SAACKE

14

# CNC Grinding Center
# Model UW I F

**Fully Automatic Grinding Wheel Changer and Tool Loader**

## SAACKE-Precision in a Compact Form

# **Most modern** technology

## For Economical Grinding

- Flexible grinding through the use of a fully automatic grinding wheel changer
- Highest precision grinding, resulting from the grinding wheel(s) being located closely to mechanical centerline of the spindle head/gearbox
- Integrated pick-up loader or chain loader (optional)
- Digital, vibration-free, variable speed controlled spindle motor
- Vibration-free grinding due to a rigid machine base

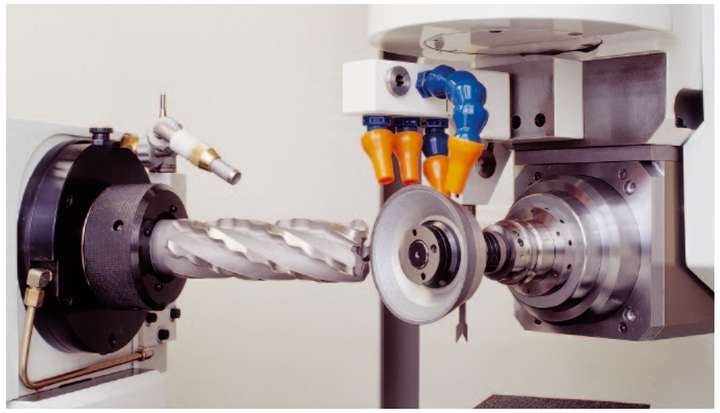


# **Pick-Up** Loading System

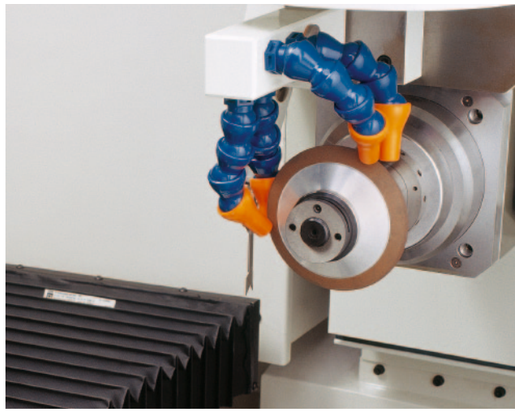
## Capacity:

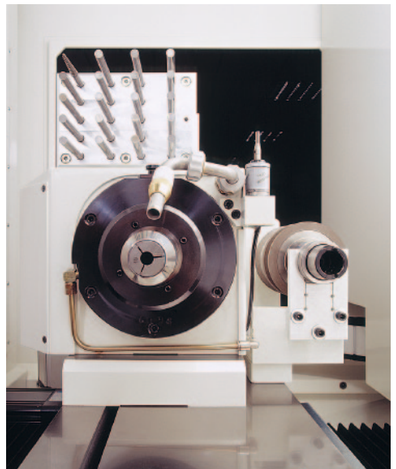
- 3.0 to 5.0 mm shank diameter 40 tools
- 5.1 to 8.0 mm shank diameter 32 tools
- 8.1 to 11.0 mm shank diameter 28 tools
- 11.1 to 14.0 mm shank diameter 24 tools
- 14.1 to 20.0 mm shank diameter 20 tools

Optimized kinematics attributed to a rotating grinding wheel



The spindle motor is water cooled and direct-drive (belt-free)





Automatic changing of the grinding wheels via HSK spindle adapters

# **Industry Leader** with a High Degree of Automation

**Chain-driven loader – Capacity 160 tools**
- including the tool loading device
- installed within the grinding enclosure
- for production and regrinding

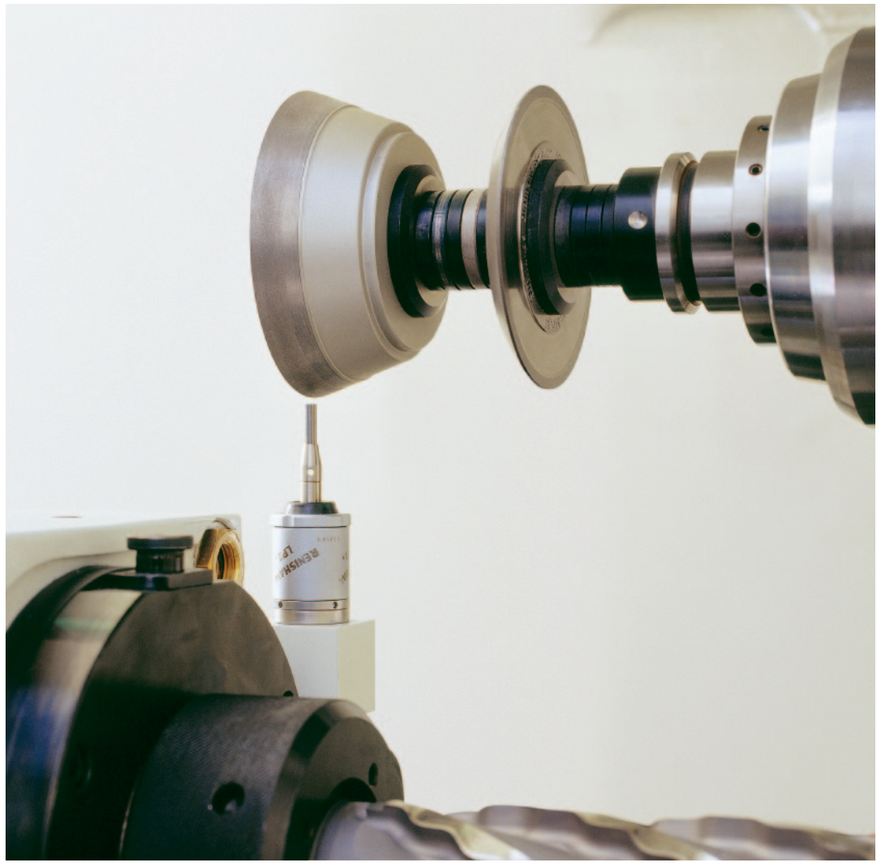
**Automatic collet changeover simplifies a “chaotic” arrangement of tool types and diameters.**

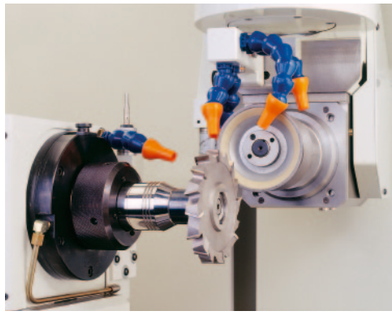

# **Exact Measuring and Positioning**

## To The Point

- Exact orientation of the tools via 3D-measuring probe
- Automatic measurement of grinding wheels (ie. diameter, flange length, grinding wheel angle and wheel width)
- Digital drives assure the highest dynamic control in all axes
- Table-mounted steady rest and tailstock

Workhead A-axis with direct drive up to 1,000 rpm for cylindrical grinding applications

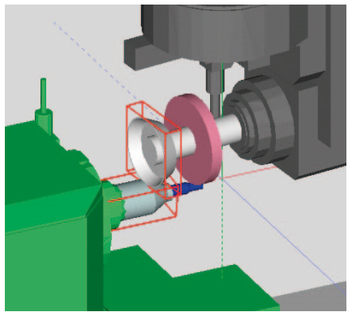




# **Greatest Variety** with Highest Precision

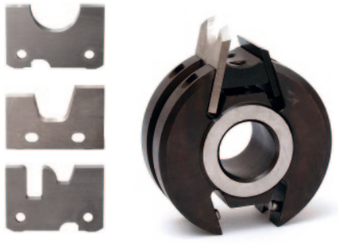
## NUMROTO*plus*® Software

- The flexible and multifunctional NUMROTO*plus*® 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

Profile – Form Cutters



Tools for the woodworking Industry

Drills and Step Drills

Deep-hole Drills

Shaper Cutters

Disc type Milling Cutters

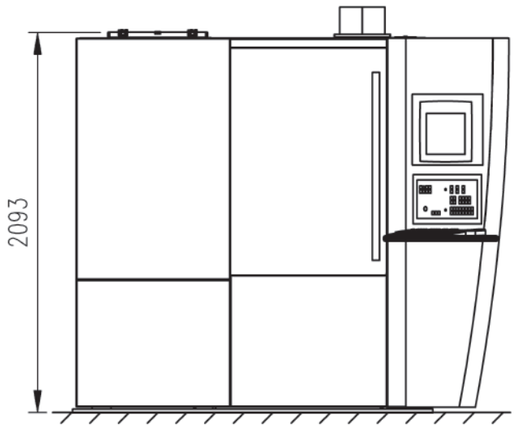
Burrs

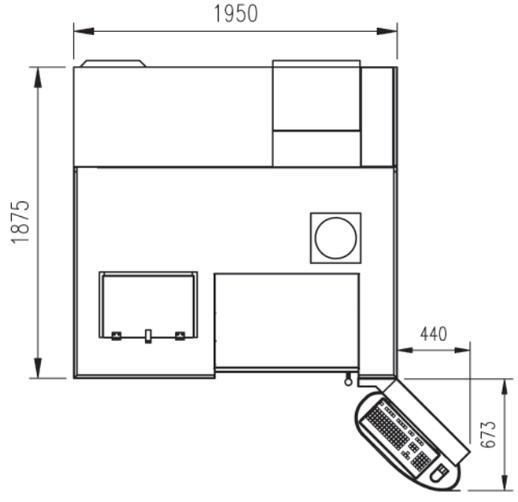
Taps

# **Technical** Data

| | |
|---|---|
| **Tool data** | |
| Max. diameter | 200 mm |
| Max. grind length during the complete grinding, measured at the front face of the work head | 270 mm (optional 360 mm) |
| **Longitudinal X-axis** | |
| Travel range | 530 mm |
| Feed rate | 0 – 15 m/min |
| Useful table area for tailstock and steady rest | 245 x 140 mm |
| **Cross slide Z-axis** | |
| Travel range | 320 mm |
| Feed rate | 0 – 15 m/min |
| **Vertical travel Y-axis** | |
| Travel range | 400 mm |
| Feed rate | 0 – 15 m/min |
| **Grinding wheel head B-axis** | |
| Swivel angle in horizontal plane | 240 deg. |
| Grinding wheel arbor with rapid clamping | HSK-C / E50 |
| Grinding spindle speed is infinitely variable | 2.000 – 12.000 rpm (optional 20.000 rpm) |
| Max. Grinding wheel diameter | 150 mm |
| **Grinding wheel changer** | |
| Number of magazine stations | 2 (optional 4) |
| **Work head A-axis with direct drive** | |
| Work head spindle taper | Plane face (ISO 50) |
| Indexing accuracy | +/- 15“ |
| Max. rpm of work head spindle | 600 rpm (optional 1.000 rpm) |
| **Drive output rating** | |
| Grinding motor, peak capacity | 5 kW (optional 16 or 26 kW) |
| Longitudinal path drive motor X-axis | 2 kW |
| Work head drive motor A-axis | 3 kW |
| Cross travel drive motor Z-axis | 2 kW |
| Vertical travel drive motor Y-axis | 3 kW |
| Grinding head B-axis | 2 kW |
| **Weight approx.** | 3.500 kg |

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




SAACKE®

Gebr. SAACKE GmbH & Co. KG
Precision Tools and Tool & Cutter Grinding Machines
Kanzlerstr. 250
75181 Pforzheim
Fon (+49) 7231 / 956-0
Fax (+49) 7231 / 956-290
www.saacke-pforzheim.de
info@saacke-pforzheim.de

SAACKE GROUP