

Tool Grinding Machine WZS 800

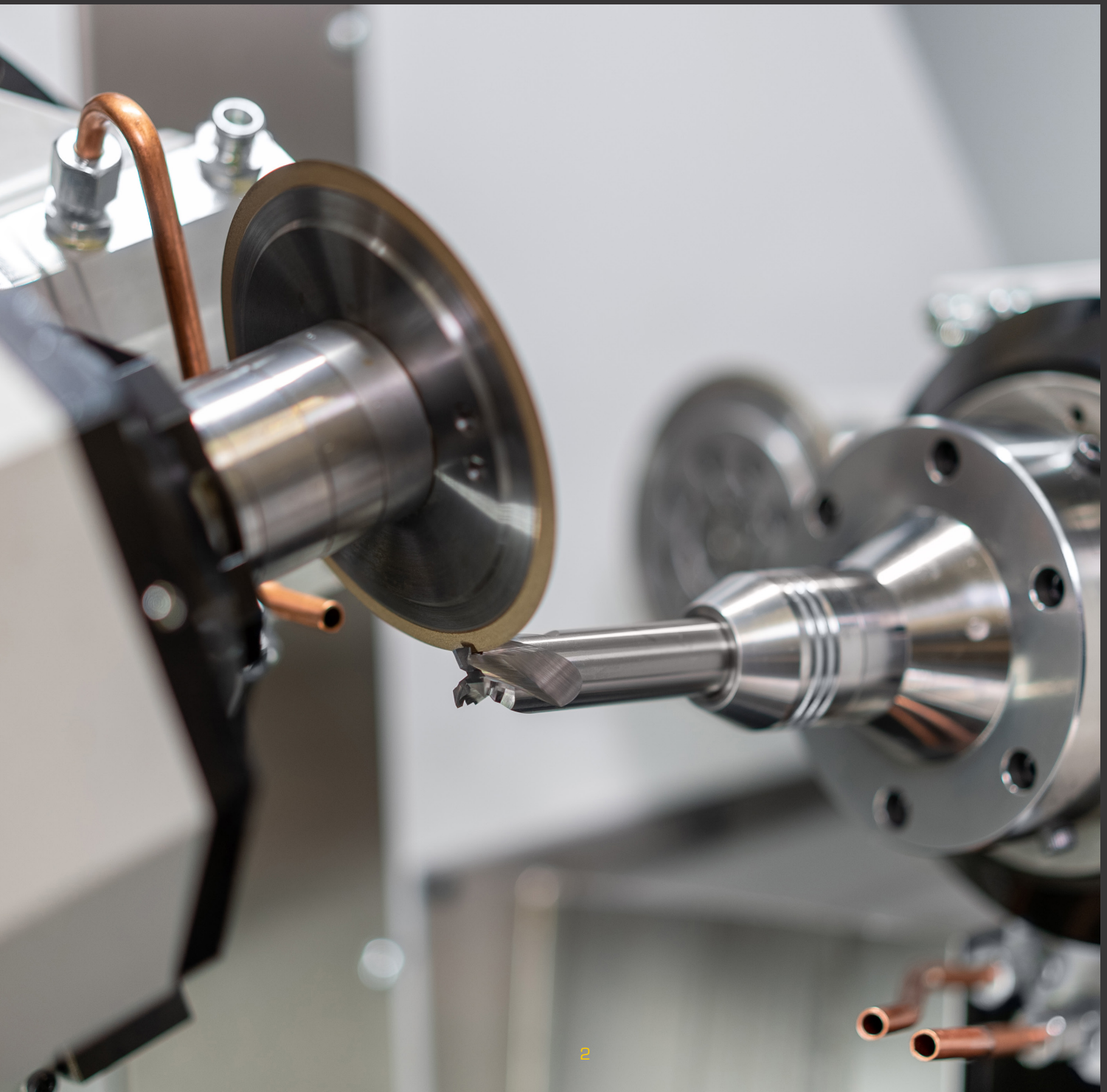
For Performance in Production



WZS 800

Productive Tool Grinding

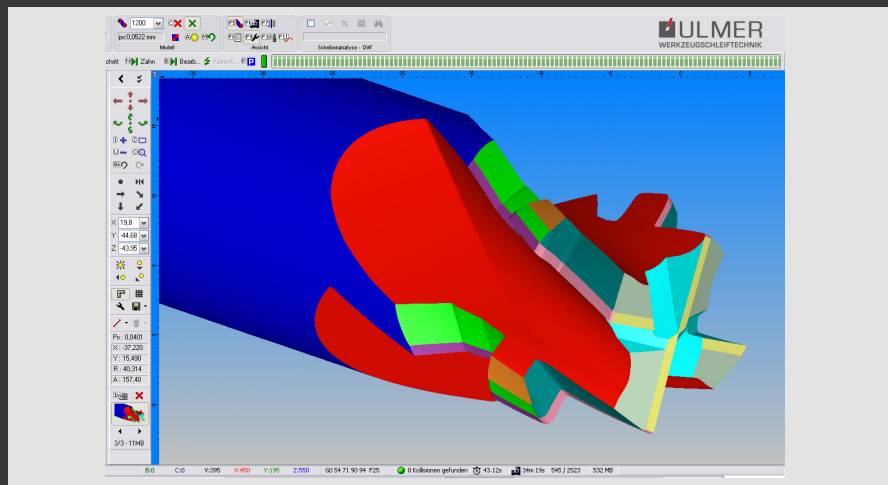
Performance and high degree of automation ensure the efficient production of medium-sized batches of precision tools made of tungsten carbide and HSS.



The advantages at a glance

- **Reliable results:** Polymer concrete machine base for optimum vibration damping, excellent rigidity, thermal stability, and efficient chip removal flow.
- **Maximum precision:** Measuring systems with high resolution close to the grinding point.
- **High power density:** Grinding spindle and rotary axes with liquid-cooled direct drives.
- **Long autonomy periods:** 12-fold grinding wheel magazine and automatic loader.
- **Optimized processes:** Optional linear drive and 14-fold grinding wheel magazine.
- **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 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.

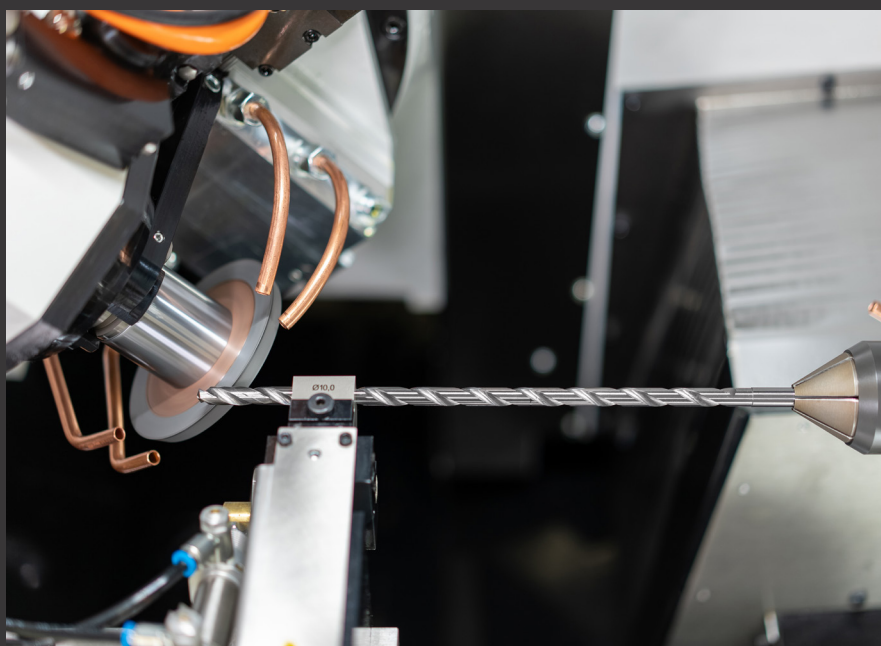
NUMROTOplus®
Programming system
with 3-D capability



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Application an Equipment

Performance, dynamic and precision in connection with automation solutions form a compact unit of economical production.



Steady Rest

Support of long workpieces during grinding.

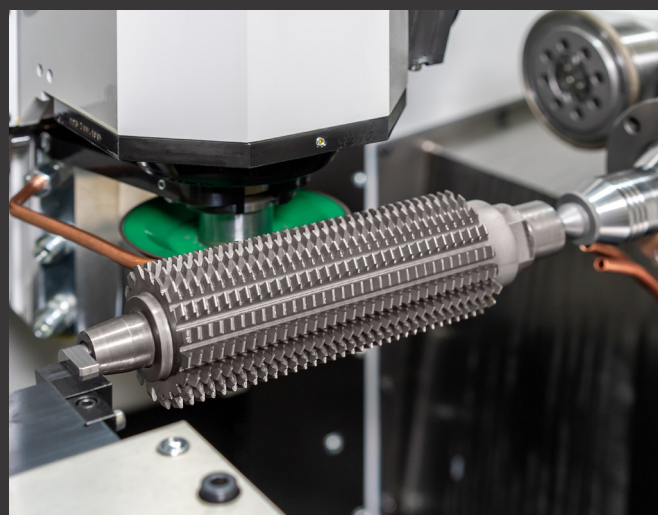
Workpiece Clamping

A variety of customary clamping systems are available.



Tail Stock

Different versions allow the clamping between centers.



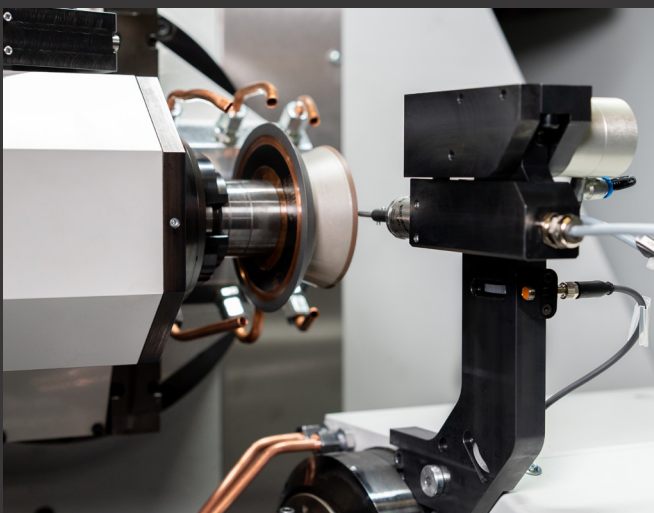
Dressing Spindle

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



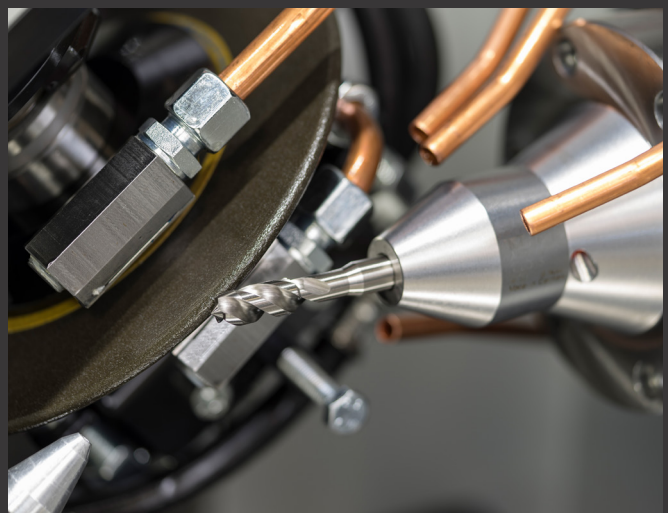
Additional Probe, fixed or swiveling

Measuring grinding wheels in the machine.



Coolant Manifold

Automatic tracking of the coolant nozzles for dressable wheels.



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Grinding wheel Automation



Integrated Automatic Grinding Wheel Changer

Quick changeover of grinding unit.
Wheel pack and coolant manifold in one unit ensure effective coolant supply.

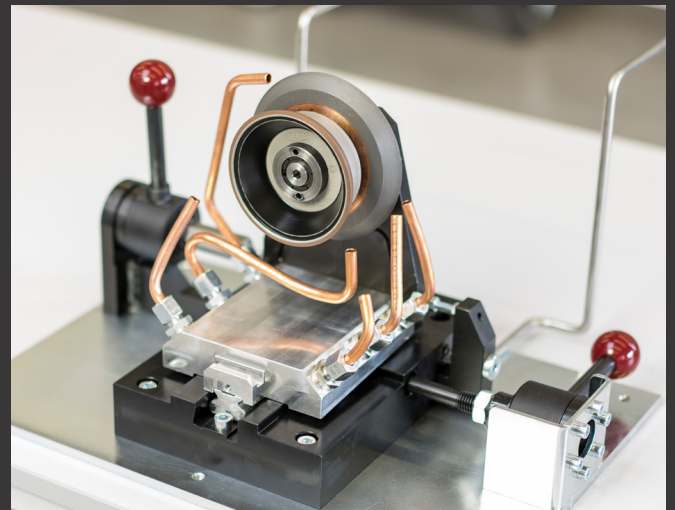
Grinding wheel dimensions

Standard: 12-fold → dia. max. 250 mm

Optional: 14-fold → dia. max. 150 mm

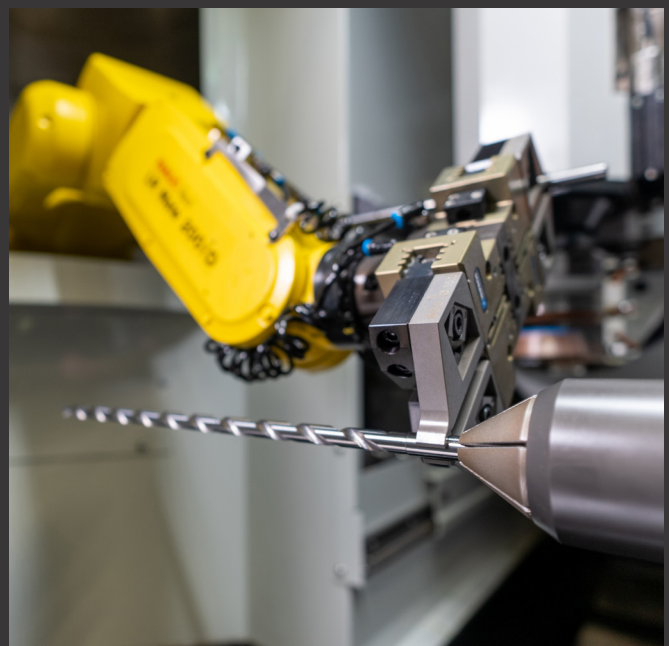
Mounting Device

Fixture for ergonomic maintenance and preparation of the wheel packs.



Robot Automation (optional)

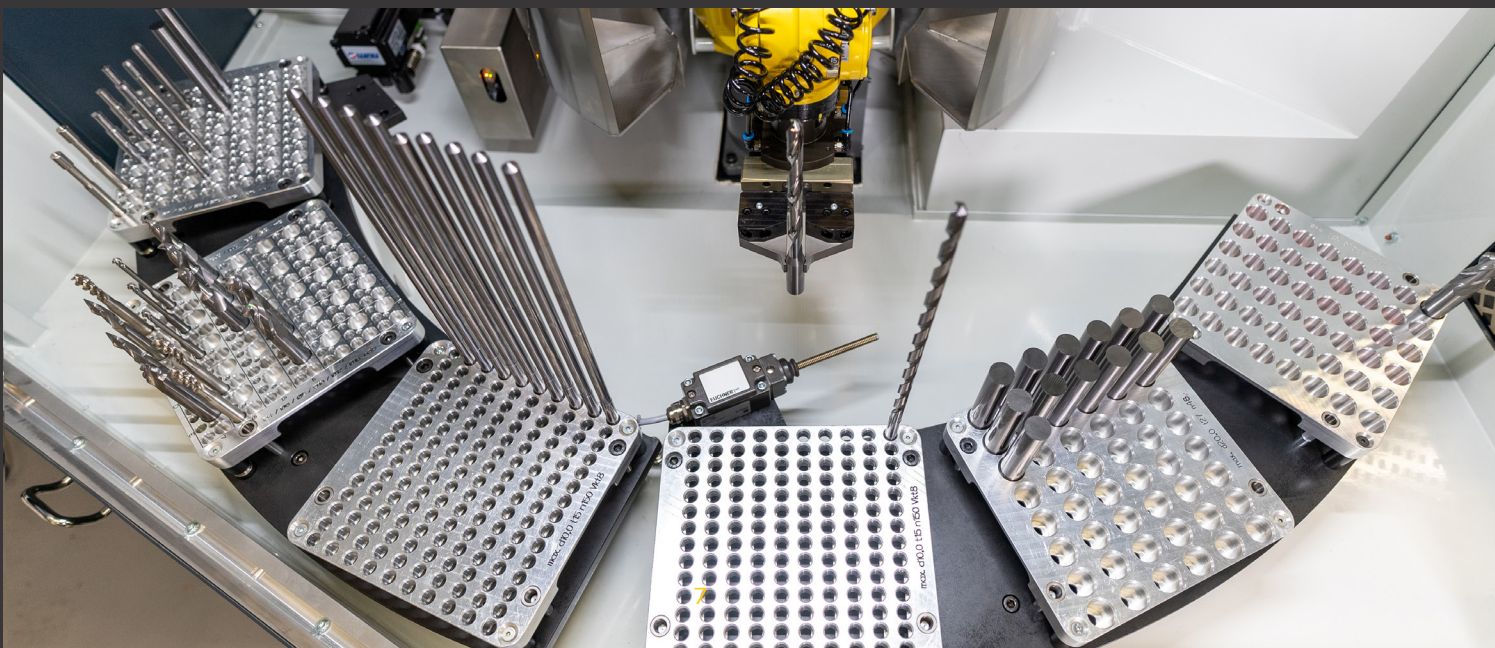
High capacity and fast changeover times guarantee long autonomy periods and the processing of large batch sizes.



Loading Device with up to 6 pallets

Capacity shank diameter 6 mm → up to 1920 pieces

Capacity shank diameter 20 mm → up to 360 pieces



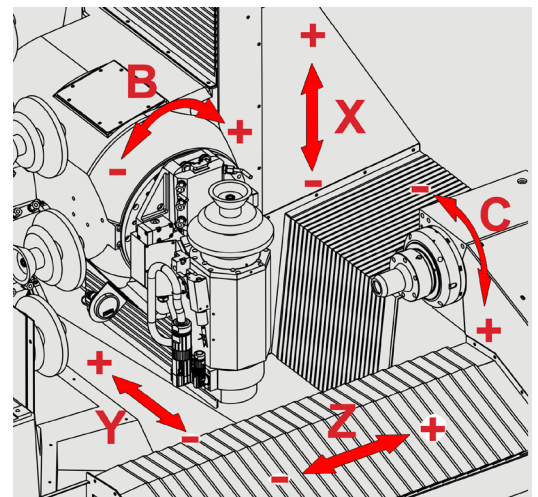
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Technical Details

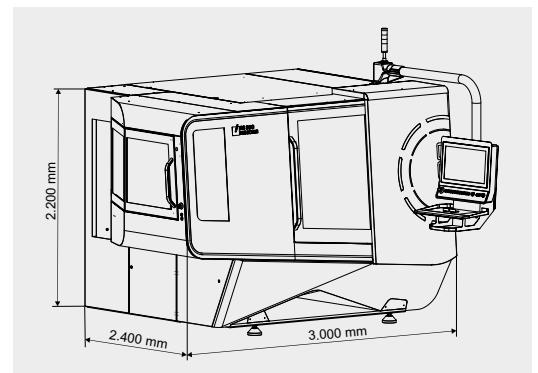
Technical Data WZS 800

Travels of axes	X-axis	350 mm
	Y-axis	590 mm
	Z-axis	700 mm
	B-axis	-180° / +90°
	C-axis	n x 360°
Resolution	X, Y, Z-axis	0.0001 mm
	B, C-axis	0.0001°
Axis drives	X, Y, Z-axis	5 kN
	B-axis	315 Nm
	C-axis	60 Nm
	Rapid travel speeds X / Y / Z	15 / 30 / 30 m/min
Grinding spindle	Motorized spindle	Ø 170 x 408 mm
	Power	22 kW
	Peak power	33 kW
	Torque infinitely	up to 9,000 (12,000) min ⁻¹
	Torque const.	35 Nm up to 6,000 min ⁻¹
	Grinding wheel Ø max.	250 mm
Workpiece spindle	Internal taper	ISO-50
	Speed	0 to 1,200 min ⁻¹
	Torque max.	60 Nm
Machine	Total connected load	25 kVA
	Supply voltage / Frequency	400 V / 50 Hz
	Dimensions W x L x H	3,000 x 2,400 x 2,200 mm
	Weight	approx. 6,7 t

Kinematic



Dimensions



Workpiece dimensions (measuring from taper zero line ISO 50)

Manual loading	Ø max.	200 mm
	Length max.	600 mm
	Weight max.	20 kg
Workpiece automation	Ø max.	32 mm
	Length max.	450 mm
	Weight max.	2.5 kg

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