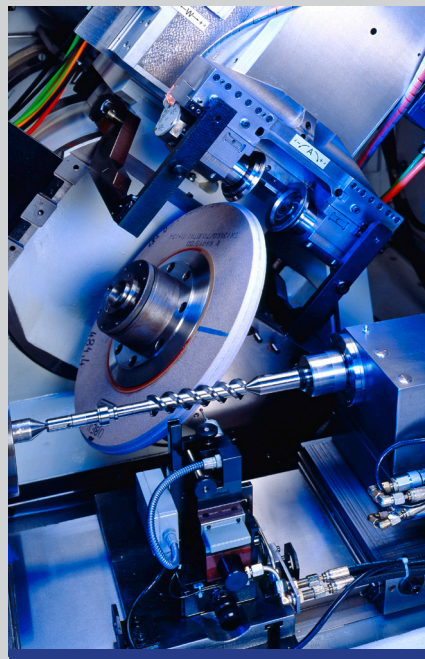
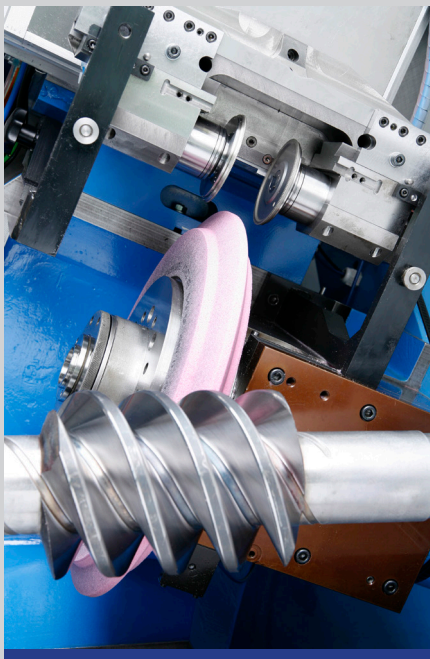


# S500 - HNC



## TECHNICAL DATA:

Workpiece diameter	10 - 350	mm
Grinding length max.	660	mm
Clamping length	1.280	mm
Modul max.	25	mm
Workpiece weight max.	800	kg
Lead angle	± 60	°
Wheel diameter	300 - 500	mm
Wheel width max.	100	mm
Wheel drive	28 (60)	kW
Cutting speed	63	m/s
Workpiece speed	52	1/min

### *In L-version:*

Grinding length	1.400	mm
Clamping length	1.750	mm

## PRODUCT INFORMATION

The CNC worm/and rotor grinding machine type **HNC** was developed for the precision grinding of all types of compressor rotors, worms, screw pumps, extruder screws and similar precision threads. The highly stable basic structure of the machine enables high productivity along with high precision. Thanks to its high drive power (optional), the machine is also thoroughly suitable for pre-grinding solid material (prior to heat treatment). Machine basis: Klingelberg worm grinding machine type HNC35 or HNC35L.

The machine is equipped with the latest drive and control technology (digital servo drives: Siemens). Thanks to the workpiece-specific user interface by SMS (HMI), the CNC control system (Siemens 840D sl) can easily be programmed by the operator in the dialogue system and ensures setup times.

The use of the latest CNC dressing technology in combination with a powerful profile calculation software system allows for high flexibility and precision so that virtually all dressable profiles can be transferred with the highest degree of precision to the grinding wheel.

The machine is particularly suitable for grinding single or multi-start worms with all known standard DIN profiles such as ZI, ZK, ZA, ZN and ZC as well as with special profiles. The achievable accuracies are in the range 3 - 6 according to DIN 3962.

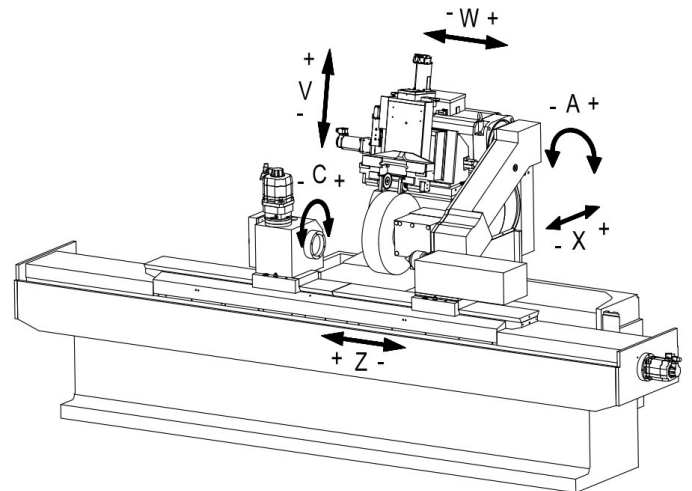


### Available options:

- Various dressing/profiling attachments
- Grinding motor with enhanced drive power (max. 48/60 kW) and water cooling
- Installation for creep-feed grinding
- Indexing unit

### The machine is equipped with 6 CNC axes:

Workpiece drive	(C-axis)
Workpiece slide	(Z-axis)
Grinding support	(X-axis)
Swivelling axis	(A-axis)
Dressing axis radial	(V-axis)
Dressing axis axial	(W-axis)



### Machining example: Worm-shaft grinding

Modul:	4,5 mm
Number of starts:	1
Length:	95 mm
Diameter:	55 mm
Cycle time:	3 min

