

J600

UNIQUE PRECISION AND SURFACE QUALITY
FOR THE PERFECT RESULT



C.O.R.E.®

 JUNG

A member of UNITED MACHINING SOLUTIONS

J600

DIMENSIONS

- Grinding Range: 300 × 600 mm
- Distance table to spindle center: 580 mm

HARDWARE

- All important elements comprise gray cast iron
- Only three feets for levelling
- Thermosymmetrical cross slide design
- X-axis with newly developed, hydrodynamic EasySlide guideway
- Double sliding door to the work area

SOFTWARE

- C.O.R.E. OS operating system
- Optimum operating comfort
- Programming with menu-guided grinding and dressing cycles
- UNITED GRINDING Digital Solutions™

« With the new J600, JUNG presents a modern surface and profile grinding machine for the highest precision and surface quality. »

MATTHIAS FRIEDRICH, SALES ENGINEER BLOHM JUNG

YOUR BENEFITS

- Electronic handwheel for X-, Y- and Z-axis
- Profile accuracy at the highest level
- Surface quality in the area of "mirror finish"
- Optimum accessibility of the work area
- Grinding wheel flange with transverse stop
- Improved reversing accuracy of the X-axis
- Maximum flexibility
- Reduced noise pollution for the operator



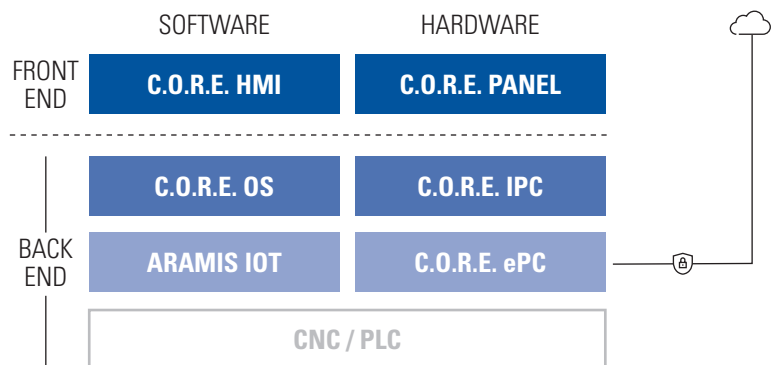
C.O.R.E. – CUSTOMER ORIENTED REVOLUTION

With C.O.R.E., we make your production fit for the digital future.

The C.O.R.E. system from UNITED GRINDING is a future-oriented hardware and software platform that takes the operation, networking and digitalization of machine tools to a new level. C.O.R.E. was developed to make our machines and your production environment fit for the digital industry of tomorrow. Operation is simple and intuitive via the multi-touch display, with a modern and customizable user interface. Thanks to the standard-

ized hardware and software architecture, all UNITED GRINDING machines equipped with C.O.R.E. technology are network-compatible and can be easily integrated into digital factories. All common interface formats are supported. C.O.R.E.'s modern IoT technology core also enables data-based value-added services and integration and communication with cloud-based customer platforms.

C.O.R.E. ARCHITECTURE



C.O.R.E. PANEL & HMI – NEXT-GENERATION MACHINE OPERATION

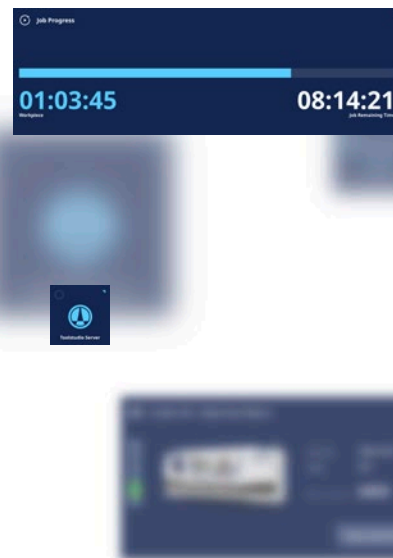
Like a large smartphone

With C.O.R.E., UNITED GRINDING has redefined the interaction between man and machine tool. Modern design combined with the most advanced technology to meet the operator requirements of tomorrow. The 24" multi-touch display enables navigation by touch and swipe gestures, similar to a smartphone. The uniform HMI for all UNITED GRINDING machines facilitates set-up, operation and general maintenance. Customizable user roles enable the display and restriction to role-relevant information and thus increase user-friendliness and safety. With the integrated front camera on the panel, assistance can be provided directly at the machine via Remote Service.

Future-proof

The digital capabilities of your machine with C.O.R.E. technology continue to grow. The C.O.R.E. HMI is continuously being expanded with new functionalities, widgets and apps to make it even more user-friendly and customizable. The arrangement, type and size of the tiles on the HMI can be customized so that every machine operator always has the information that is important to him or her at a glance.

In future, new software updates and functionalities will be easy to install via the customer portal, so you will always be up to date.



Technical data

- 24" Full HD Multitouch-Display
- Override rotary switch with cycle start
- Standardized function keys
- Integrated 2-hand start
- Electronic key system (RFID)
- Integrated front camera
- Tilt adjustment

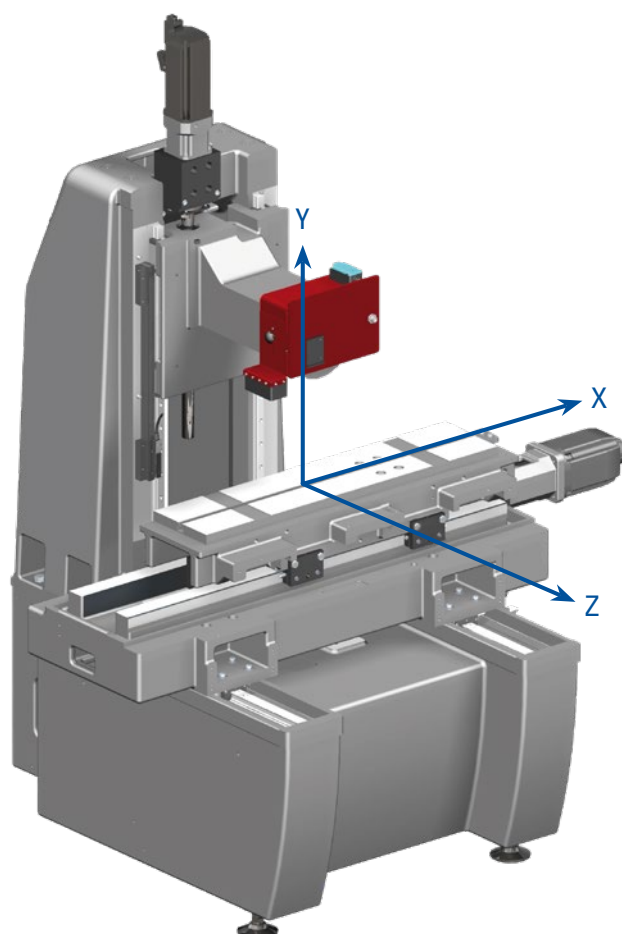
ESTABLISHED CONSTRUCTION PRINCIPLE

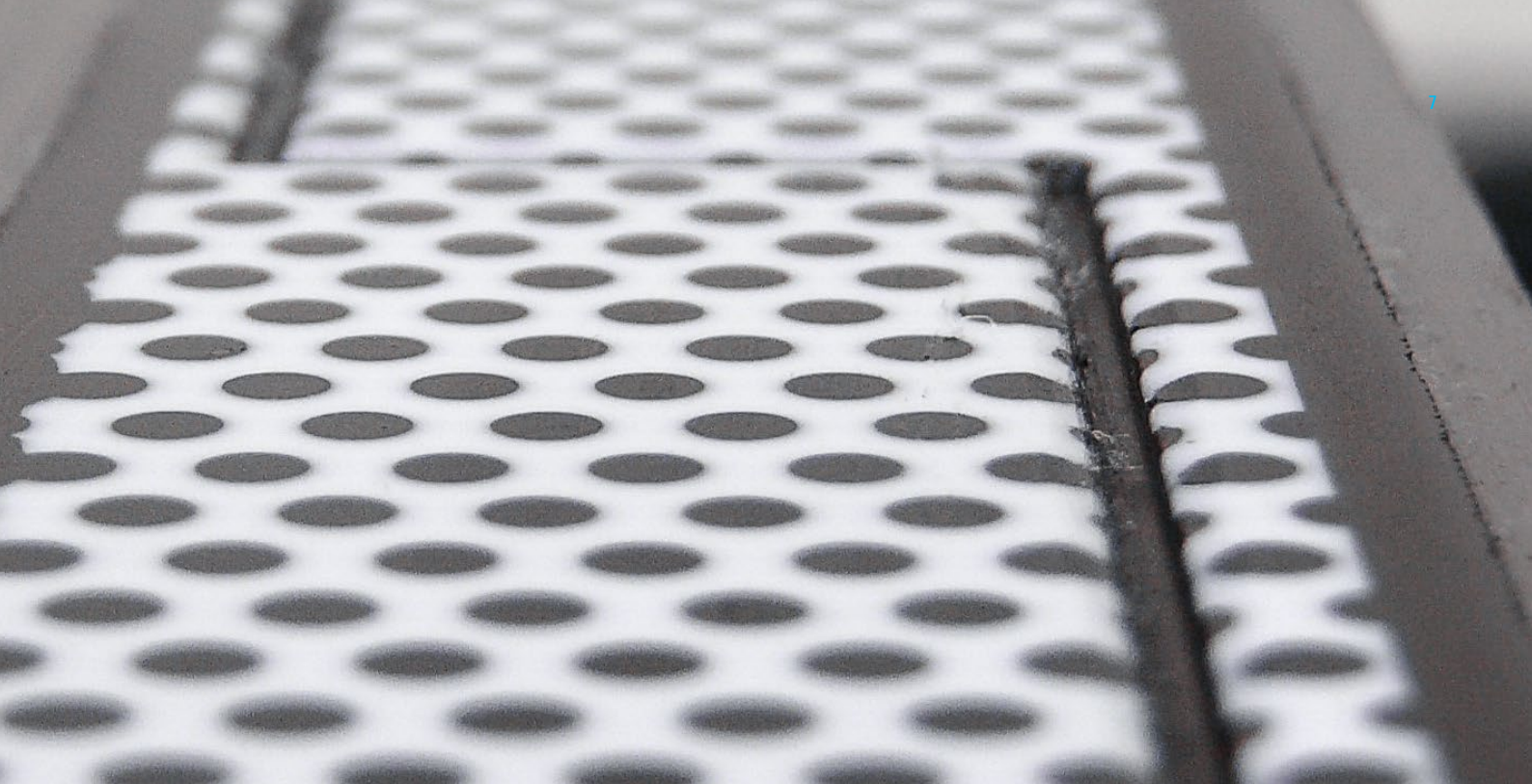
Machine bed, column, cross slide, table and spindle head of the J600 are made of cast iron. Thanks to 3D-CAD and finite element analysis, we have optimized the rigidity and weight of the machine. The machine's cross-slide design ensures a consistent position of the grinding wheel to the spindle head vertical guide and direct absorption of the grinding forces by the cross-slide and table guideways. Highprecision re-circulating ball-screws are also installed in all three axes. All electrical equipment and control systems of the J600 are manufactured by Siemens.



The design principle of the J600 offers a number of further advantages:

- Large grinding range with compact external dimensions
- 3 leveling elements ensure maximum precision, even at critical locations
- 400 kg table load allow for extensive use of the working area
- The large door opening makes individual loading of heavy parts possible
- Machine, cabinet and control panel form one unit for safe transport



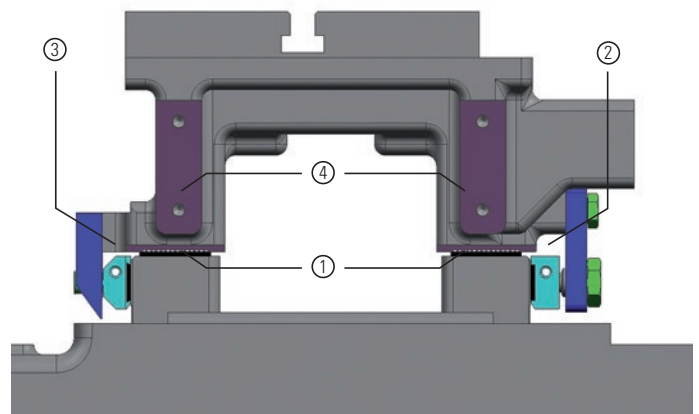


The thermo-symmetrical guideway principle EasySlide

Optimal dampening and maximum smoothness increase the precision of the grinding process. To achieve this, the J600 is equipped with scraped guideways in the X-axis and the guides on the table base with the new EasySlide coating. As a result your parts receive a very high surface finish quality. The new wear resistant composite EasySlide coating on the lateral guides and on the table base ensures utmost running smoothness, increased precision and high surface finish quality.

Key advantages

- EasySlide guideways with very high wear resistance
- Lateral guidance by preloaded, externally mounted guides
- Separation of load and guiding plane
- Increased smoothness and optimal dampening
- Exceptionally high surface quality of workpieces
- 400 kg table load
- 330 table strokes/min
- Feed rate of up to 50 m/min due to low static friction
- Constant permanent lubrication with appropriate lubricant



- ① Guideway support
- ② Lateral table guide, fixed side with EasySlide coating
- ③ Lateral table guide, moveable side with EasySlide coating
- ④ Sliding coating on table

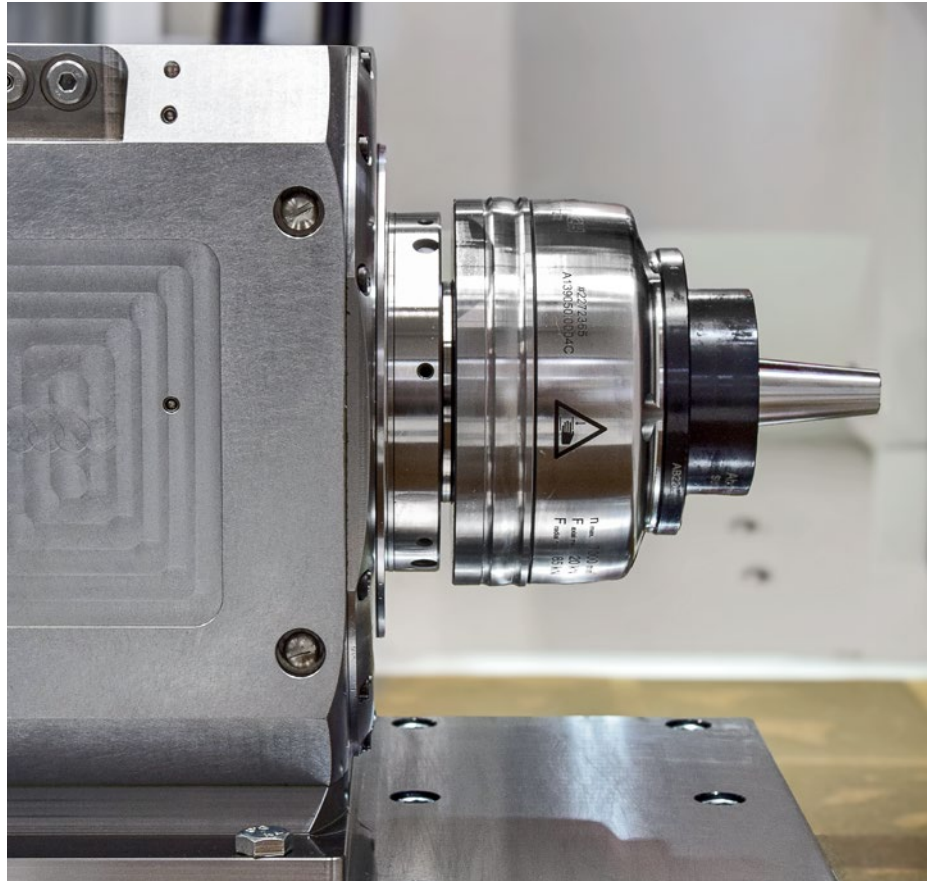
APPLICATIONS



CUSTOMIZED APPLICATIONS

Grinding with individual clamping

Implementation of rotary CNC-axes or flexible zero-point clamping systems, tailored to customer requirements. In addition, there are supplementary automation solutions.

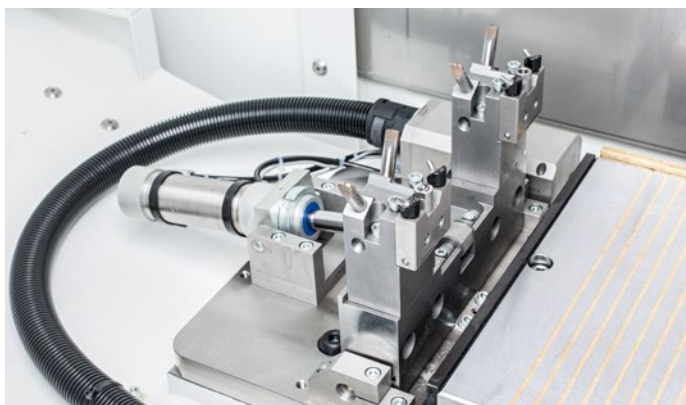


Also external cylindrical and noncircular grinding

Any external contour consisting of line and circular elements can be ground on the J600 with polygon grinding. External cylindrical grinding and noncircular grinding tasks can also be performed with the highest precision and surface quality.



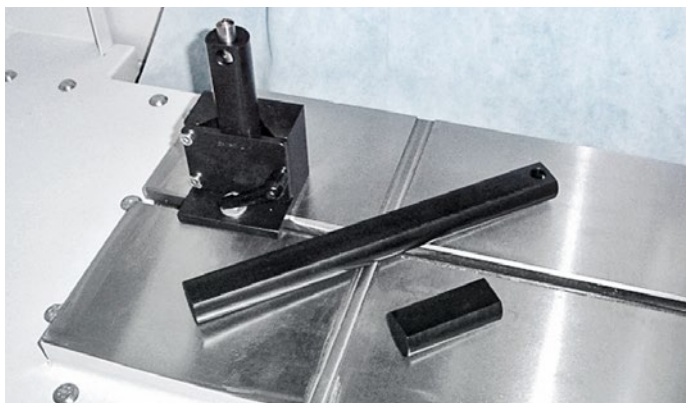
DRESSING SYSTEMS - MAXIMUM FLEXIBILITY FOR ECONOMICAL PRODUCTION



Folding dresser for peripheral, lateral and profile dressing. Pneumatic actuation prevents grinding wheel and grinding wheel guard from colliding with the dresser.



Table-top dresser PA-TLR28 for the use of two universal diamond forming rolls for contour dressing. Diamond form rolls for path-controlled dressing.

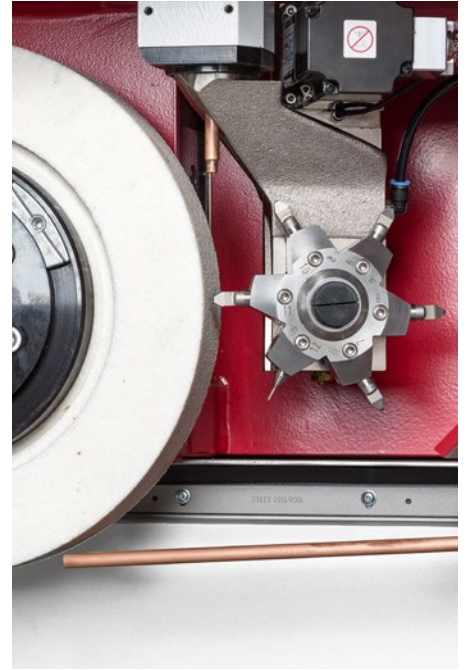
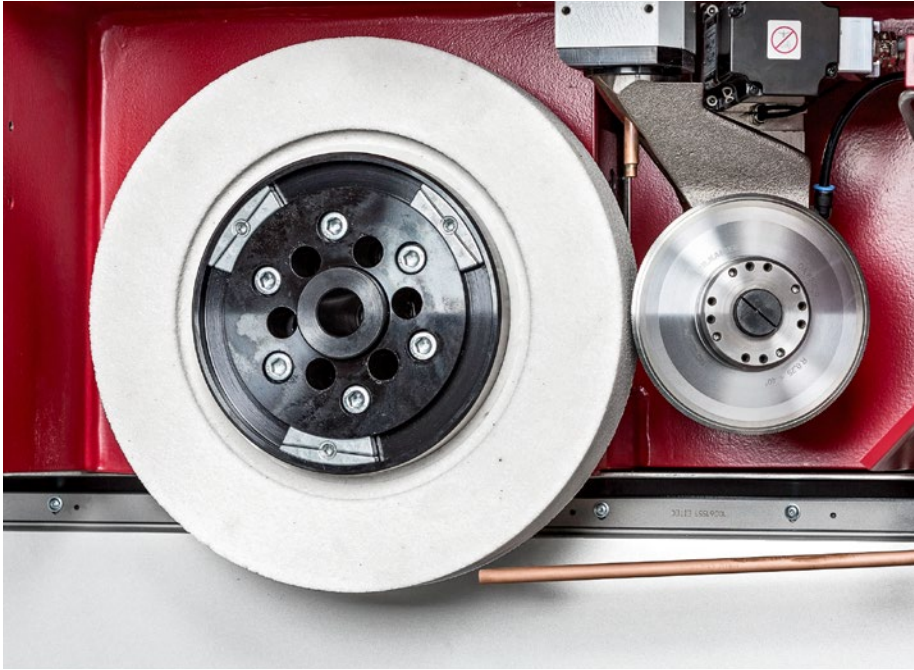


Diamond holder with interchangeable inserts (90, 150, 300 mm) for efficient peripheral and face dressing as well as for calibrating.



Swivel dresser PA-T130 mounted on the left side of the machine table. Torsion-resistant dressing arm mounted on one side for μ m-precise contour and quick tool change. Automatic adjustment of the dressing wheels (profile depth up to 30 mm).

HEAD DRESSER PA-K37



The CNC-controlled 4-axis head dresser PA-K37 impresses with variety of technical improvements. Increased stability with simultaneous reducing vibrations leads to higher accuracy when dressing.

Precision

- High-precision, direct axis drives with 0.1 μm resolution

Operation

GripsProfile programming system for

- Workpiece profile geometry creation
- Collision and feasibility checks
- CAD/CAM integration

Flexibility

- 6x toolholder for profile diamonds, or alternatively toolholder for rotating diamond dressing disc
- Quick-change system for toolholders

Productivity

- Continuous dressing of the grinding wheel during machining

Performance

- Automatic setting-up and gauging of tools on the machine
- Integrated tool management
- Acoustic emission controlled dressing technology

Production reliability

- Overhead arrangement prevents collisions with workholders/fixtures in the working area

Cost effectiveness

- Longer dressing tool life
- Maximum precision in unmanned operation

- Complex profiles can be flexibly produced
- Profile depth: inner profile 20 mm, outer profile 30 mm
- CD dressing, less cycle time, more space on the machine table

WE ARE HERE FOR YOU!

Our products are designed to meet customer demands for as long as possible, they are intended to operate efficiently, reliably, and be available at any time.

From “Start up” through to “Retrofit” – our Customer Care is there for you throughout the working life of your machine. For this reason, you can rely on competent HelpLines worldwide and Service Engineers near you:

- We will provide you with fast, straight-forward support.
- We will help to increase your productivity.
- We work professionally, reliably and transparently.
- We will provide a professional solution to your problems.



Start up
Commissioning
Extension of the guarantee



Qualification
Training
Product support



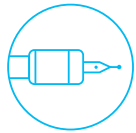
Prevention
Maintenance
Inspection



Service
Customer service
Customer advice
Helpline



Digital Solutions
Remote Service



Material
Spare parts
Replacement parts
Accessories



Rebuild
Machine overhauling
Refurbishing of assemblies



Retrofit
Conversions
Retrofitting parts

DIGITAL SOLUTIONS

Digital Solutions stand for products and services that open up the data space of your machine through IoT-based networking, enable seamless integration across the entire store floor in digital value-added networks and provide data-based value-added services and

digital services – for greater efficiency, productivity and competitiveness. You can find out more about the services of Digital Solutions on our website under the Customer Care section.

CUSTOMER CARE

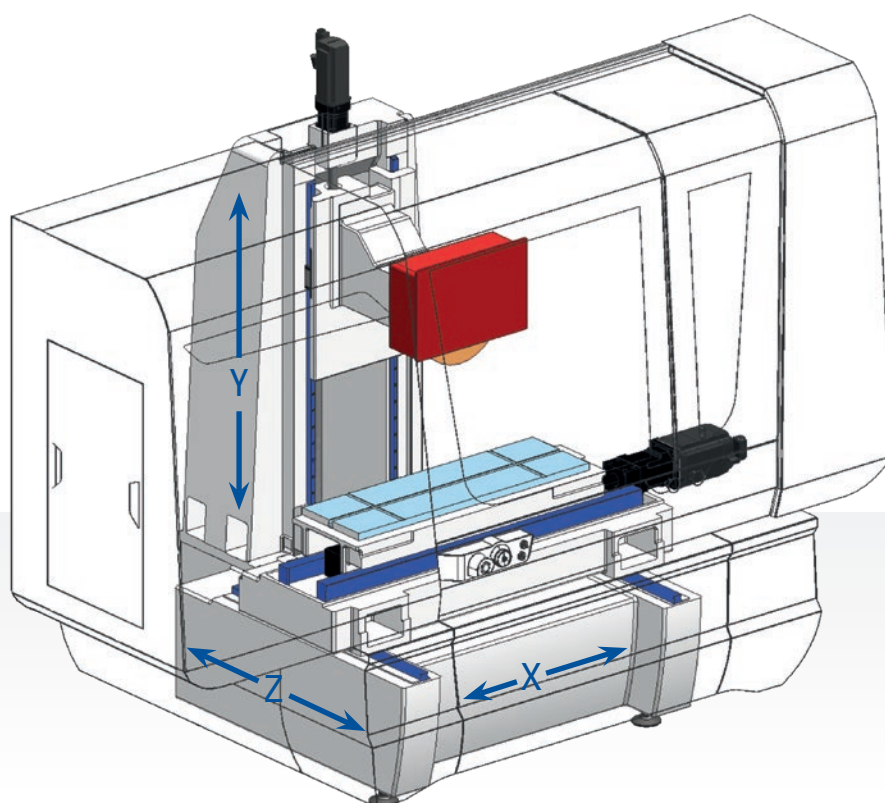


TECHNICAL DATA

J600

Grinding rage	300 × 600 mm
Magnetic chuck	300 × 600 mm
Table clamping area with auxiliary surface	300 × 1,000 mm
Distance table to spindle center	130 ... 580 mm
Table load with magnetic chuck, max.	400 kg
Table height above floor	925 mm
X-axis, longitudinal travel, max.	700 mm
Feed rate	30 ... 50,000 mm/min
Y-axis, wheel head vertical travel, max.	450 mm
Feed rate	4 ... 3,750 mm/min
Z-axis, saddle cross travel, max.	345 mm
Feed rate	4 ... 4,000 mm/min
Grinding spindle drive, variable speed, AC-motor	8.5/1,500 kW/min ⁻¹
Speed, max.	5.000 1/min
Grinding wheel (d × w × bore)	150 ... 300 × 14 ... 50 × 76.2 mm
Dimensions width	3,360 mm
depth, incl electrical cabinet, without operator panel	2,410 mm
height	2,500 mm
Weight, incl. electrical cabinet	4,500 kg
Short stroke reciprocating (no. of strokes per time)	330/min at 15 mm length of stroke

We reserve the right to make technical changes



BLOHM JUNG GMBH

Productivity, performance, and precision—these are the three characteristics that users worldwide associate with flat and profile grinding machines from BLOHM and JUNG. For decades, our machines have been successfully used in a wide variety of applications and under a wide range of conditions. The experience gained from more than 35,000 machines delivered is continuously incorporated into innovations and further developments – with the aim of sustainably increasing our customers' production efficiency.

Our portfolio ranges from surface grinding machines and universal solutions to customer-specific production machines. Our service and tech-

nology specialists accompany our customers throughout the entire life cycle of the machines – from grinding trials and training to maintenance contracts and retrofit projects. Personal, fast, and competent.

In 2008, the two established brands BLOHM and JUNG were merged under the umbrella of Blohm Jung GmbH. Since then, this combined expertise has set new standards in precision, quality, and cost-effectiveness. As part of UNITED MACHINING SOLUTIONS and with a global sales and service network, Blohm Jung GmbH supports its customers worldwide – and is always close at hand.



ABOUT US

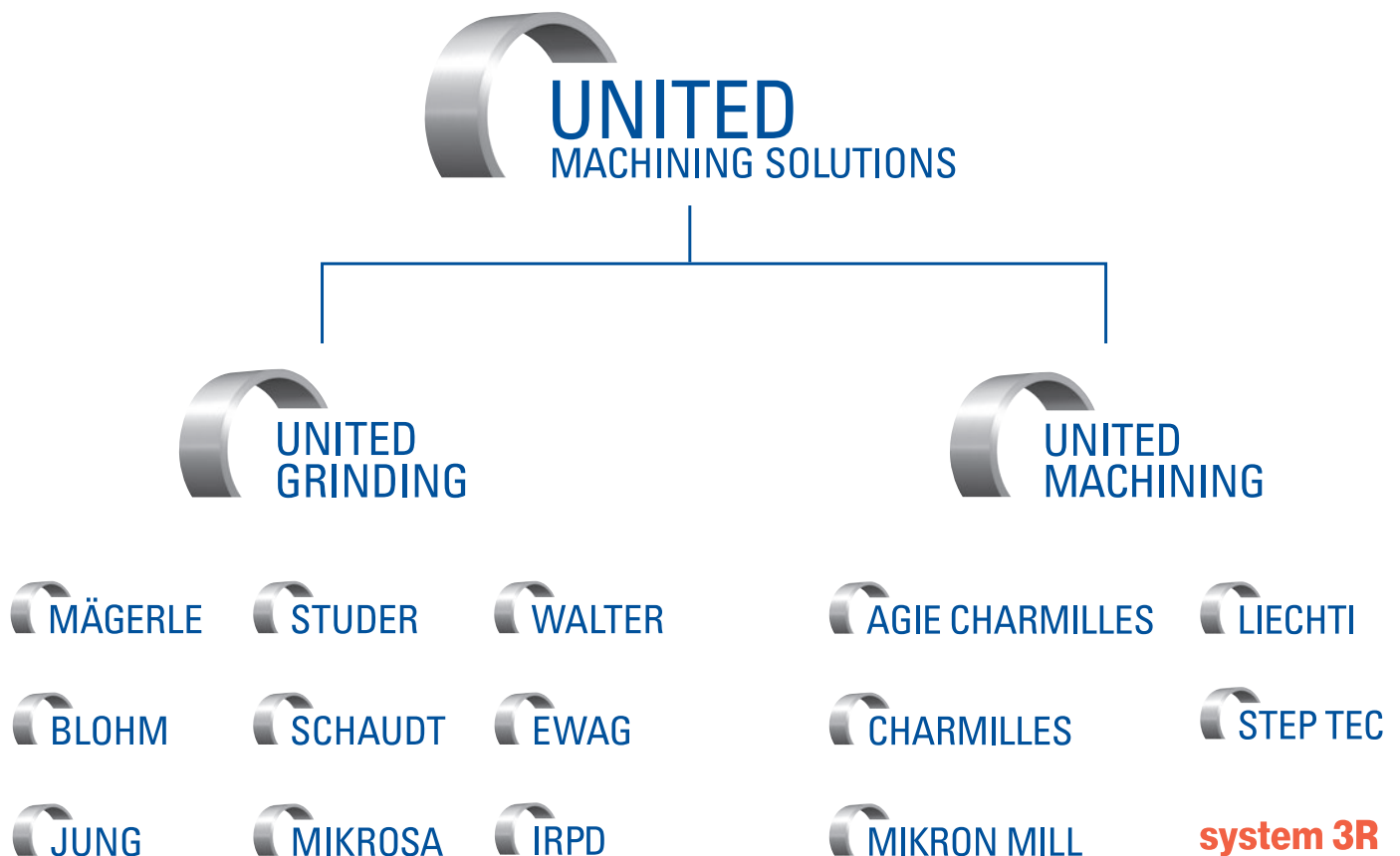
UNITED MACHINING SOLUTIONS

UNITED MACHINING SOLUTIONS is one of the largest machine tool manufacturers in the world. With around 5,000 employees at over 50 global production, service and sales locations, UNITED MACHINING SOLUTIONS is close to its customers and highly efficient. The group is organized into two divisions: UNITED GRINDING and UNITED MACHINING.

UNITED GRINDING includes the brands MÄGERLE, BLOHM, JUNG, STUDER, SCHAUDT, MIKROSA, WALTER, EWAG and IRPD. Its technologies include surface and profile grinding machines, cylindrical grinding machines, machines for tool machining and machine tools for additive manufacturing.

The UNITED MACHINING division includes the brands AGIE CHARMILLES, CHARMILLES, MIKRON MILL, LIECHTI, STEP TEC and SYSTEM 3R. It includes machines for EDM (Electrical Discharge Machining), high-speed milling and laser technology as well as spindle production and automation solutions.

“We want to make our customers even more successful”





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