



UW I D

THE ALL-ROUNDER AMONG THE
TOOL GRINDING MACHINES



A SAACKE PRODUCT...

for maximum flexibility

Grinding wheel change

in just 12 seconds

Full flexibility

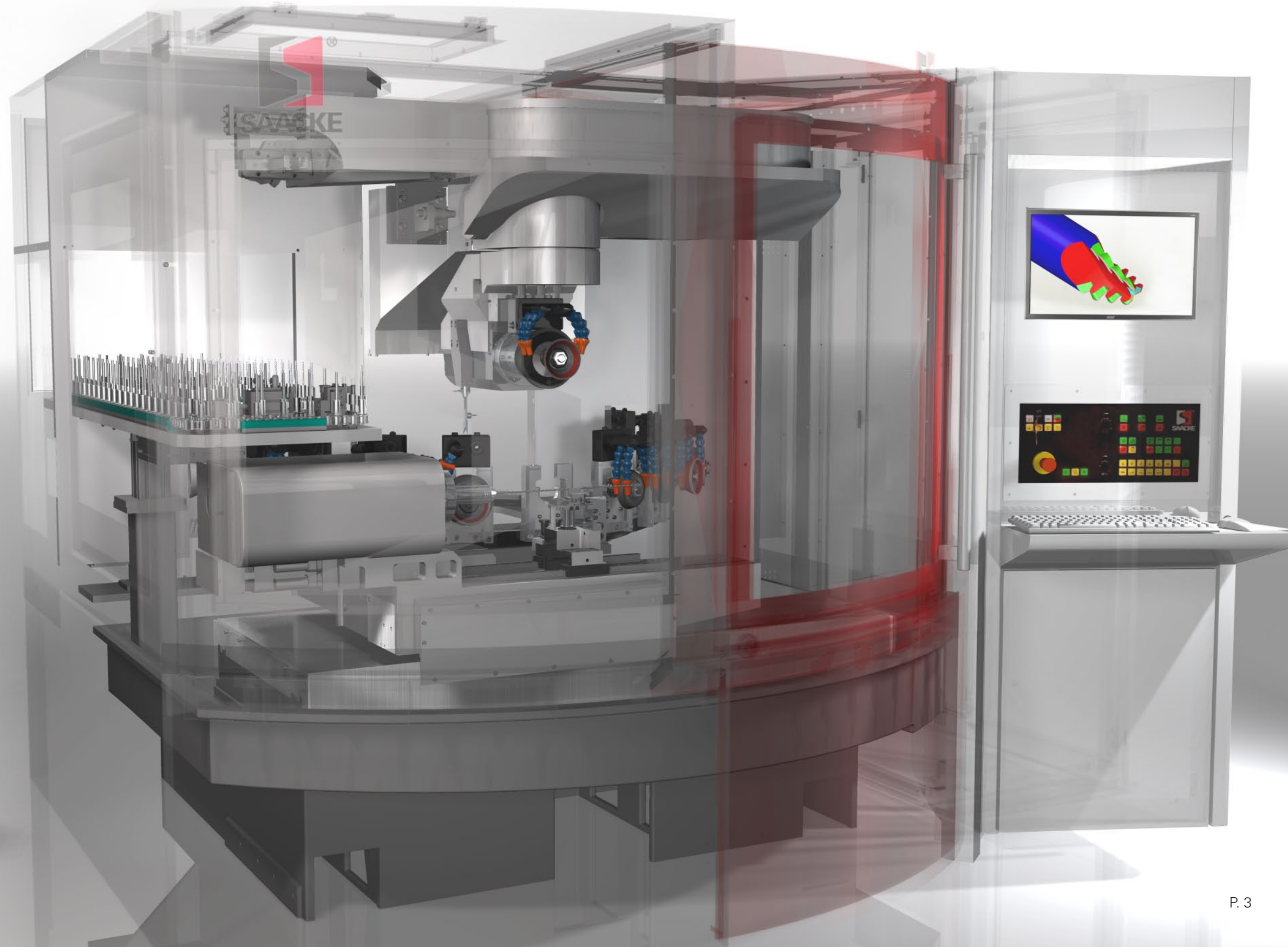
with individual configurations
for different tools

Compact automation

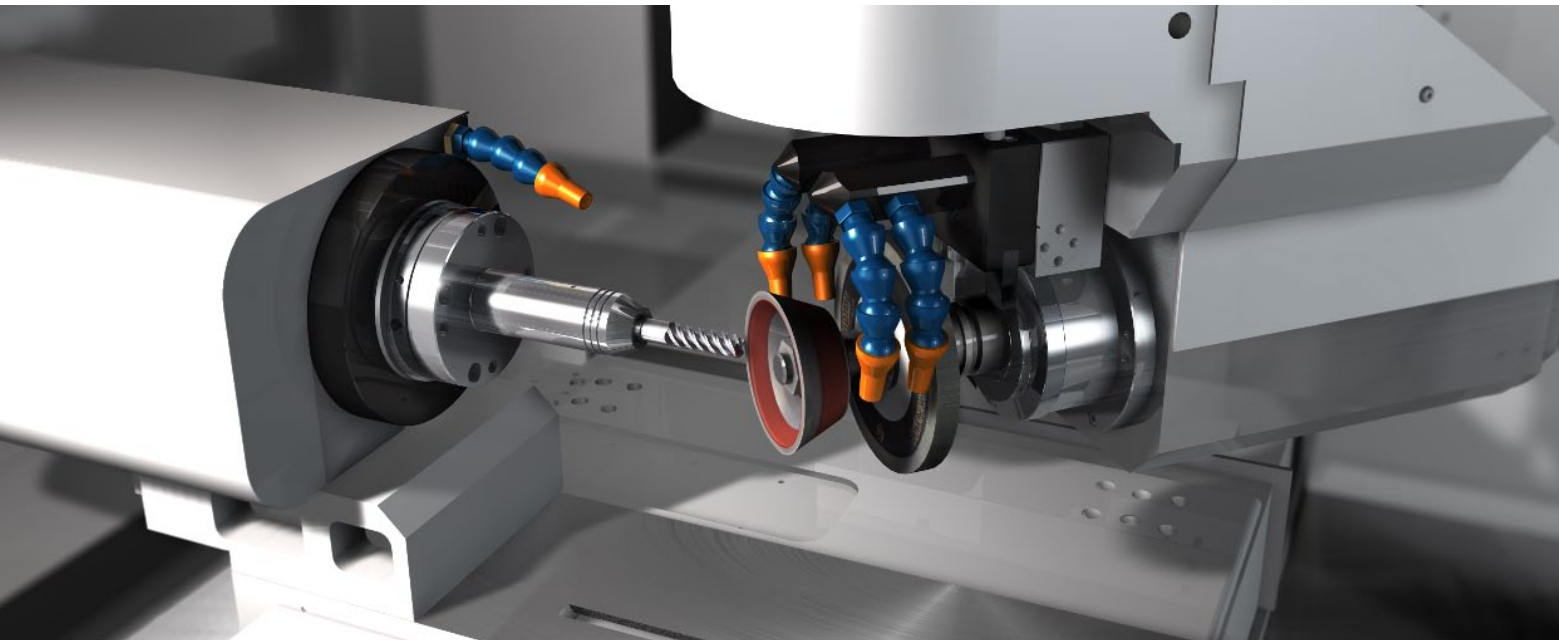
due to an integrated chain loader

The new generation of an absolute all-rounder

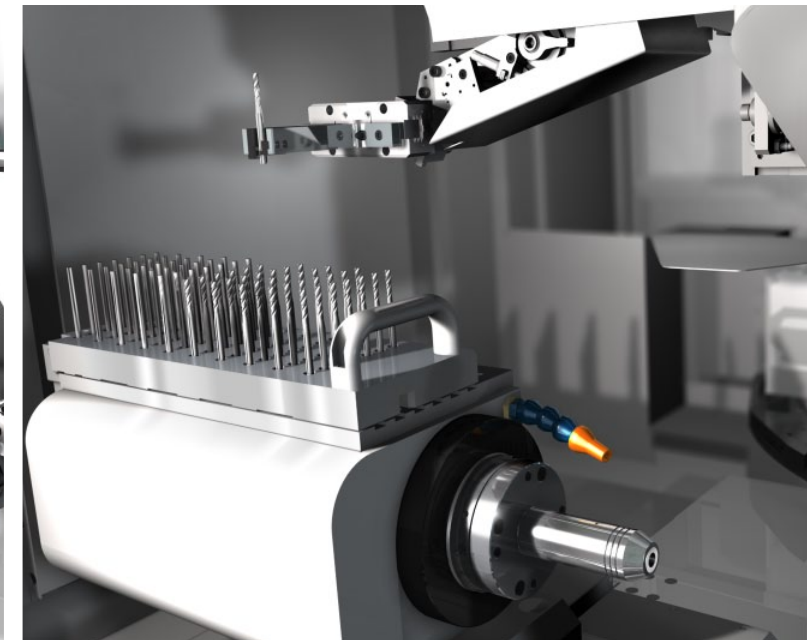
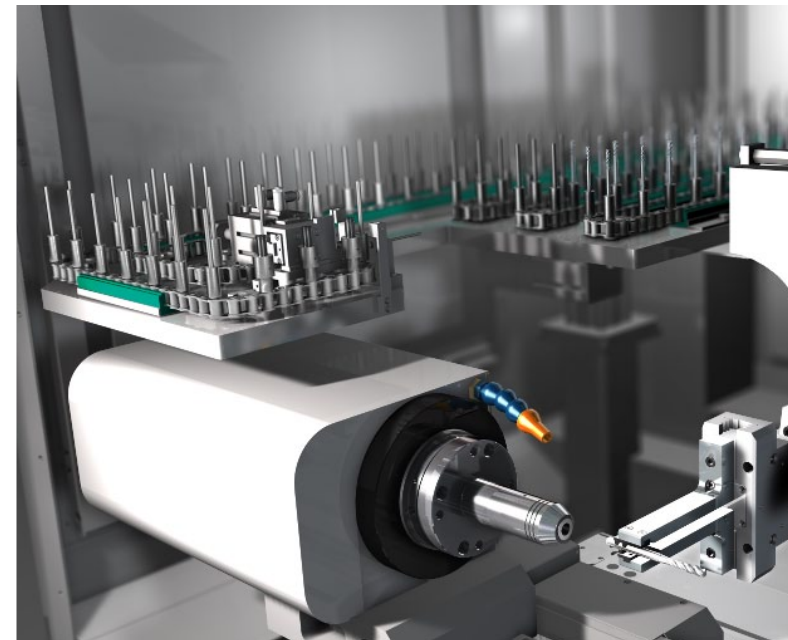
Several sophisticated developments make the latest generation of the UW I D a true master of flexibility and a space wonder. Instead of optionally docking the chain loader to the machine in a separate unit, the UW I D skilfully integrates the complete chain loader with up to 320 workpieces volume right inside the machine. This not only makes the outer dimensions of the machine much more compact, but also reduces the tool change time. The greatest time savings are, however, achieved by the UW I D during the grinding wheel change. The completely newly designed mechanism causes the machine to quickly roll the prepared grinding wheel packages right under the spindle to achieve time savings of up to 70 percent. The entire grinding wheel change thus reduces to only 12 seconds. The ideal partner for anyone who wants to produce efficiently and compactly.



Compact kinematic - maximum flexibility



Flexible loading systems matching any process



A Glance at Advantages

- Flexible Set-Up using the Fully Automatic Grinding Wheel Changer with 6 Magazine Positions (optional 12)
- Simultaneous and automatic changing of the cooling nozzles with the grinding wheel packages
- High automation due to the integrated tool changing system
- High Accuracy due to Positioning the Grinding Wheel in the Center of the Grinding Head Rotational Axis
- Digital control and axis drives resulting in high dynamic in all axes
- Work head with direct drive suitable for cylindrical grinding up to 600 rpm (optional 1,000 rpm)
- User-friendly software for the complete grinding of metal, wood or profile machining tools

Integrated Pick-Up Loading System

Capacity:

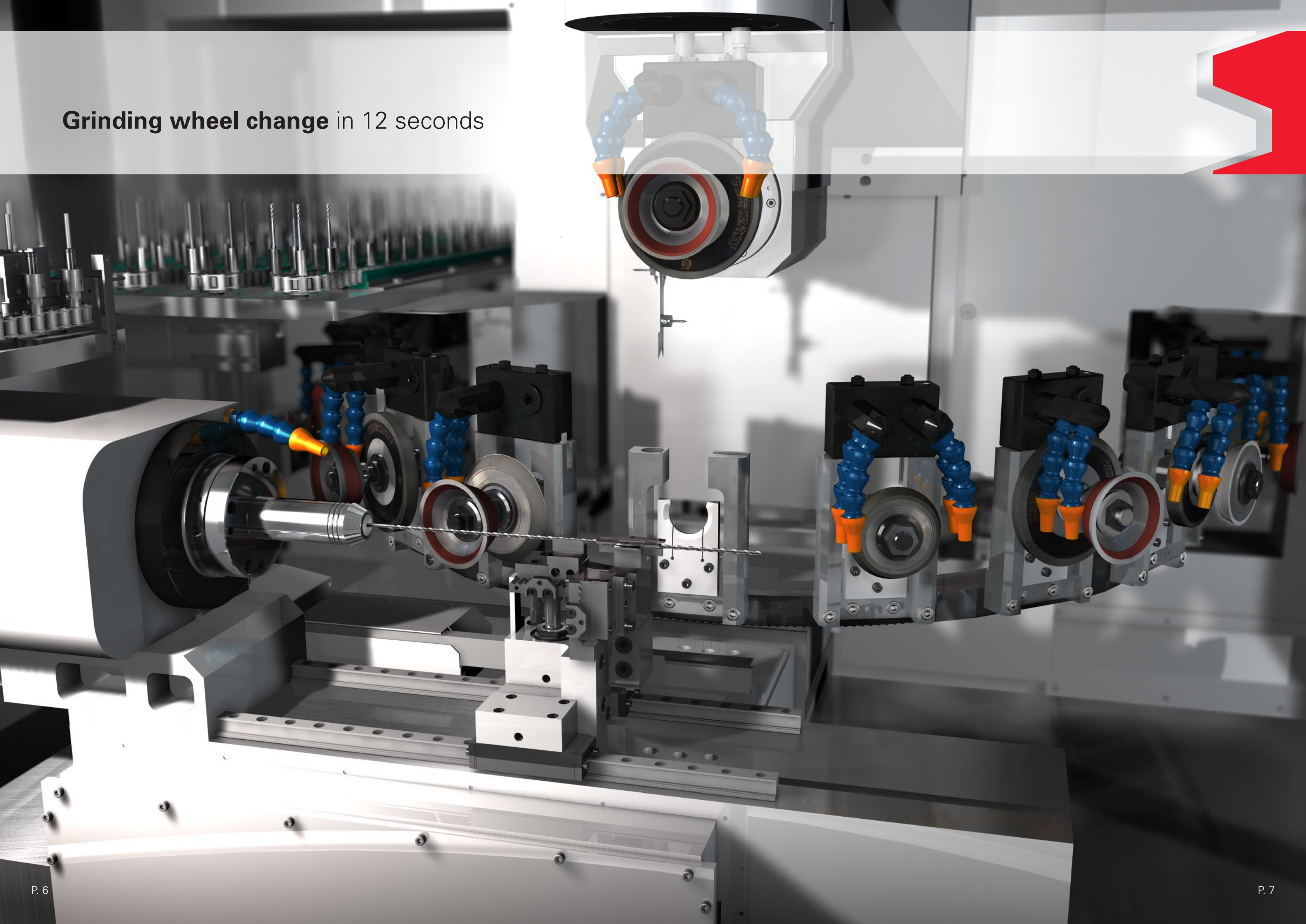
- 3.0 to 5.0 mm shank dia. 143 tools
- 5.1 to 9.0 mm shank dia. 90 tools
- 9.1 to 12.0 mm shank dia. 70 tools
- 12.1 to 16.0 mm shank dia. 54 tools
- 16.1 to 20.0 mm shank dia. 35 tools
- 20.1 to 32.0 mm shank dia. 18 tools

Chain-driven loader – Capacity 320 tools

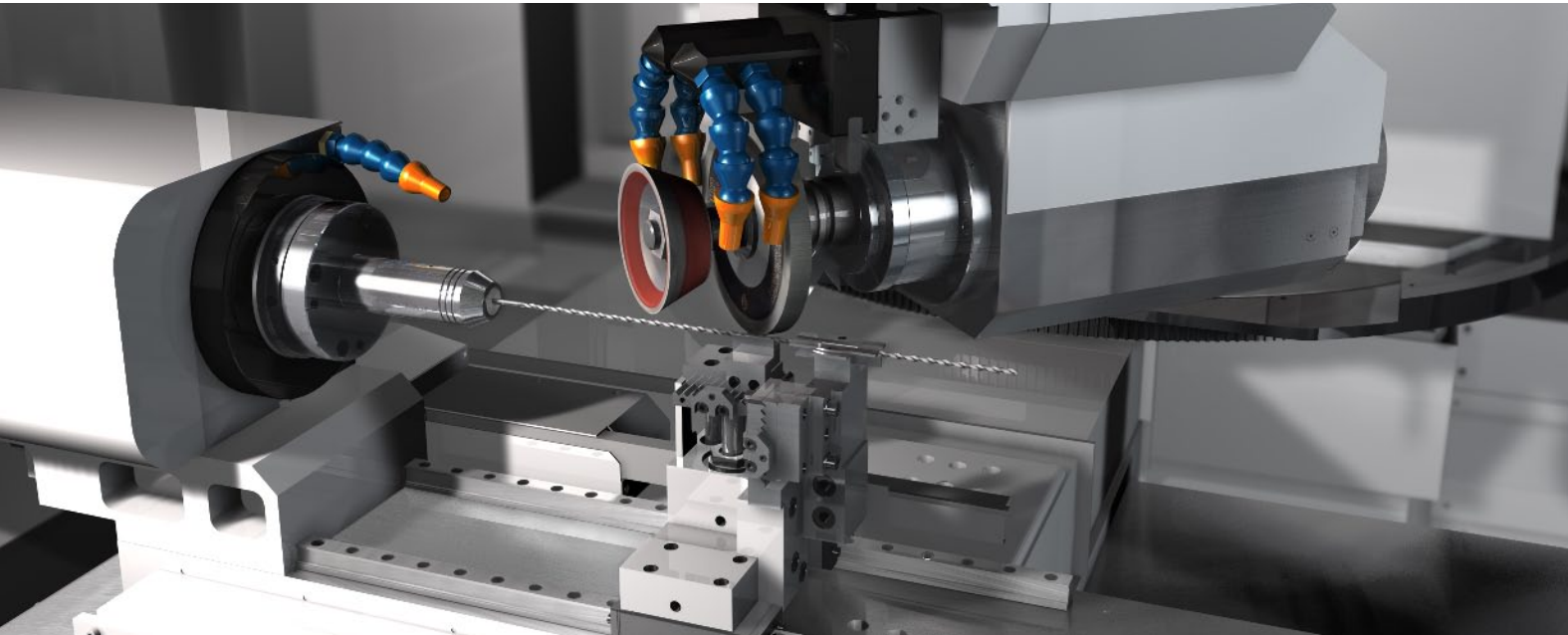
- including the tool loading device
- for production and regrinding

Automatic collet changeover simplifies a “chaotic” arrangement of tool types and diameters.

Grinding wheel change in 12 seconds



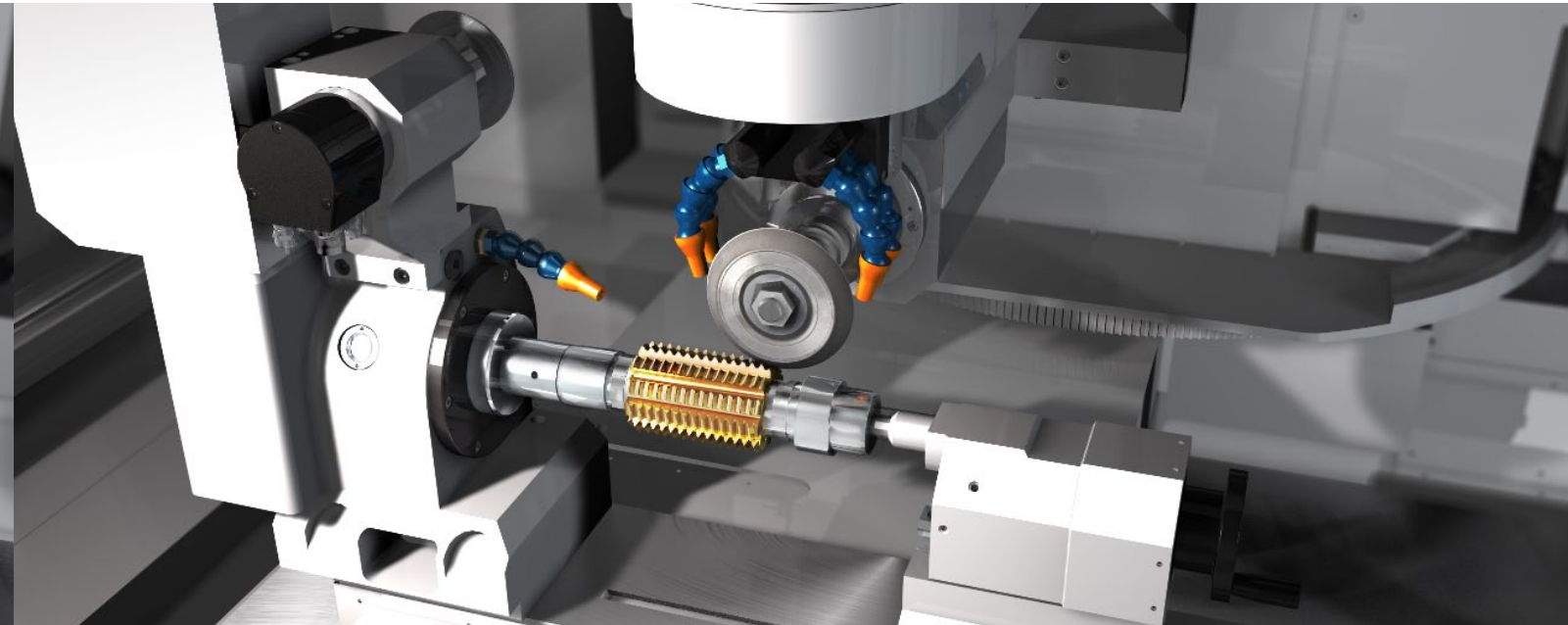
If things get longer



Cycle times will decrease as a result of the CNC moving steady rest technology

- Mounted on the grinding table as a 6th axis
- Equipped with low wear, high precision linear guide ways
- For support and guidance of long tools during the grinding process
- Optimal control of the grinding deflection over the complete grinding length
- Supported directly beneath the contact point of the grinding wheel
- Through a creative adaptable system, different solutions are possible
- Tailstock adapters available include a full or half-round bushing
- Special solution allows high precision guiding for tools with tapered diameter

Even for individual needs



Hobs & co.

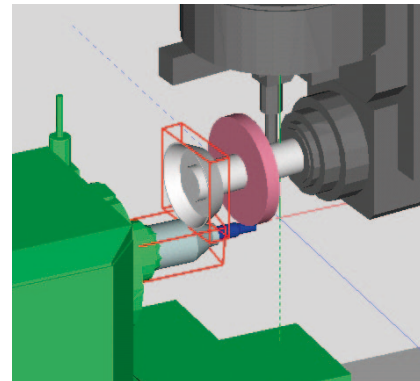
- Grinding of straight- and spiral fluted hobs, stability and output up to module 12 in quality up to AAA
- Integrated dressing of the grinding wheel
- Measuring probe for positioning of the hob
- Nominal drive motor rating up to 36 kW for grinding wheels up to dia. 250 mm
- Working area between centers up to 480 mm

Greatest Variety with Highest Precision

Technical Data

NUMROTOplus® Software

- The flexible and multifunctional NUMROTOplus® Software is perfect to program special tools in a short amount of time
- An exceptional variety of programs with a built-in database for tools, technology and grinding wheel packages
- Straightforward and easy to install Software updates are available over the complete machine life
- 3D collision monitoring and machine simulation
- The software is compatible with a commercially available and standard PC; from your local PC supplier



Cylindrical and Tapered Cutters

Drills and Step Drills



Tools for the woodworking Industry

Profile – Form Cutters



Deep-hole Drills

Disc type Milling Cutters

Shaper Cutters

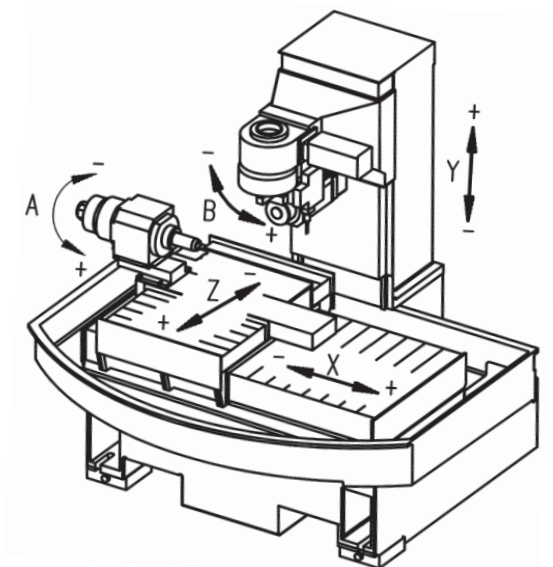
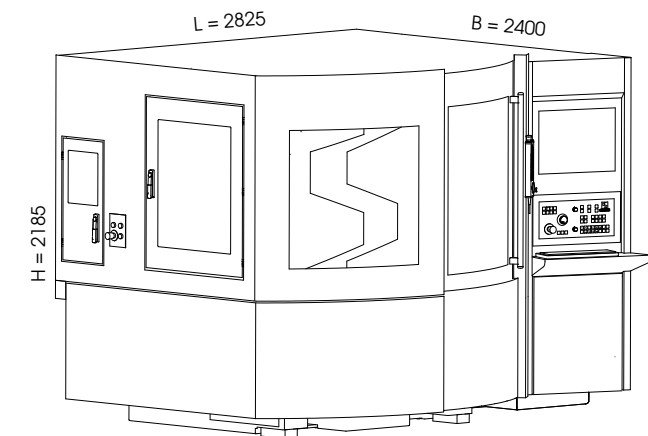
Burrs

Taps

Inserts

Tool data	
Max. diameter	250 mm
Max. diameter for complete grinding	250 mm
Max. edge length for complete grinding (measured at the front edge of the work head)	430 mm
Centre height	195 mm
Grinding table X-axis	
Longitudinal traverse	625 mm
Feed rate	0 – 15 m/min
Cross slide Z-axis	
Longitudinal traverse	305 mm
Feed rate	0 – 15 m/min
Vertical travel Y-axis	
Vertical travel	305 mm
Feed rate	0 – 15 m/min
Grinding head B-axis	
Swivel in horizontal plane	240 deg.
Motor grinding spindle	dia. 170 mm
Grinding wheel arbor with rapid clamping	HSK-C / E50
Grinding spindle speed infinitely variable	2,000 – 12,000 rpm (optional 20,000 rpm)
Max. Grinding wheel diameter	dia. 150 mm
Grinding wheel changer	
Number of magazine positions	6 (optional 12)
Workhead A-axis with direct drive	
Work spindle taper	Plane face (ISO 50)
Through bore capacity	dia. 32 mm
Through bore capacity by automatical clamping	dia. 30 mm
Indexing accuracy	+/- 15"
Max. rpm of work spindle	600 rpm (optional 1,000 rpm)
Resolution	
X-, Y- and Z-axis	0.0001 mm
B- and A-axis	0.0001 deg.
Drive output rating	
Grinding motor, peak capacity	16 kW (optional 26 or 36 kW)
Longitudinal path drive motor X-axis	3 kW
Workhead drive motor A-axis	3 kW
Cross travel drive motor Z-axis	3 kW
Vertical travel drive motor Y-axis	3 kW
Grinding head B-axis	3 kW
Weight approx.	5,200 kg

Subject to technical change.
Descriptions and pictures contain optional accessories.



UW I D



Gebr. SAACKE GmbH & Co. KG
Präzisionswerkzeuge und Werkzeugschleifmaschinen
Kanzlerstr. 250
75181 Pforzheim
Fon (+49) 7231 / 956-0
Fax (+49) 7231 / 956-290
www.saacke-pforzheim.de
info@saacke-pforzheim.de

