

Cylindrical Grinding Machine

 **ULMER**  
WERKZEUGSCHLEIFTECHNIK

# RS 800 REINECKER

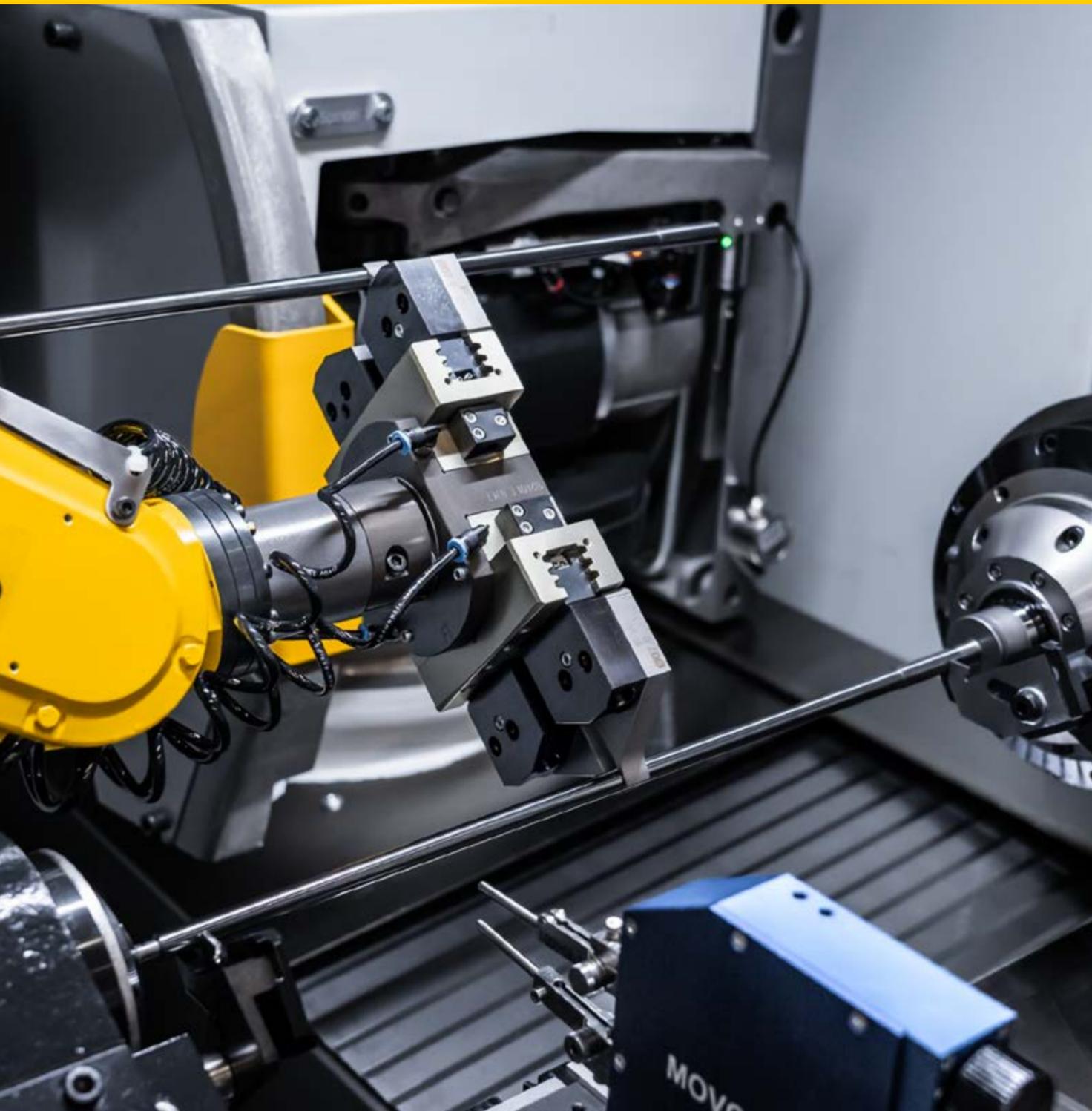
## Discipline: Relay race



# RS 800 REINECKER

## Flawless handover

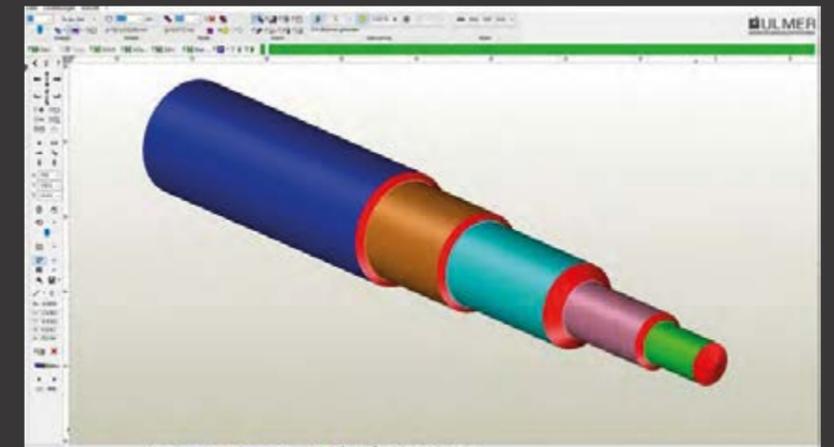
Flexible machining of solid carbide and HSS tool blanks and parts.



## Good to know

- **Reliable results:** Polymer concrete machine base for optimum vibration damping, excellent rigidity, thermal stability, and efficient swarf removal flow.
- **Process-optimized systems:** Grinding unit with 400 mm [16"] wheel diameter, optional tailstock spindle drive and automatic balancing system.
- **High powered grinding:** Two liquid-cooled motor grinding spindles enable roughing and finishing operations of the highest quality in one setup.
- **Long autonomy periods:** Workpiece automation with expandable loader capacity.
- **Customized solutions:** Different workpiece clamping systems offer a maximum of possibilities with short setup times. Parts can be held using a chuck or between centers with no drive dog required.
- **Ergonomics for maintenance and service:** Easy, fast maintenance and repair due to good accessibility to service-relevant areas.
- **Innovative design:** Integrated operating status light in the front for far away 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



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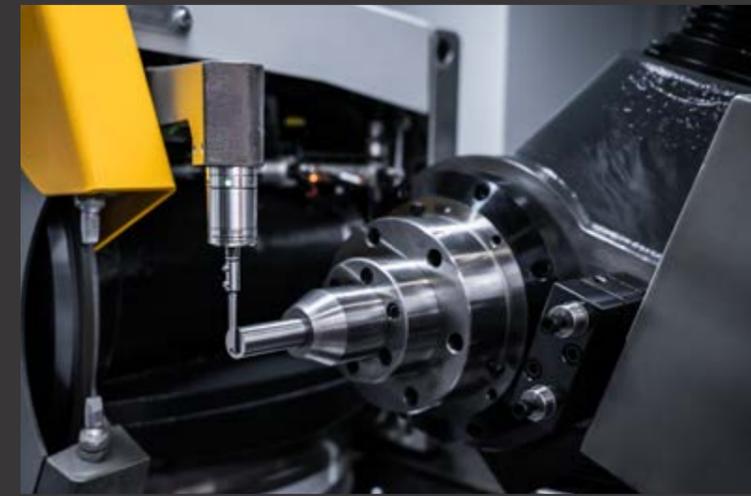
## Application & Equipment

The dynamic interaction of all components ensures optimized processes, precision and dimensional stability.



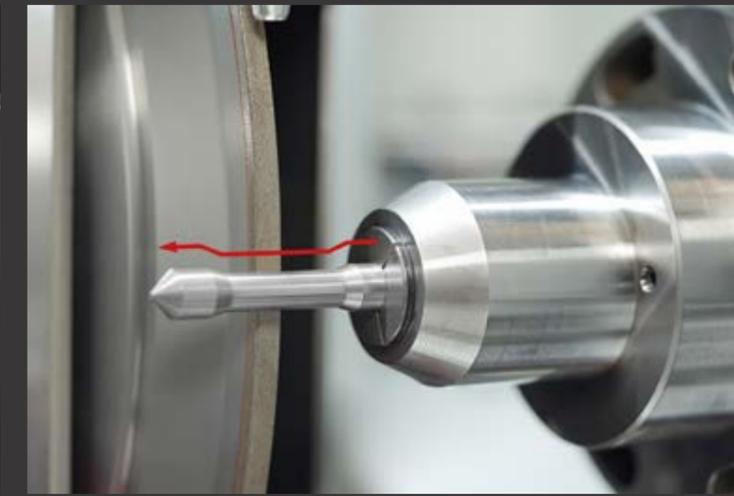
### Grinding between centers

- Workpiece can be machined over the entire length in one setup.
- Center pressure is generated from the workpiece spindle.
- Driven tailstock spindle synchronous with workpiece spindle optional.



### Swivelling Probe

Precise automatic detection of the axial workpiece position.

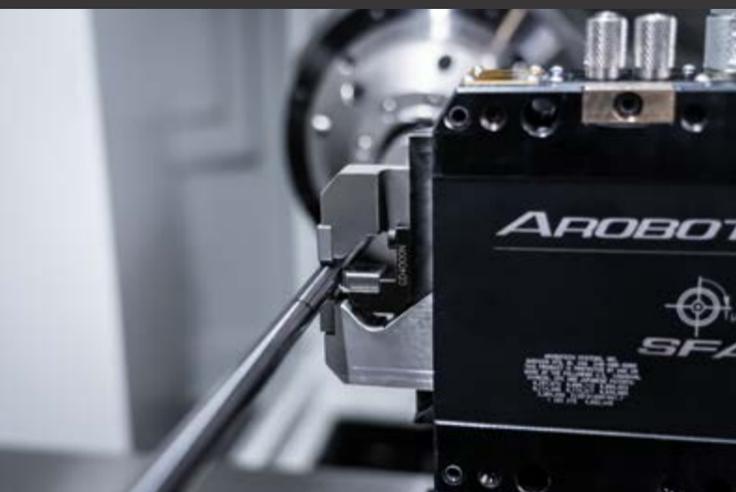


### Contour / Peelgrinding

High precision machining of slender workpieces with less cutting force due to small contact zone.

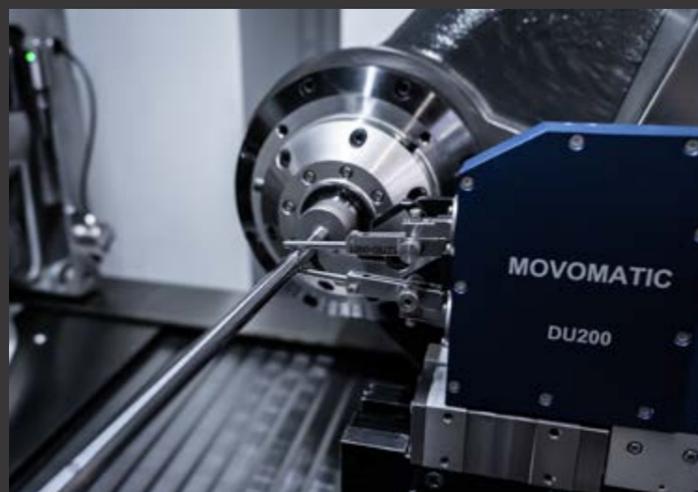
### Steady Rest

Reliable support during the whole grinding process.



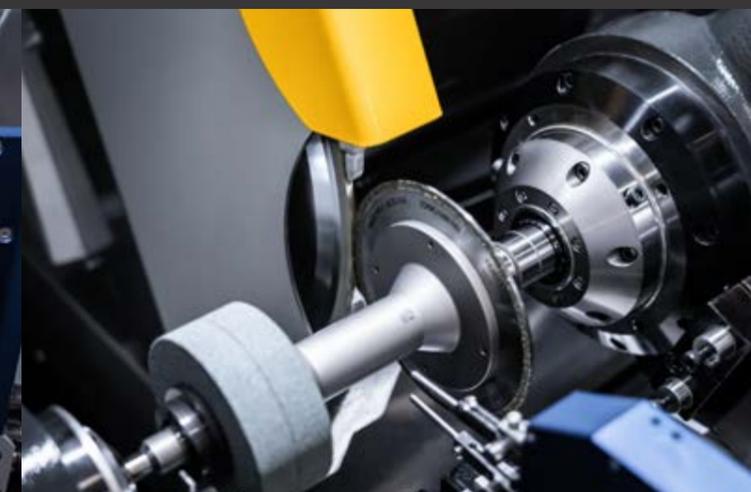
### Measuring Unit

Close-to-process measuring with automatic compensation.



### Dressing

Sharpening and forming of both grinding wheels directly in the machine.



### Optional Swivelling Grinding Unit

- Back taper 3°
- Front taper 30°

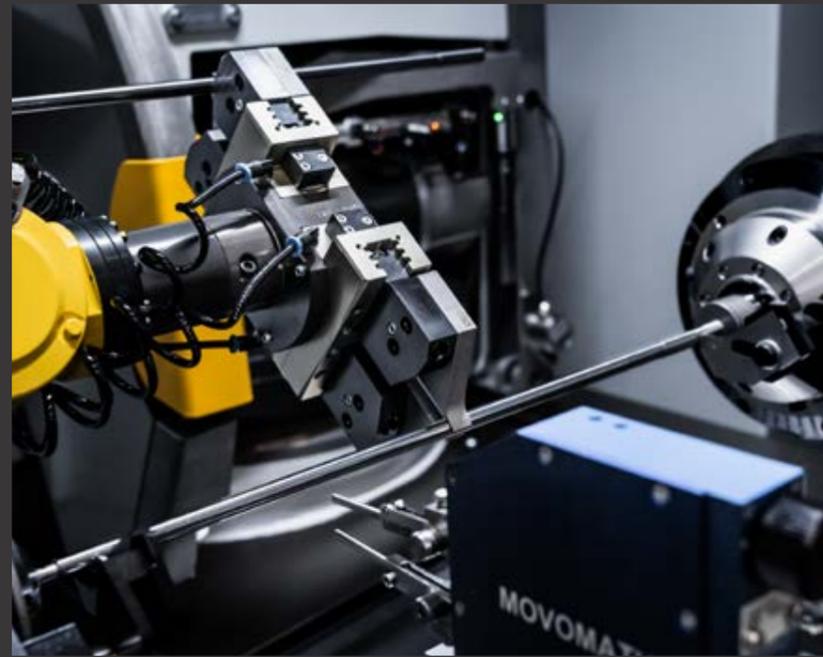


# RS 800 REINECKER Automation Solutions



## Robot Automation

Simple set-up and efficient changeover of workpieces, also in hydraulic chucks.



## Loading Device

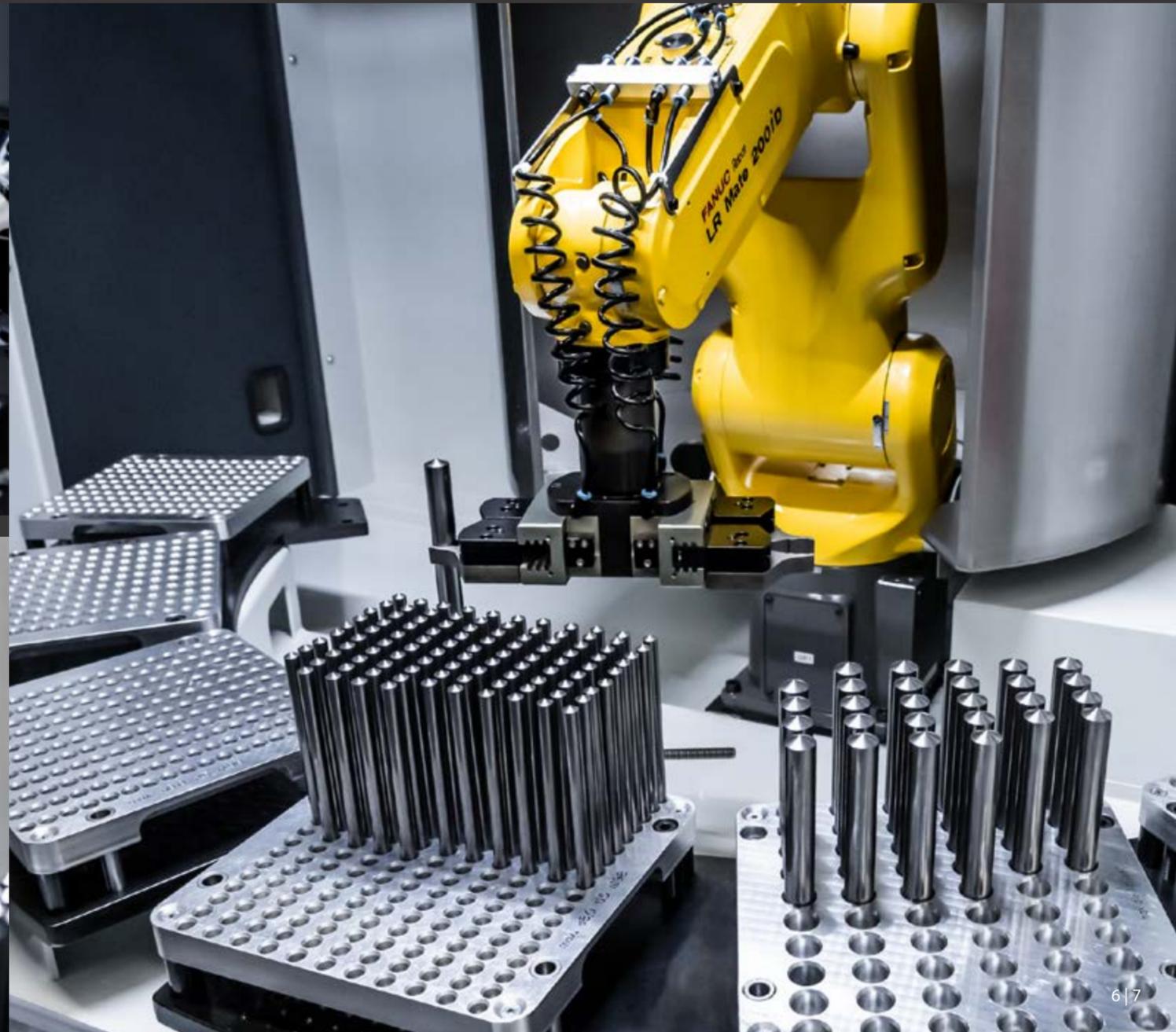
High capacity and fast changeover times provide efficient processing of large batch sizes.



Capacity (example):

Shank diameter 6 mm [0.23"] → 1,920 pieces

Shank diameter 20 mm [0.8"] → 360 pieces



# RS 800 REINECKER

## Technical Details

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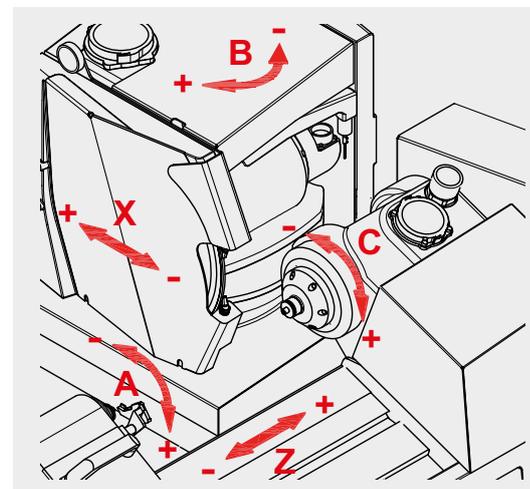
### Performance Data RS 800

<b>Travels of axes</b>	X-axis	319 mm [12.5"]
	Z-axis	730 mm [28.75"]
	B-axis	-195° / +95°
	C-axis	n x 360°
	A-axis (option)	n x 360° (synchron C)
<b>Resolution</b>	X, Z-axis	0.0001 mm [4 millionths"]
	B-axis	0.0001°
	C-axis	0.001°
	A-axis (option)	0.001°
<b>Axis drives</b>	X, Z-Achse	5 kN
	Rapid travel speed X/Z	15 / 30 m/min
<b>Grinding spindle</b>	Motorized spindle	Ø 164 x 450 mm
	Nominal power	11 kW [15 hp]
	Peak power	17 kW [23 hp]
	Speed infinitely	up to 6,500 rpm
	Torque const. S6 <sub>60%</sub>	20 Nm to 5,500 rpm
	Grinding wheel Ø max.	400 mm
	Tool holder	HSK-E80
	Cutting speed	<140 m/s
<b>Workpiece spindle</b>	Interface attachment	REINECKER Standard
	Speed max.	3,000 rpm
	Torque max.	22 Nm
<b>Machine</b>	Total connected load	27 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. 6.2 t [13,700 lbs]

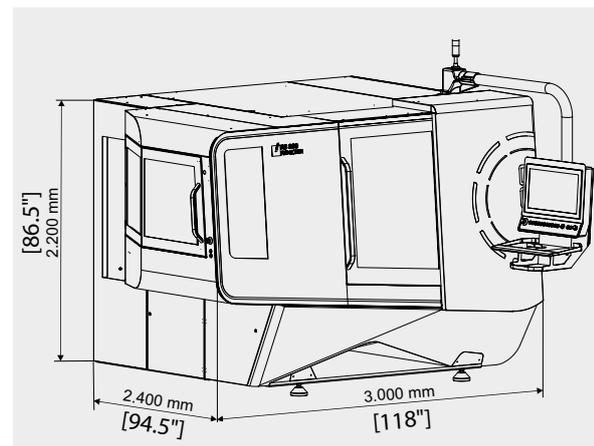
### Workpiece Dimensions

<b>Manual loading</b>	Ø max.	100 / 200 mm [3.9/7.9"]
	Length max.	700 / 500 mm [27.6/19.7"]
	Weight max.	20 kg [44 lbs.]
<b>Workpiece automation</b>	Ø max.	32 mm [1.25"]
	Length max.	480 mm [18.9"]
	Weight max.	2.5 kg [5.5 lbs.]

### Kinematic



### Dimensions [in mm + inch]



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