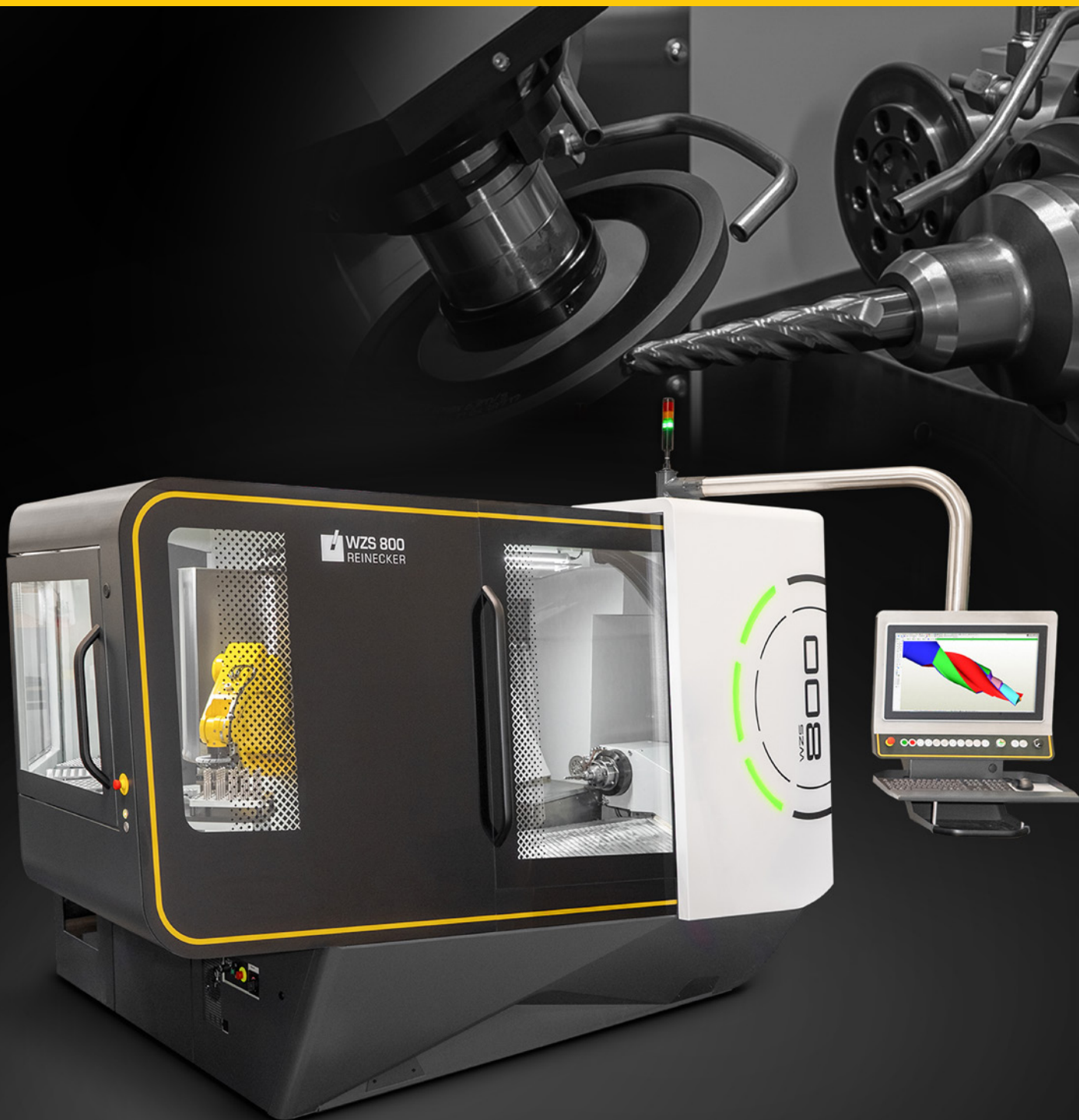


Tool Grinding Machine

**ULMER**  
WERKZEUGSCHLEIFTECHNIK

# WZS 800 REINECKER

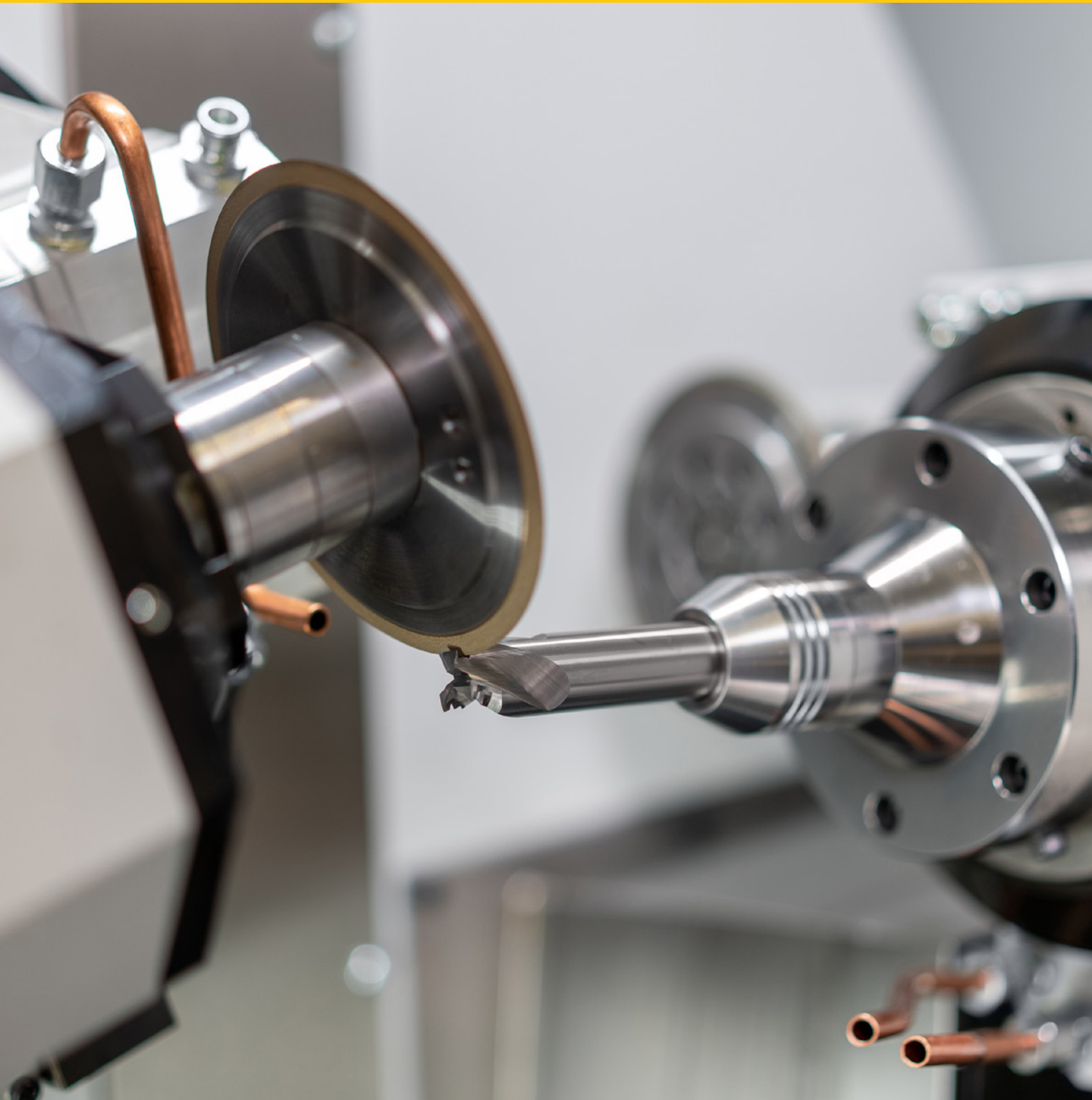
Discipline: Marathon



# WZS 800 REINECKER

**For maximum endurance**

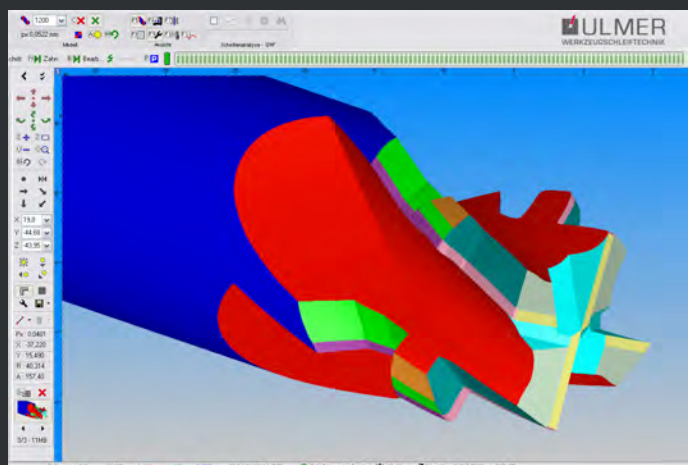
Performance and high degree of automation ensure the efficient production of large-sized batches of precision tools made of tungsten carbide and HSS.



# Good to know

- **Reliable results:** Polymer concrete machine base for optimum vibration damping, excellent rigidity, thermal stability, and efficient swarf removal flow.
- **Maximum precision:** Measuring systems with high resolution close to the grinding point. Optional linear drives.
- **High power density:** Grinding spindle and rotary axes with liquid-cooled direct drives.
- **Long autonomy periods:** 14-station grinding wheel magazine and automatic loader.
- **Ergonomics for maintenance and service:** Easy, fast maintenance and repair due to good accessibility to service-relevant areas.
- **Customized solutions:** A large number of further option modules allow the implementation of different requirements.
- **Innovative design:** Integrated operating status light with long-distance effect in the front area for quick recognition of operating statuses.
- **Up-to-date security:** Operating mode selector switch with RFID-coded recognition of users and their authorization, as well as integrated NUM-Safe safety architecture.
- **User-friendly operation:** Height-adjustable control panel with 24" multi-touch screen and NUMROTOplus® programming system with 3D simulation and collision detection.
- **NUM Flexium+:** CNC control with powerful NUM DriveX drives.

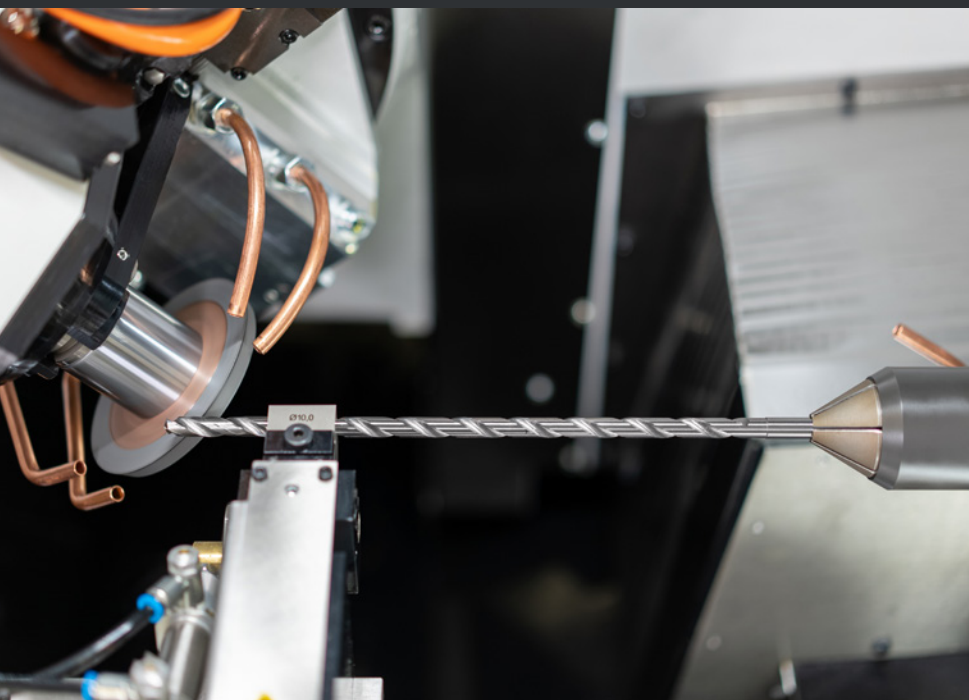
**NUMROTOplus®**  
Programming system  
with 3D-capability



# WZS 800 REINECKER

## Application & Equipment

Dynamic and precision in connection with automation solutions form a compact unit of state of the art production.



### Steady Rest

Support of long workpieces during grinding.

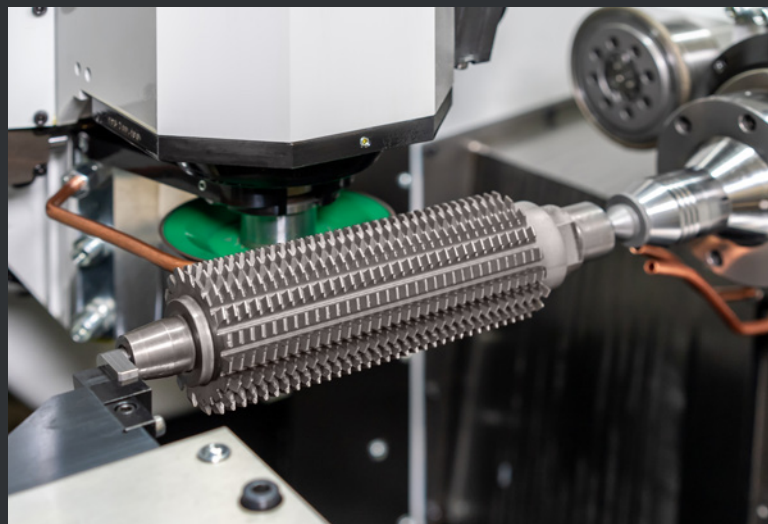
### Workpiece Clamping

A variety of customary clamping systems are available.



### Tail Stock

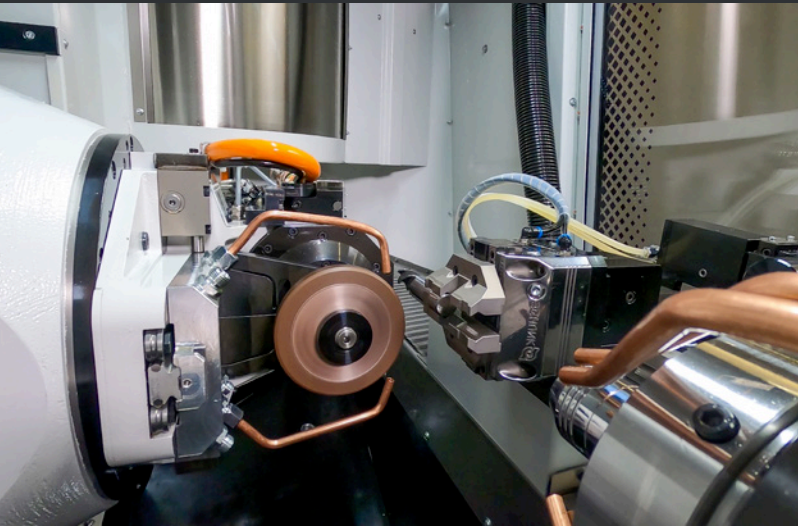
Different versions allow the clamping between centers.





### Clamping Force Block

Integrated shank machining, such as Weldon clamping surface or coolant grooves.



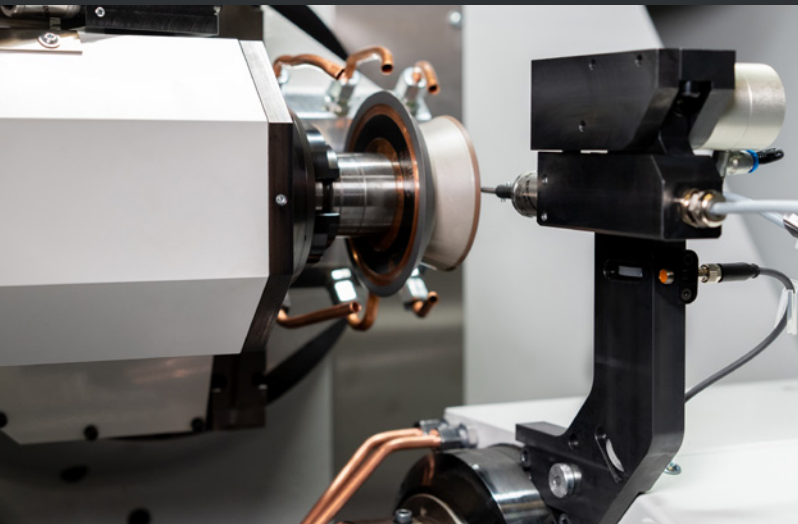
### Dressing Spindle

Process integrated grinding wheel dressing, optionally with acoustic emission sensor.



### Additional Probe, swiveling

Measuring grinding wheels in the machine.



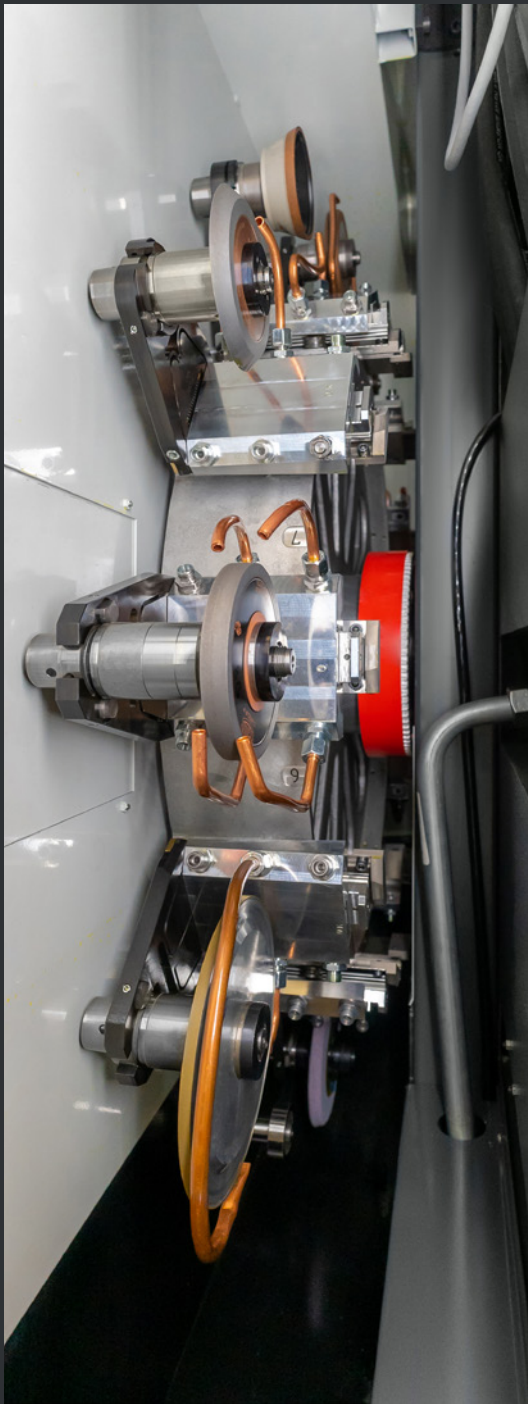
### Coolant Manifold

Automatic compensation of the coolant nozzles for dressable wheels.



# WZS 800 REINECKER

## Automation Solutions

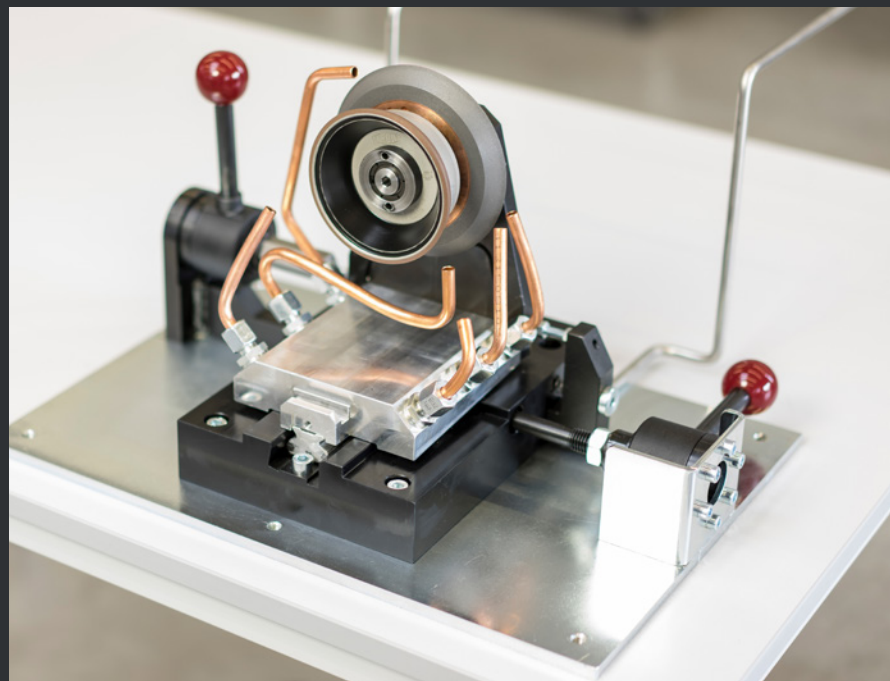


### Integrated Automatic Wheel Changer

- Quick changeover of grinding unit.
- Wheel pack and coolant manifold in one unit ensure effective coolant supply.
- Choice of
  - Standard: 12-fold dia. max. 250 mm [10"]
  - Optional: 14-fold dia. max. 150 mm [6"]

### Mounting Device

Fixture for ergonomic maintenance and preparation of the wheel packs.

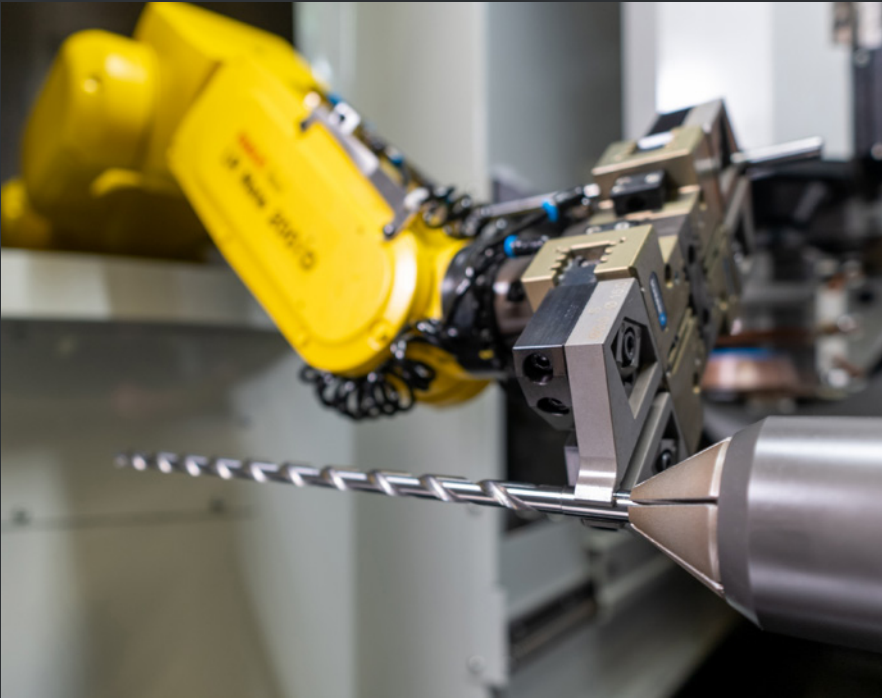


More about  
integrated  
processes:



**Robot Automation (optional)**

High capacity and fast changeover times guarantee long autonomy periods and the processing of large batch sizes.



Capacity (example):  
Loading device with up to 6 pallets  
Shank diameter 6 mm [0.23"] → 1,920 pieces  
Shank diameter 20 mm [0.8"] → 360 pieces



# WZS 800 REINECKER

## Technical Details

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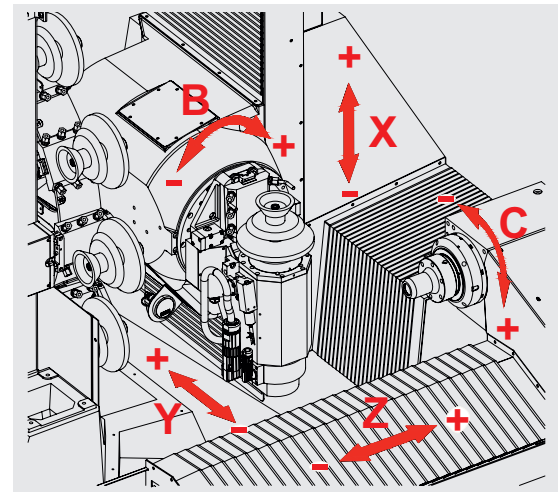
### Performance Data WZS 800

<b>Travels of axes</b>	X-axis	350 mm [14"]
	Y-axis	590 mm [23"]
	Z-axis	700 mm [27.5"]
	B-axis	-180° / +90°
	C-axis	n x 360°
<b>Resolution</b>	X, Y, Z-axis	0.0001 mm [4 millionths"]
	B, C-axis	0.0001°
<b>Axis drives</b>	X, Y, Z-axis	5 kN
	B-axis	350 Nm
	C-axis	60 Nm
	Rapid travel speeds X/Y/Z	15 / 30 / 30 m/min
<b>Grinding spindle</b>	Motorized spindle	Ø 170 x 408 mm [6.7 x 16.1"]
	Nominal Power	22 kW [30 hp]
	Peak power	33 kW [44 hp]
	Speed infinitely	up to 9,000 (12,000) rpm
	Torque const.	35 Nm up to 6,000 rpm
	Grinding wheel Ø max. (Option)	203 (250) mm [8 (9.8)"]
	Internal taper	HSK 50E
<b>Workpiece spindle</b>	Internal taper	ISO-50
	Speed max.	up to 2,000 rpm
	Torque max.	60 Nm
<b>Machine</b>	Total connected load	25 kVA
	Supply voltage/Frequency	400 V-50/60 Hz
	Dimensions W x L x H	3,000 x 2,400 x 2,200 mm [118" x 94.5" x 86.5"]
	Weight	approx. 6.7 t [15,000 lbs.]

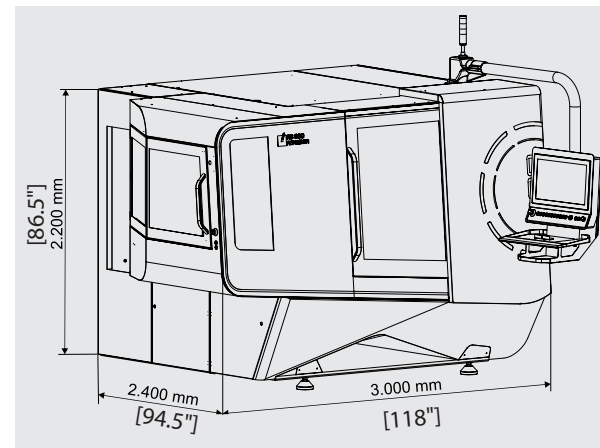
### Workpiece Dimensions (measuring from taper zero line ISO 50)

<b>Manual loading</b>	Ø max.	200 mm [8"]
	Length max.	600 mm [23.6"]
	Weight max.	20 kg [44 lbs.]
<b>Workpiece automation</b>	Ø max.	32 mm [1.25"]
	Length max.	450 mm [17.7"]
	Weight max.	2.5 kg [5.5 lbs.]

### Kinematic



### Dimensions [in mm + inch]



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