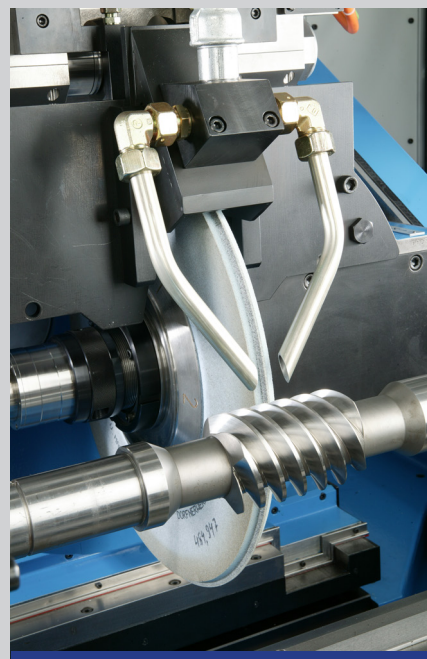


S500 - HSS



TECHNICAL DATA:

Workpiece diameter	10 - 350	mm
Grinding length max.	500	mm
Clamping length	750	mm
Module	0,5 - 25	mm
Helix angle (fixed)	± 45	°
Workpiece weight max.	250	kg
Wheel diameter	300 - 500	mm
Wheel width max.	60	mm
Wheel drive	28 (42)	kW
Cutting speed max.	45	m/s

PRODUCT INFORMATION

The CNC worm grinding machine type **HSS** was developed for the precision grinding of all types of worms, screw pumps, extruder screws and similar precision threads. The highly stable basic structure of the machine enables high productivity along with high precision. The machine is also thoroughly suitable for pre-grinding solid material (prior to heat treatment). Machine basis: Klingelnberg worm grinding machine type HSS350.

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 short 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.

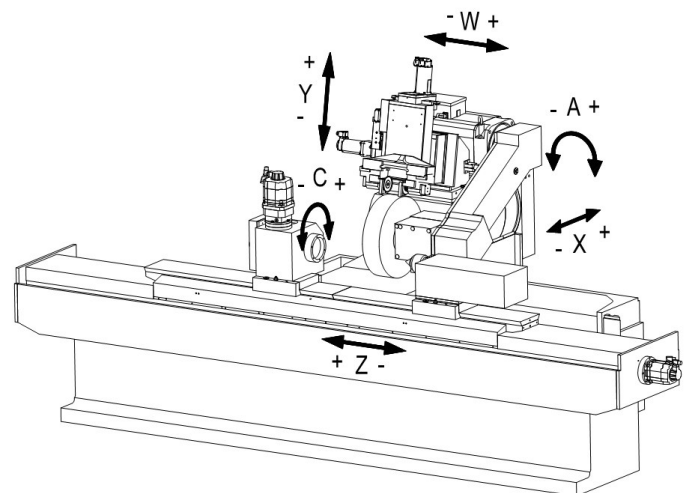
The machine is particularly suitable for grinding single or multi-start worms with all known standard DIN profiles such as ZI, ZK, ZA, ZN and ZC as well as with special profiles. The achievable accuracies are in the range 3 - 6 according to DIN 3962.

Available options:

- Various dressing/profiling attachments
- Grinding motor with enhanced drive power (42 kW)
- Indexing unit

The machine is equipped with max. 6 CNC axes:

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



Machining example: Thread rolling die (from solid)

Number of starts:	5
Length:	30 mm
Diameter:	40 mm
Lead:	7,5 mm
Cycle time:	3,8 min

Machining example: Worm (finish grinding)

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

