

TECHNICAL DATA:

Workpiece diameter	200	mm
Grinding length	450	mm
Clamping length	700	mm
Modul	6	mm
Workpiece weight max.	100	kg
Lead angle	+/- 25	°
Grinding wheel diameter	275 – 350	mm
Grinding wheel width max.	40	mm
Grinding wheel drive	4	kW
Cutting speed max.	45	m/s
Workpiece speed max.	200	1/min

Version HG(A):

Range (fully automatic)	M3 - M27 (45)	
Relief frequency:	5	Hz

PRODUCT INFORMATION

The universal CNC thread grinding machines in the **NRK** series are particularly suitable for grinding precision threads on worms, threaded spindles, ball screw spindles and threaded rolls as well as threading tools. These machines enable optimum productivity and accuracy thanks to their stable basic structure (basis: Reishauer thread grinding machine type NRK).

Equipped with CNC dressing technology, these machines are also impressively flexible and can grind all types of external threads - including special profiles. In their basic version, these machines are used in particular for grinding single and multi-start worms (with standard DIN profiles such as ZI, ZK, ZA and ZN as well as for special profiles). Achievable accuracies are in the range 2 - 5 according to DIN 3962.

In the **HG(A) version**, the machines really show their capabilities when used for grinding threading tools with a focus on cutting taps as well as forming taps (LH/RH). The machine is also available as a 3-axis version with a table-mounted dressing unit.

For series production applications, these machines can be equipped with an optional automatic loading system - configured for cassettes, customer-specific pallets or similar.

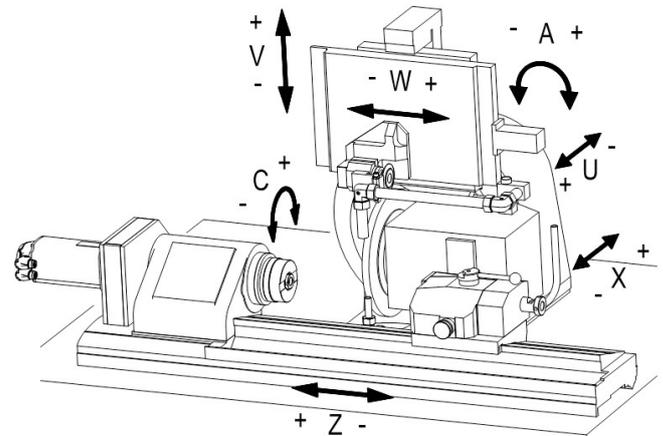
The machine is equipped with the latest drive and control technology (digital servo drives: Siemens or Bosch Rexroth, precision length and angle measuring systems: Heidenhain). Thanks to the workpiece-specific user interface by SMS (HMI), the CNC control system (Siemens 840D sl or Bosch Rexroth MTX) can easily be programmed by the operator in the dialogue system and allows for short setup times.

Available options:

- Robot solutions (Fanuc)
- Automatic portal loader
- Various dressing units
- Measuring probe

The machine is equipped with max. 7 CNC axes:

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



Machining example: Worm-shaft grinding

Modul:	1,5 mm
Number of starts:	7
Length:	20 mm
Diameter:	21 mm
Dressing:	CNC
Cycle time:	1,2 min

