

TRADITION IN TOOL GRINDING SINCE 1859.

Since 1859, the REINECKER brand has been known for innovative and reliable machines for the production of precision tools. For over 25 years, these have been manufactured in southern Germany by Ulmer Werkzeugschleiftechnik.

Our many years of experience in the field of tool grinding make us a recognised partner for our customers, who can rely not only on precision and performance, but also on application-specific solutions – from small family businesses to large corporations.

At our location in Ulm-Eisingen, approximately 170 employees are involved in the development, design, manufacture and sale of machine parts and grinding machines.

The high-performance REINECKER machines offer solutions for the entire process chain for the manufacture of precision tools – from end machining and cylindrical grinding to geometric grinding.

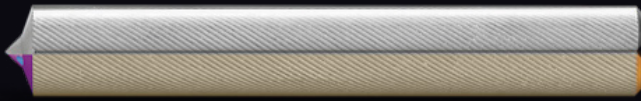
In addition to a growing sales and service network, our global activities are successfully supported by our two subsidiaries, REINECKER ITALIA and REINECKER AMERICA.





WE COVER THE ENTIRE PROCESS CHAIN.

From the blank to the finished precision tool.



END PROFILE GRINDING

Grinding of tips, chamfers and grooves in any combination on tool blanks made from tungsten carbide or HSS.

CYLINDRICAL GRINDING

Flexible machining of solid carbide and HSS tool blanks and parts, utilizing contour peel grinding and plunge grinding.



TOOL GRINDING

Efficient production and re-sharpening of state of the art tungsten carbide and HSS.



	SF 50 REINECKER	RS 50 REINECKER	RS 800 REINECKER	WZS 8 REINECKER	WZS 70 REINECKER	WZS 800 REINECKER
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Travels of axes

X-axis	220 mm [8.7"]	220 mm [8.7"]	319 mm [12.5"]	750 mm [29.5"]	740 mm [29.1"]	350 mm [14"]
Y-axis	-	-	-	250 mm [9.8"]	250 mm [9.8"]	590 mm [23"]
Z-axis	900 mm [35.4"]	900 mm [35.4"]	730 mm [28.6"]	600 mm [23.6"]	740 mm [29.1"]	700 mm [27.5"]
B-axis	-	+10° / +90° (optional)	-195° / +95°	+20° / -200°	-180° / +210°	-180° / +90°

Grinding spindle

Nominal power	11 kW [15 hp]	11 kW [15 hp]	11 kW [15 hp]	10 kW [14 hp]	10 kW [14 hp]	22 kW [30 hp]
Peak power	17 kW [23 hp]	14 kW [19 hp]	17 kW [23 hp]	16 kW [21.5 hp]	26 kW [35 hp]	33 kW [44 hp]
Speed infinitely (option)	up to 6,500 rpm	500 up to 7,500 rpm	up to 6,500 rpm	up to 9,000 (12,000) rpm	up to 9,000 (12,000) rpm	up to 9,000 (12,000) rpm
Torque const.	20 Nm up to 5,500 rpm	27 Nm up to 5,000 rpm	20 Nm up to 5,500 rpm	12 Nm up to 9,000 rpm	24 Nm up to 6,000 rpm	35 Nm up to 6,000 rpm
Grinding wheel ø max. (option)	300 mm [11.8"]	350 mm [14"]	400 mm [15.7"]	150 mm [5.9"]	203 mm [8"]	203 (250) mm [8 (9.8)"]

Workpiece spindle

Speed max. (option)	2,000 rpm	3,000 rpm	3,000 rpm	2,000 rpm	1,200 (2,000) rpm	2,000 rpm
Torque max. (option)	22 Nm	22 Nm	22 Nm	60 Nm	60 Nm (100 Nm)	60 Nm

Workpiece dimensions (manual loading)

ø max.	32 mm [1.3"]	50 mm [2"]	100 / 200 mm [3.9/7.9"]	200 mm [8"]	270 mm [10.6"]	200 mm [8"]
Length max.	450 mm [17.7"]	460 mm [18.1"]	700 / 500 mm [27.6/19.7"]	250 mm [9.8"]	570 / 700 mm [22.4 / 27.6"]	600 mm [23.6"]
Weight max. (option)	20 kg [44.1 lbs.]	20 kg [44.1 lbs.]	20 kg [44.1 lbs.]	20 kg [44.1 lbs.]	20(60) kg [44.1(132.3) lbs.]	20 kg [44.1 lbs.]

Workpiece dimensions (automatic loading)

ø max.	32 mm [1.3"]	32 mm [1.3"]	32 mm [1.3"]	32 mm [1.3"]	32 mm [1.3"]	32 mm [1.3"]
Length max.	450 mm [17.7"]	460 mm [18.1"]	480 mm [18.9"]	150 / 250 mm [5.9 / 9.8"]	450 mm [17.7"]	450 mm [17.7"]
Weight max.	2.5 kg [5.5 lbs.]	2.5 kg [5.5 lbs.]	2.5 kg [5.5 lbs.]	2.5 kg [5.5 lbs.]	2.5 kg [5.5 lbs.]	2.5 kg [5.5 lbs.]

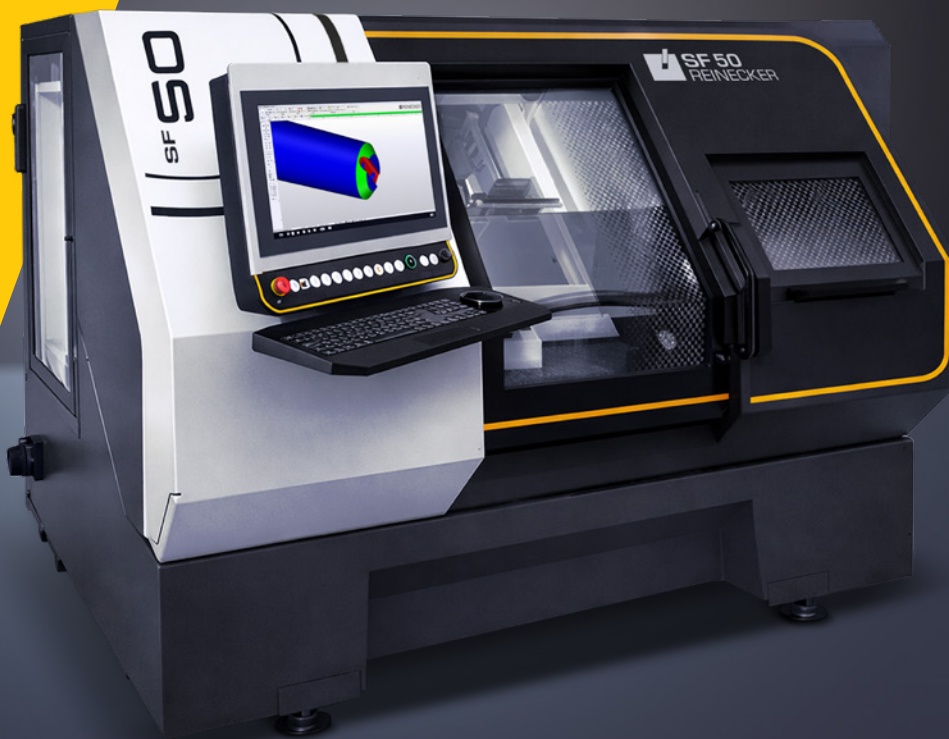
Machine dimensions

Basic machine W x L x H	2,420 x 2,130 x 1,800 mm [95.3 x 83.9 x 70.9"]	2,420 x 2,130 x 1,800 mm [95.3 x 83.9 x 70.9"]	3,000 x 2,400 x 2,200 mm [118.1 x 94.5 x 86.5"]	2,070 x 2,210 x 2,440 mm [81.5 x 87 x 96"]	2,120 x 2,680 x 2,420 mm [83.5 x 105.5 x 95.3"]	3,000 x 2,400 x 2,200 mm [118.1 x 94.5 x 86.5"]
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END PROFILE GRINDING MACHINE

SF 50 REINECKER

Discipline: Triathlon – The Three Challenge Champion



GOOD TO KNOW

- Individual geometries:
Production of tips, chamfers and connection grooves for coolant channels.
- Complete solution:
Integrated flipping station for end machining on both sides.
- Low setup effort:
Up to four different grinding wheels can be mounted on one fixture.
- Process optimization:
Robot automation is available as an option.
- Power-operated three-jaw chuck with interchangeable inserts for clamping ranges from \varnothing 3 mm [0.12"] to 32 mm [1.3"].
- User-friendly operation:
Control panel with 21.5" multi-touch screen.



Travels of axes

X-axis	220 mm [8.7"]
Z-axis	900 mm [35.4"]

Grinding spindle

Nominal power	11 kW [15 hp]
Peak power	17 kW [23 hp]
Speed infinitely	up to 6,500 rpm
Torque const.	20 Nm up to 5,500 rpm
Grinding wheel \varnothing max.	300 mm [11.8"]

Workpiece spindle

Speed max.	2,000 rpm
Torque max.	22 Nm

Workpiece dimensions (manual loading)

\varnothing max.	32 mm [1.3"]
Length max.	450 mm [17.7"]
Weight max.	20 kg [44.1 lbs.]

Workpiece dimensions (automatic loading)

\varnothing max.	32 mm [1.3"]
Length max.	450 mm [17.7"]
Weight max.	2.5 kg [5.5 lbs.]

Machine dimensions

W x L x H	2,420 x 2,130 x 1,800 mm [95.3 x 83.9 x 70.9"]
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CYLINDRICAL GRINDING MACHINE

RS 50 REINECKER

Discipline: Sprint – Quick to start and fast over the finish line



GOOD TO KNOW

- Individual solutions:
Generation of cylinder and cone surfaces in combination with points, chamfers, radii and steps.
- Reliable results:
High accuracy contours via peel grinding.
- High powered grinding:
Swiveling grinding unit for roughing and finishing of the highest quality in one setup.
- Low setup effort:
Two different grinding wheels can be mounted on one wheel adapter.
- Process-optimized systems:
Optional automatic loading device for machining small batches.
- Workpiece clamping in hydraulic expansion chucks and pressure collets.
- User-friendly operation:
Control panel with 21.5" multi-touch screen.



Travels of axes

X-axis	220 mm [8.7"]
Z-axis	900 mm [35.4"]
B-axis (option)	+10° / +90°

Grinding spindle

Nominal power	11 kW [15 hp]
Peak power	14 kW [14 hp]
Speed infinitely	500 up to 7,500 rpm
Torque const.	27 Nm up to 5,000 rpm
Grinding wheel ø max.	350 mm [13.8"]

Workpiece spindle

Speed max.	3,000 rpm
Torque max.	22 Nm

Workpiece dimensions

(manual loading)

ø max.	50 mm [2"]
Length max.	460 mm [18.1"]
Weight max.	20 kg [44.1 lbs.]

Workpiece dimensions

(automatic loading)

ø max.	32 mm [1.3"]
Length max.	460 mm [18.1"]
Weight max.	2.5 kg [5.5 lbs.]

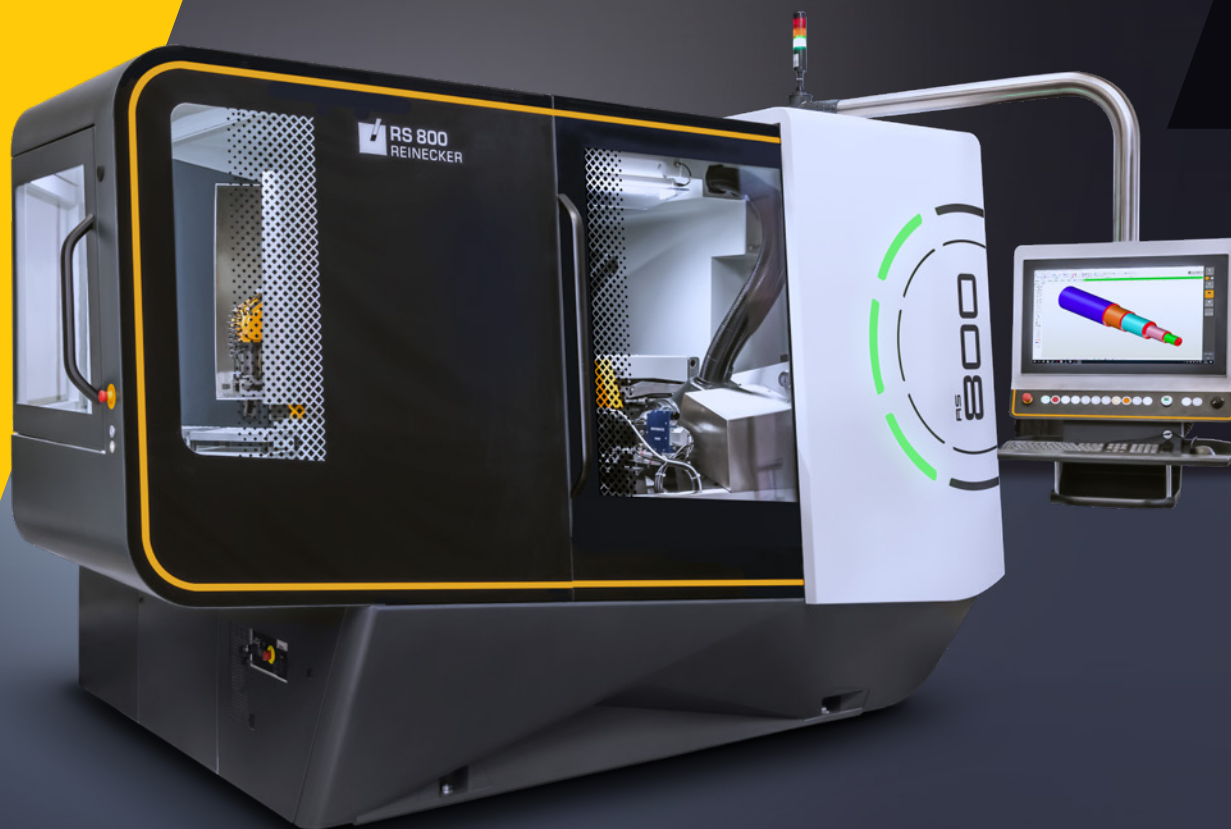
Machine dimensions

W x L x H	2,420 x 2,130 x 1,800 mm [95.3 x 83.9 x 70.9"]
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CYLINDRICAL GRINDING MACHINE

RS 800 REINECKER

Discipline: Relay race – Flawless handover



GOOD TO KNOW

- 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 for machining parts by using a chuck or being held between centers.
- Innovative design:

Integrated operating status light in the front for far away quick recognition of operating status.
- 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.

Travels of axes

X-axis	319 mm [12.5"]
Z-axis	730 mm [28.7"]
A-axis (option)	n x 360° (synchron C)
B-axis	-195° / +95°

Grinding spindle

Nominal power	11 kW [15 hp]
Peak power	17 kW [23 hp]
Speed infinitely	up to 6,500 rpm
Torque const. $S_6_{60\%}$	20 Nm up to 5,500 rpm
Grinding wheel \varnothing max.	400 mm [15.7"]

Workpiece spindle

Speed max.	3,000 rpm
Torque max.	22 Nm

Workpiece dimensions (manual loading)

\varnothing max.	100 / 200 mm [3.9 / 7.9"]
Length max.	700 / 500 mm [27.6 / 19.7"]
Weight max.	20 kg [44.1 lbs.]

Workpiece dimensions (automatic loading)

\varnothing max.	32 mm [1.3"]
Length max.	480 mm [18.9"]
Weight max.	2.5 kg [5.5 lbs.]

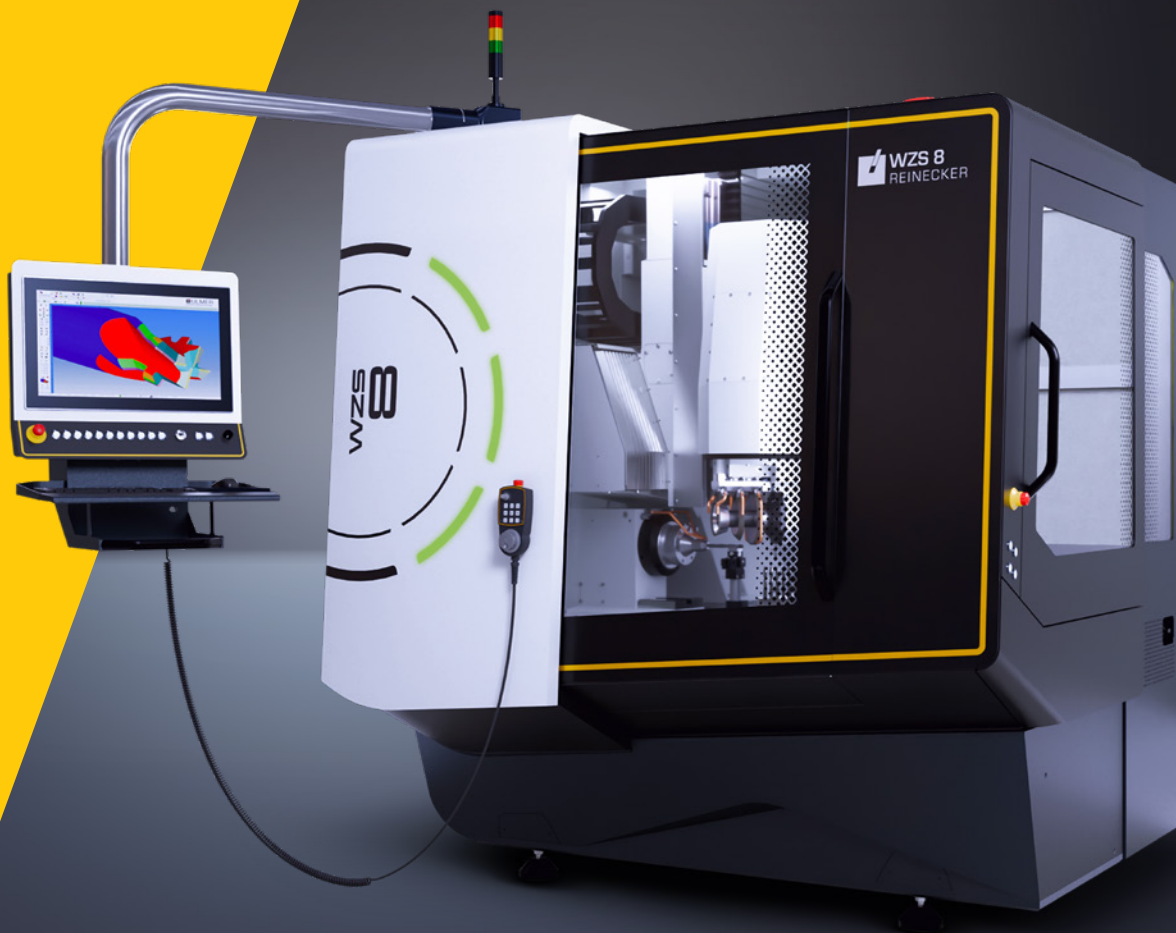
Machine dimensions

W x L x H	3,000 x 2,400 x 2,200 mm [118.1 x 94.5 x 86.5"]
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TOOL GRINDING MACHINE

WZS 8 REINECKER

Discipline: Freestyle – Production and resharpening



GOOD TO KNOW

- Low space requirement:
Compact machine with small dimensions.
- Maximum precision:
High-resolution measuring systems close to the grinding point.
- Dynamic and durable:
X and Z axes fitted with Linear Drive.
- Optimized processes:
8-fold grinding wheel magazine and selection of different solutions for workpiece automation as an option.
- Innovative design:
Integrated operating status light with remote effect in the front area for quick recognition of operating states.
- Up-to-date security:
Operating mode selector switch with RFID-coded recognition of users and their authorizations as well as integrated NUM-Safe safety architecture.
- User-friendly application:
Control panel with 24" multi-touch screen.
- NUM FlexiumPRO:
CNC control with powerful NUM DrivePro drives.

Travels of axes

X-axis	750 mm [29.5"]
Y-axis	250 mm [9.8"]
Z-axis	600 mm [23.6"]
B-axis	+20° / -200°

Grinding spindle

Nominal power	10 kW [14 hp]
Peak power	16 kW [21 hp]
Speed infinitely (option)	up to 9,000 (12,000) rpm
Torque const.	12 Nm up to 9,000 rpm
Grinding wheel ø max.	150 mm [5.9"]

Workpiece spindle

Speed max.	2,000 rpm
Torque max.	60 Nm

Workpiece dimensions (manual loading)

ø max.	200 mm [7.9"]
Length max.	250 mm [9.8"]
Weight max.	20 kg [44.1 lbs.]

Workpiece dimensions (automatic loading)

ø max.	32 mm [1.3"]
Length max.	150/250 mm [5.9/9.8"]
Weight max.	2.5 kg [5.5 lbs.]

Machine dimensions

W x L x H Basic machine	2,070 x 2,210 x 2,440 mm [81.5 x 87.0 x 96.1"]
W x L x H with robot att.	2,430 x 2,210 x 2,440 mm [95.7 x 87.0 x 96.1"]

TOOL GRINDING MACHINE

WZS 70 REINECKER

Discipline: Decathlon – Multitalent in many disciplines



GOOD TO KNOW

- Compact machine:
Large workspace at small machine dimensions.
- 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 drive and 12-station grinding wheel magazine.
- High degree of automation:
Loading device integrated or robot automation with up to 14 pallets (XL cell).

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°

Grinding spindle

Nominal power	10 kW [14 hp]
Peak power	26 kW [35 hp]
Speed infinitely (option)	up to 9,000 (12,000) rpm
Torque const.	24 Nm up to 6,000 rpm
Grinding wheel ø max.	203 mm [8"]

Workpiece spindle

Speed max. (option)	1,200 (2,000) rpm
Torque max. (option)	60 Nm (100 Nm)

Workpiece dimensions (manual loading)

ø max.	270 mm [10.6"]
Length max.	570 / 700 mm [22.4"]
Weight max. (option)	20 kg [44.1 lbs.] (60 kg [132 lbs.])

Workpiece dimensions (automatic loading)

ø max. Robot / Pick Up	32 mm [1.3"] / 25 mm [1"]
Length max. Robot / Pick Up	450 mm [17.7"] / 200 mm [7.9"]
Weight max. Robot / Pick Up	2.5 kg [5.5 lbs.] / 1.5 kg [3.3 lbs.]

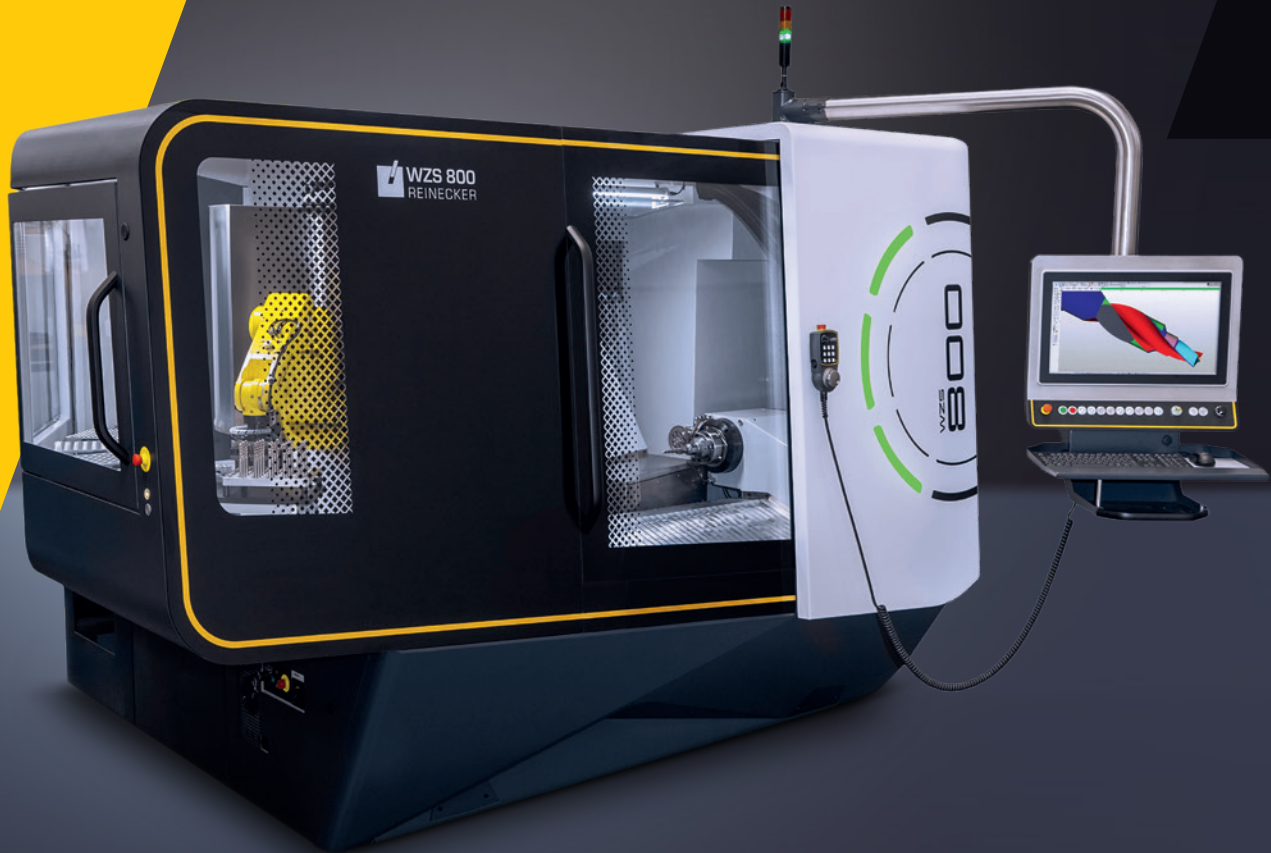
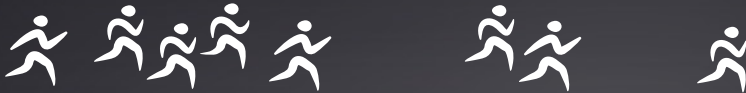
Machine dimensions

Basic machine W x L x H	2,120 x 2,680 x 2,420 mm [83.5 x 105.5 x 95.3"]
with robot att. W x L x H	3,130 x 2,680 x 2,420 mm [123.2 x 105.5 x 95.3"]

TOOL GRINDING MACHINE

WZS 800 REINECKER

Discipline: Marathon – For a maximum of endurance



GOOD TO KNOW

- **Maximum precision:**
 Measuring systems with high resolution close to the grinding point.
- **Long autonomy periods:**
 14-station grinding wheel magazine and automatic loader.
- **Optimized processes:**
 Optional linear drives and 12-station grinding wheel magazine with grinding wheels up to 250 mm [9.8"]
- **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.

Travels of axes

X-axis	350 mm [14"]
Y-axis	590 mm [23"]
Z-axis	700 mm [27.5"]
B-axis	-180° / +90°

Grinding spindle

Nominal power	22 kW [30 hp]
Peak power	33 kW [44 hp]
Speed infinitely (option)	up to 9,000 (12,000) rpm
Torque const.	35 Nm up to 6,000 rpm
Grinding wheel ø max. (option)	203 mm [8"] (250 mm [9.8"])

Workpiece spindle

Speed max.	2,000 rpm
Torque max.	60 Nm

Workpiece dimensions (manual loading)

ø max.	200 mm [7.9"]
Length max.	600 mm [23.6"]
Weight max.	20 kg [44.1 lbs.]

Workpiece dimensions (automatic loading)

ø max.	32 mm [1.3"]
Length max.	450 mm [17.7"]
Weight max.	2.5 kg [5.5 lbs.]

Machine dimensions

W x L x H	3,000 x 2,400 x 2,200 mm [118.1 x 94.5 x 86.5"]
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DRESSING MACHINE

K43C KIRNER

Discipline: Discus – All around the disks



GOOD TO KNOW

- Dressing and profiling of diamond and CBN grinding wheels.
- Machining of single wheels and wheel packages.
- Interface: Adapter ISO 40 (optional HSK 50).
- Smallest radii down to 0.05 mm are visualized and can be profiled excellently.
- Integrated measuring system for the axes X/Y as well as automatic infeed.

Workpiece spindle head

Workpiece spindle	100 x 160 mm [3.94 x 6.3"]
Speed infinitely	100 - 1,000 rpm
Direction of Rotation	synchronous and counter-rotation
Grinding wheel ø max.	400 mm [15.8"]

Coordinate table

X-axis travel distance	150 mm [5.9"]
Rough adjustment X-axis	80 mm [3.15"]
Y-axis travel distance	130 mm [5.1"]
Rough adjustment Y-axis	70 mm [2.75"]

Dressing unit

Dressing wheel ø max.	200 mm [7.9"]
Dressing wheel width max.	20 mm [0.8"]
speed infinitely variable	1,000 - 3,000 rpm
mounting hole	32 mm [1.3"]
swivel range approx.	± 96°
Oscillating stroke	42 mm [1.65"]
Feed	manual / automatic

Camera monitor system

Monitor	19" Industrial TFT Monitor
Zoom range	9x, 20x, 40x, 55x & 100x

Machine dimensions

W x L x H (protective cover closed)	1,500 x 1,500 x 2,200 mm [59 x 59 x 86.5"]
W x L x H (protective cover open)	1,500 x 1,500 x 2,800 mm [59 x 59 x 110.2"]



CONTROL, DRIVES AND COMMUNICATION

CNC CONTROL AND DRIVE SYSTEMS FROM NUM®

- NUM Flexium +:
CNC control with powerful NUM DriveX drives.
- NUM FlexiumPro with NUM DrivePro drives
from the new WZS 8 machine generation onwards.
- Integrated NUM SamX unit for monitoring
safety-related movements.

NUMROTOPLUS®

Calculation, simulation, and production of complex geometries for short setup times, high precision, and process reliability.

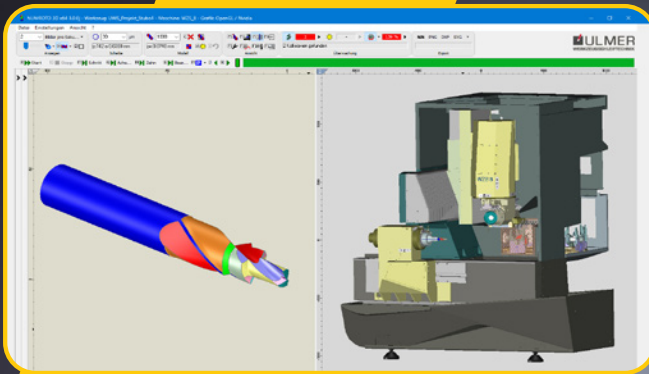
REINECKER CONTROL

The innovative user interface for REINECKER machines of the new generation:

- Dashboard for visualizing the machine status
- Setup and monitoring of automation solutions
- Statistical analysis of machine data
- Maintenance and service of the machine
- Digital instructions and documentation
- Testing and adjustment of machine functions

NUM IIOT-GATEWAY

Transmitting machine data to higher-level systems via OPC UA, MQTT and MTConnect.



NUMROTO



REINECKER CONTROL

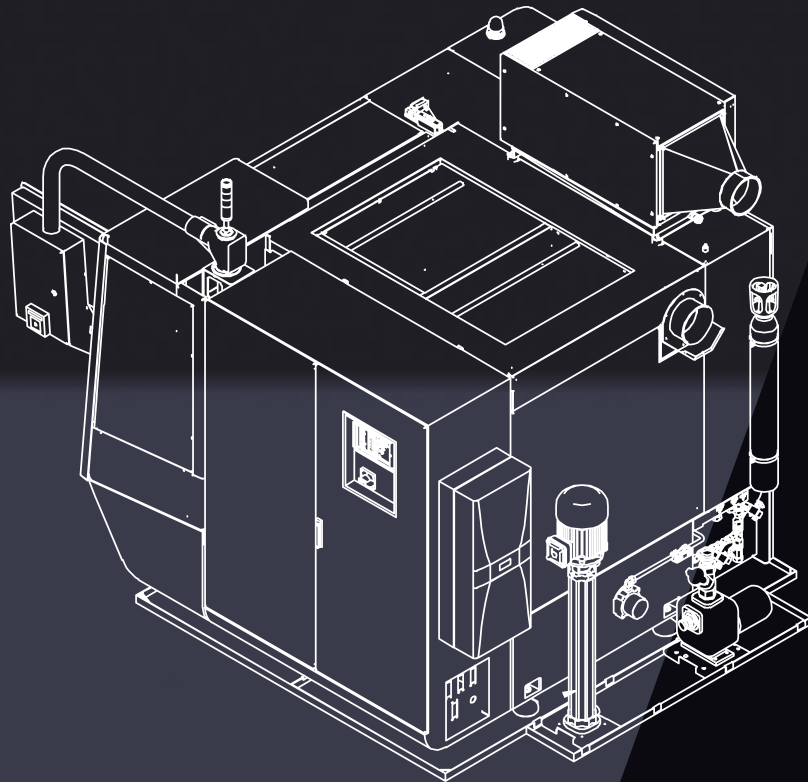
OPTION – ADDITIONAL EQUIPMENT

ON REQUEST, WE ALSO SUPPLY THE ASSOCIATED MACHINE PERIPHERY.

- Concentricity tester
- Test equipment set for machine measuring

Selection, dimensioning and specification of:

- Air extraction and filtration systems
- Fire extinguishing systems
- Coolant pumps
- Coolant filtration systems



TECHNICAL SUPPORT

- Consulting on questions to application engineering.
- Idea generation and elaboration of customer-specific solutions.
- Preparation of installation plans for the adequate dimensioning of the power supply.
- Joint development of special automation solutions.
- Consulting on the selection of the fire protection system and in questions concerning the dimensioning of air extraction and coolant supply.
- Support for the creation of machining programs.
- Perfect system integration of workpiece clamping and automation.
- Training courses on machine operation and programming during the pre-acceptance test in Ulm and start-up on site.





EXTENSIVE SERVICE ROUNDS OFF OUR OFFERINGS

- Maintenance and repair by qualified service technicians.
- Service worldwide.
- Telephone hotline in German and English.
- Online service via TeamViewer for fault diagnosis.
- Comprehensive availability of spare parts (standard components) and daily express service in the shortest possible time.
- Reconditioning of machines at the Ulm factory.
- Repairs of components in exchange.
- Training for maintenance at customer's site.

HEADQUARTER AND PRODUCTION

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