**Tool Grinding Machine** 



# WZS 70 REINECKER Discipline: Decathlon



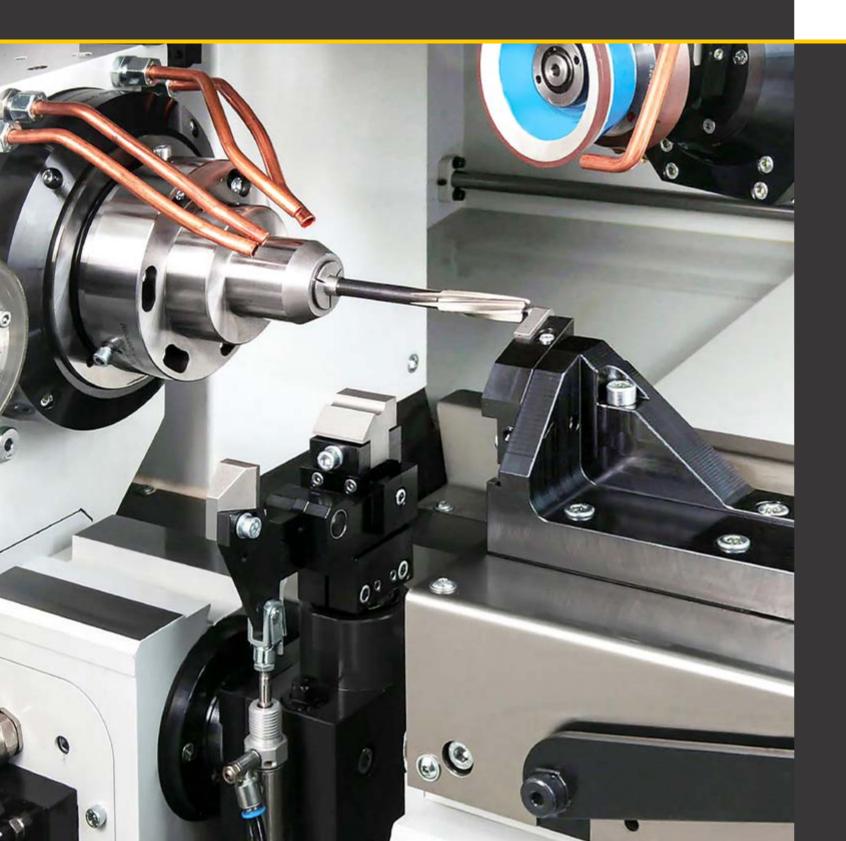




## WZS 70 REINECKER

### Multitalent in many disciplines

A variety of available options offer individual solutions for the production of contemporary precision tools made of carbide and HSS.



# Good to know

- machine dimensions.

- NUM DriveX drives.

NUMROTO*plus*® Programming system with 3D graphics



• Compact machine: Large workspace at small

**Short set-up times:** Precise interface for different workpiece clamping systems.

• Maximum precision: High resolution glass scales in all 5 axes (direct measuring systems).

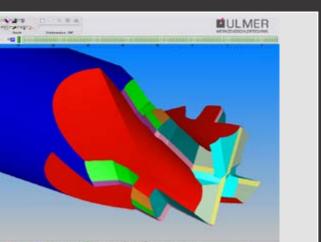
• High Performance: Direct drive systems (liquid cooled) for grinding spindle and rotating axes.

• Optimized processes: Optional linear drives and 12-station grinding wheel magazin.

• Ergonomics for maintenance and service: Easy, fast maintenance and repair due to good accessibility to service-relevant areas.

Individual solutions: A wide range of additional options offer the realization of different requirements.

**NUM Flexium+:** CNC control with powerful



## WZS 70 REINECKER **Application & Equipment**

Our "decathlete" covers a wide range of possible applications. The production of complex tool geometries and variable batch sizes.

Additional axis with steady rest and downholder Stabilization of long workpieces due to following support during grinding process.



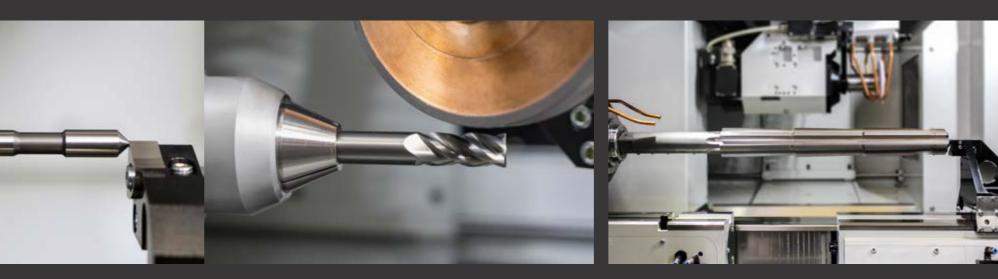
Second Probe Progress integrated measuring of grinding wheels in the machine.

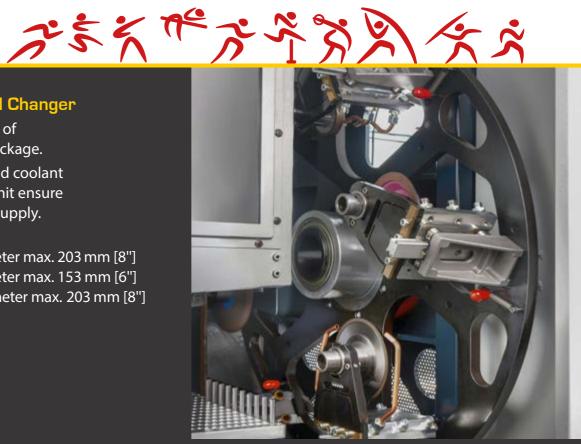


#### **Tail Stock**

Different versions allow the clamping between centers.

Workpiece Clamping Different industry standard clamping systems are available.





#### **Automatic Wheel Changer**

- Quick changeover of grinding wheel package.
- Wheel package and coolant manifold in one unit ensure effective coolant supply.
- Choice of 6-station for diameter max. 203 mm [8"] 8-station for diameter max. 153 mm [6"] 12-station for diameter max. 203 mm [8"]

Tailstock attachment for heavy workpieces Optional C-axis with max. 100 Nm torque to handle workpieces >15 kg.

## WZS 70 REINECKER **Automation Solutions**



**Pick-up Automation** Easy set-up and reliable changing of the workpieces also in hydraulic expansion chuck.



**Robot Automation** High capacity and fast changeover times provide efficient processing

of large batch sizes.

Capacity (example): Loading device with up to 4 pallets Shank diameter 10 mm  $[0.4"] \rightarrow 450$  pieces Loading device with up to 16 pallets Shank diameter 10 mm  $[0.4"] \rightarrow 2.250$  pieces

Capacity (example): Loading Device with up to three pallets. Shank diameter 10 mm  $\rightarrow$  300 pieces.

### Workpiece Pallets

Separation of workpiece pallets from workspace allows for anytime quality inspection.





More about automation:



## WZS 70 REINECKER Technical Details

### Performance Data WZS 70

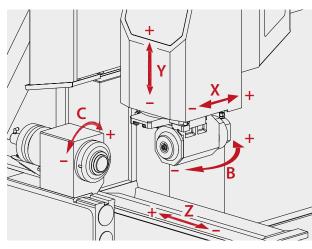
Travels of axes	X-axis	740 mm [29.1"]
	Y-axis	250 mm [9.8"]
	Z-axis	740 mm [29.1"]
	B-axis	-180 / +210°
	C-axis	n x 360°
Resolution	X, Y, Z-axis	0,0001 mm
	B, C-axis	0,0001°
Axis drives	X, Y, Z-axis	2,4 kN
	B-axis	315 Nm
	Rapid travel speeds X / Y / Z	30 / 30 / 30 m/min
Grinding spindle	Motorized spindle	Ø 150 x 300 mm [5.9 x 11.8"]
	Nominal Power	10 kW [14 hp]
	Peak power	26 kW [35 hp]
	Speed infinitely (Option)	up to 9,000 rpm (12,000 rpm)
	Torque const.	24 Nm up to 6,000 rpm
	Grinding wheel Ø max.	203 mm [8"]
	Internal taper	HSK 50E
Workpiece spindle	Internal taper	ISO-50
	Speed standard (optional)	1,200 (2,000) rpm
	Torque max. (optional)	60 Nm (100 Nm)
Machine	Total connected load	15 kVA
	Supply voltage / Frequency	400 V - 50/60 Hz
	Machine (basic) W x L x H	2,120 x 2,680 x 2,420 mm [83.5 x 105.5 x 95.3 "]
	with add. robot $W \times L \times H$	3,130 x 2,680 x 2,420 mm [123.2 x 105.5 x 95.3 "]
	Weight	[13,200 lbs.]

(measuring from taper zero line ISO 50)

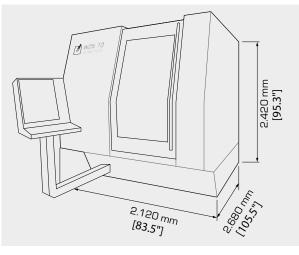
### **Workpiece Dimensions**

Ø max. 270 mm [10.6"] **Manual loading** Length max. 570 mm [22.4"] Weight max. 20 kg [44 lbs.] 32 mm [1.26"] Ø max. Workpiece Length max. 450 mm [17.7"] automation (robot) Weight max. 2.5 kg [5.5 lbs.] 25 mm [0.98"] Ø max. Workpiece 200 mm [7.9"] Length max. automation (Pick up) Weight max. 1.5 kg [3.3 lbs.]

### Kinematic



### Dimensions [in mm + inch]



#### Ulmer Werkzeugschleiftechnik GmbH & Co.KG August-Nagel-Str. 9

89079 Ulm-Einsingen, Germany Phone +49(0)7305/171-324 Fax +49(0)7305/171-328 info@werkzeugschleifen.de www.werkzeugschleifen.de



