

# JUNG REBUILD

MACHINE OVERHAULS AT THE HIGHEST LEVEL



A member of UNITED MACHINING SOLUTIONS



BLOHM

JUNG

ABOUT US

## BLOHM JUNG GMBH

Productivity, performance and precision – three attributes which users worldwide associate with surface and profile grinding machines from BLOHM and JUNG. Our machines have been in use worldwide for decades in widely varying fields of application and under very different conditions. The experience gained from over 35,000 delivered machines is constantly incorporated into further developments and innovations, increasing our customers' production efficiency even further.

The product portfolio of Blohm Jung GmbH extends from surface grinding machines through application-oriented universal machines to customer-oriented production machines. Our Customer Care and technology specialists support our customers throughout the entire lifecycle of the machine. From grinding tests through training and maintenance contracts to retrofits, we offer our customers prompt and personal advice.

In 2008 the two established brands BLOHM and JUNG merged under one roof. Blohm Jung GmbH has thus combined its extensive know-how and constantly enables new, higher standards in the area of precision, quality and cost efficiency. There are also many opportunities for tailoring production solutions to individual customer requirements. As part of the UNITED GRINDING Group, Blohm Jung GmbH is represented internationally with offices in India, China, Singapore, Japan and the USA. A further 40 sales and service agencies guarantee a worldwide presence and customer proximity.

«A machine overhaul for JUNG products can be individually tailored to your requirements using a modular system. Choose between individual component overhauls or opt for a complete rebuild of your machine and give it a new lease of life – it will then be in the same condition as when it was first delivered and will retain its open design with the same easy handling. After that, the machine's lifespan will be up to several decades again.»



Here you can see a time lapse video of a JUNG REBUILD

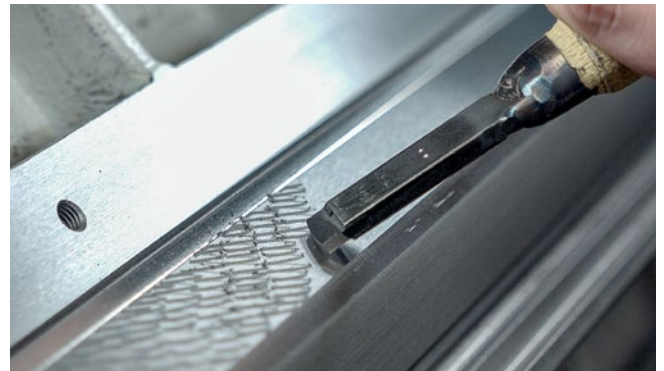
JAN HINKELMANN, HEAD OF CUSTOMER CARE

## YOUR REBUILD OPTIONS AT JUNG

### Guideway overhaul

During a guideway overhaul first of all the double V-guides of cross slide, table and bed (optional) are ground in relative to each other. The result is a perfectly coordinated machine geometry. The procedure is the same as for new machines (type H and J series). During this exclusive machining method a surface hardening takes place and the proven cross hatch finish (other fields of application: medical technology, automotive industry) is ground into the guides. But it is only the combination of guideway grinding and subsequent scraping of the table that gives the unique precision and longevity of a JUNG grinding machine. The know-how our employees have amassed over the decades together with constant quality controls and the use of our special machines guarantee the highest quality and precision of your JUNG grinding machine.

Duration: approx. 5-6 weeks



### Grinding spindle overhaul

The condition of your grinding spindle is vital, as it is in direct contact with the workpiece via the grinding wheel and the key factor determining quality or reject. After a grinding spindle overhaul you get an as-new product, which can meet the highest requirements.

Machine types: F, H, J, C, JT series

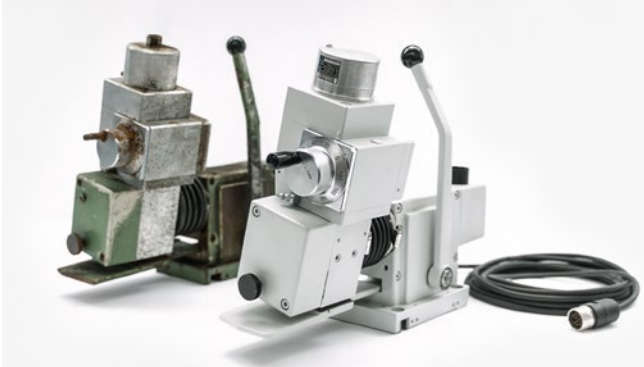
Duration: generally available as an exchange from stock



### Repainting

It isn't just technology that is crucial today – the look of a machine also plays an increasingly important role. Repainting will significantly enhance your machine and have a positive effect on the presentation of your machinery. After thorough disassembly of various machine elements, heavily stressed parts are sand-blasted in order to create an ideal basis for our multi-layer paint.

Duration: approx. 3 weeks



### Dresser overhaul

Another of JUNG's core competencies is the dressing unit, which guarantees reliable contour accuracy. If signs of wear appear, you have the option of an overhaul. The dresser is restored to as-new condition. After disassembly all spare and wear parts are replaced and the guides are reground if necessary. The dresser is then reassembled and aligned by a service technician.

Types: MA65, AF65/100, HF50, PA30/31/37/120/130  
Duration: 2-4 weeks depending on type



### Upgrades/retrofits

We are very keen to ensure that you are always kept up to date, without having to replace your machine's entire technology. For such cases we offer various upgrades/retrofits, such as e.g.

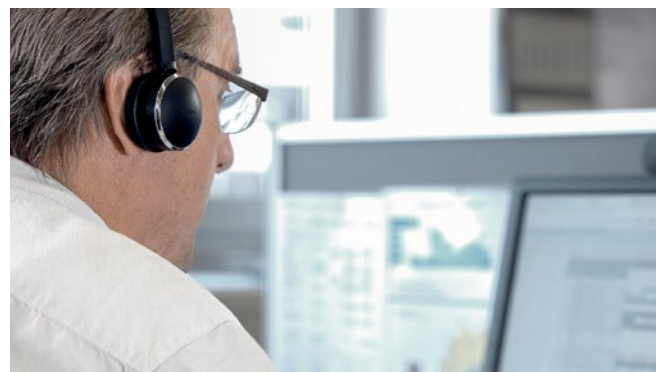
- Upgrade of the automatic central lubrication system
- Update of individual or a number of scales
- Update of the digital display
- Upgrade of the dressing unit
- Upgrade of technology (e.g. creep feed, plunge, face grinding, etc.)
- Update of the machine control system



### Loan equipment

While your unit or machine is with us for an overhaul we can provide you with a loan unit or a JUNG loan machine for this period to avoid serious production losses.

Types: PA3x, JF520



### Warranty

We offer a warranty of 12 months or 2000 operating hours on overhauls, including the replaced parts. For rebuilds and machine overhauls with guideway grinding the warranty on the machine geometry is extended to 24 months or 4000 operating hours.

## HF-I SERIES



### The time-tested classic

Familiar handling with new electrics. Glass scales in the Y and Z axis, automatic central lubrication system plus monitoring function as well as an integrated 5.5 kW grinding spindle drive are part of the standard product and qualify the HF-i series as the optimal machine for everyday use or as an auxiliary machine in toolmaking.



### Digital measuring systems with display

Available in Y and Z axes for micron-precise positioning. Equipped with zero switchoff function.



### User-friendly control panel

All settings can be made very easily and are clearly displayed.



### Automatic central lubrication system

For lead screws, column, table and cross slide guides. With oil level and oil pressure monitoring for ultimate reliability of the lubrication function.

# TECHNICAL DATA

## TABLE

HF50-i

Max. grinding range	600 x 250 mm
Max. table clamping surface	600 x 200 mm
Max. distance table/spindle center	350 mm
Max. load including magnetic chuck	100 kg

## X-AXIS (TABLE MOVEMENT)

Feed rate, stepless hydraulic adjustment (reciprocate grinding)	1.000 – 24.000 mm/min
Feed rate, electro-mechanical	– mm/min
Input resolution	– mm

## Y-AXIS (VERTICAL MOVEMENT)

Feed rate	500 mm/min
Travel	250 mm
Input resolution	0,001 mm
Wheel head infeed per table stroke	0,001 – 0,01 mm
Adjustable return section	– mm

## Z-AXIS (TRANSVERSE MOVEMENT)

Feed rate	1 – 1.000 mm/min
Travel	225 mm
Adjustable line feed per table double stroke	0,1 – 10 mm
Continuous feed, steplessly adjustable	10 – 1.000 mm/min
Input resolution	0,001 mm

## MAIN SPINDLE DRIVE

Spindle speed (dependent on grinding wheel diameter)	100 – 4.200 min <sup>-1</sup>
Taper	1:6
Max. drive capacity	5,5 kW
Cutting speed	35 m/s

## GRINDING WHEEL

Max. diameter x max. width x bore	225 x 20 x 51 mm
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## X-AXIS (TABLE MOVEMENT)

Voltage supply	400 V AC/50 Hz
Total connected load	7,5 kW
Fuse	25 A

## SPACE REQUIREMENT(WITHOUT SAFETY DISTANCES, INCL. CONTROL CABINET/COOLANT SYSTEM)

Length x width x height	2.750 x 1.800 x 2.200 mm
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## WEIGHT

Without control cabinet/with control cabinet	-/1.400 kg
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## JF-I SERIES



### The classic universal machine

The JF-i series has everything that is needed to make setting it up and operating a userfriendly experience. The clearly arranged control system with 3-axis position display and conventional operating elements makes the execution of changing grinding tasks child's play, particularly in toolmaking.



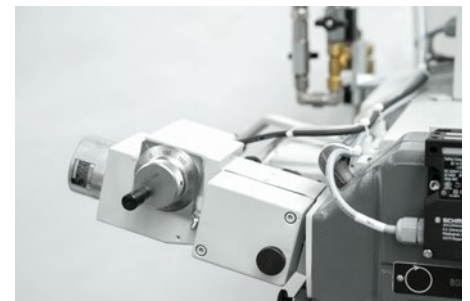
### Control panel with digital display

All commands are self-explanatory and easily set via function keys, step switches and the digital display.



### Mechanical infeed with fast feed

The height infeed is controlled either via hand-wheel (mechanical) or automatically via stepper motor and fast feed keys.



### Manual head dresser with automatic dressing rate compensation and V-constant

Dressing infeed amounts are compensated automatically with the Y-axis and the set grinding spindle speed is kept constant. The dressing movement is executed manually using a hand lever.

## TECHNICAL DATA

TABLE	JF415-i	JF520-i	JF625-i
Max. grinding range	400 x 200 mm	600 x 250 mm	600 x 300 mm
Max. table clamping surface	400 x 150 mm	600 x 200 mm	600 x 250 mm
Max. distance table/spindle center	400 mm	490 mm	490 mm
Max. load including magnetic chuck	75 kg	100 kg	130 kg

### X-AXIS (TABLE MOVEMENT)

Feed rate, stepless hydraulic adjustment (reciprocate grinding)	1.000 – 24.000 mm/min	1.000 – 24.000 mm/min	1.000 – 24.000 mm/min
Feed rate, electro-mechanical	– mm/min	– mm/min	– mm/min
Input resolution	– mm	– mm	– mm

### Y-AXIS (VERTICAL MOVEMENT)

Feed rate	600 mm/min	500 mm/min	500 mm/min
Travel	380 mm	380 mm	360 mm
Input resolution	0,001 mm	0,001 mm	0,001 mm
Wheel head infeed per table stroke	0,0005 – 0,05 mm	0,0005 – 0,05 mm	0,0005 – 0,05 mm
Adjustable return section	0 – 10 mm	0 – 10 mm	0 – 10 mm

### Z-AXIS (TRANSVERSE MOVEMENT)

Feed rate	1 – 1.000 mm/min	1 – 1.000 mm/min	1 – 1.000 mm/min
Travel	165 mm	225 mm	280 mm
Adjustable line feed per table double stroke	0,1 – 10 mm	0,1 – 10 mm	0,1 – 10 mm
Continuous feed, steplessly adjustable	10 – 1.000 mm/min	10 – 1.000 mm/min	10 – 1.000 mm/min
Input resolution	0,001 mm	0,001 mm	0,001 mm

### MAIN SPINDLE DRIVE

Spindle speed (dependent on grinding wheel diameter)	100 – 4.200 min <sup>-1</sup>	100 – 4.200 min <sup>-1</sup>	100 – 4.200 min <sup>-1</sup>
Taper	1:6	1:6, 1:10*	1:10; 1:6*
Max. drive capacity	2,5 kW	5,5 kW	9,3 kW
Cutting speed	35 m/s	35 m/s	35 m/s

\*optional

### GRINDING WHEEL

Max. diameter x max. width x bore	225 x 20 x 51 mm	250 x 25 x 51 mm	300 x 30 x 76,2 mm
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### X-AXIS (TABLE MOVEMENT)

Voltage supply	400 V AC/50 Hz	400 V AC/50 Hz	400 V AC/50 Hz
Total connected load	6 kW	7,5 kW	13,5 kW
Fuse	25 – 35 A	25 – 35 A	35 A

### SPACE REQUIREMENT(WITHOUT SAFETY DISTANCES, INCL. CONTROL CABINET/COOLANT SYSTEM)

Length x width x height	2.800 x 1.750 x 2.200 mm	3.000 x 2.050 x 2.440 mm	3.200 x 2.050 x 2.440 mm
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### WEIGHT

Without control cabinet/with control cabinet	1.300/1.550 kg	1.600/1.850 kg	2.250/2.500 kg
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# JF-N SERIES



### The modern universal machine

For the machining of individual parts during surface and profile grinding, the JF-N series is the best suited entry-level machine for the job. The handwheels for “quick grinding” make it easy to operate, while different program cycles can be added, which activate automatically – producing a machine that will soon become a partner you won’t want to do without.



### Control panel with touchscreen

All commands are set intuitively via function buttons, step switches and touchscreen.



### Control panel

Allows the Y and Ze axes to be positioned using an electronic handwheel. The speed of the axes can be variably preset.



### Automatic head dresser with dressing dimension compensation and V-constant

Dressing infeed amounts are automatically compensated with the Y-axis and the set grinding spindle speed is kept constant. The dressing movement and diamond infeed are programmed via the control panel and executed automatically. (option)

## TECHNICAL DATA

TABLE	JF525N-RS	JF630N-RS
Max. grinding range	600 x 250 mm	600 x 300 mm
Max. table clamping surface	600 x 200 mm	600 x 250 mm
Max. distance table/spindle center	490 mm	490 mm
Max. load including magnetic chuck	100 kg	130 kg

### X-AXIS (TABLE MOVEMENT)

Feed rate, stepless hydraulic adjustment (reciprocate grinding)	1.000 – 24.000 mm/min	1.000 – 24.000 mm/min
Feed rate, electro-mechanical	– mm/min	– mm/min
Input resolution	– mm	– mm

### Y-AXIS (VERTICAL MOVEMENT)

Feed rate	0,1 – 2.000 mm/min	0,1 – 2.000 mm/min
Travel	380 mm	360 mm
Input resolution	0,001 mm	0,001 mm
Wheel head infeed per table stroke	0,001 – 9,99 mm	0,001 – 9,99 mm
Adjustable return section	0,001 – 9.999,9 mm	0,001 – 9.999,9 mm

### Z-AXIS (TRANSVERSE MOVEMENT)

Feed rate	1 – 1.000 mm/min	1 – 1.000 mm/min
Travel	225 mm	280 mm
Adjustable line feed per table double stroke	0,1 – 10 mm	0,1 – 10 mm
Continuous feed, steplessly adjustable	10 – 1.000 mm/min	10 – 1.000 mm/min
Input resolution	0,001 mm	0,001 mm

### MAIN SPINDLE DRIVE

Spindle speed (dependent on grinding wheel diameter)	100 – 4.200 min <sup>-1</sup>	100 – 4.200 min <sup>-1</sup>
Taper	1:6, 1:10*	1:10; 1:6*
Max. drive capacity	5,5 kW	9,3 kW
Cutting speed	35 m/s	35 m/s

\*optional

### GRINDING WHEEL

Max. diameter x max. width x bore	250 x 25 x 51 mm	300 x 30 x 76,2 mm
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### X-AXIS (TABLE MOVEMENT)

Voltage supply	400 V AC/50 Hz	400 V AC/50 Hz
Total connected load	7,5 kW	13,5 kW
Fuse	25 A	35 A

### SPACE REQUIREMENT(WITHOUT SAFETY DISTANCES, INCL. CONTROL CABINET/COOLANT SYSTEM)

Length x width x height	3.000 x 2.050 x 2.440 mm	3.200 x 2.050 x 2.440 mm
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### WEIGHT

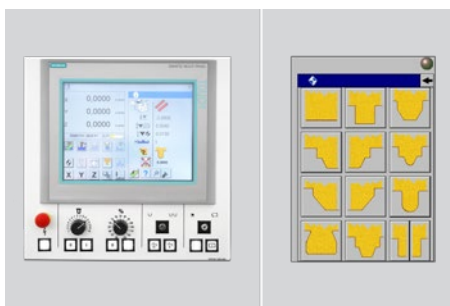
Without control cabinet/with control cabinet	1.600/1.850 kg	2.250/2.500 kg
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# JE-P SERIES



### The compact profile grinding machine

Surface and profile grinding go hand-in-hand for our customers. Simple, manual set-up of the machine is controlled with electronic handwheels and joystick. The graphic operator guidance supports the processes of grinding and profile dressing.



### Control panel with touch screen

All commands are set very simply via function keys, step switches and touch screen. Complex programming tasks ("Profile" basic screen) are supported by the user-friendly graphic menu guidance.



### Control panel

Allows positioning of all axes via joystick and electronic handwheels. The speed of the axes can be variably preset.



### Table dresser with tilting function

For profiling the grinding wheel, the table dresser tilts up pneumatically and then lowers again below the magnetic chuck. Equipped with 5 tool holders for diamonds (4x 45°; 1x vertical).

## TECHNICAL DATA

TABLE	JE525P-R	JE630P-R
Max. grinding range	600 x 250 mm	600 x 300 mm
Max. table clamping surface	600 x 200 mm	600 x 250 mm
Max. distance table/spindle center	490 mm	490 mm
Max. load including magnetic chuck	100 kg	130 kg

### X-AXIS (TABLE MOVEMENT)

Feed rate, stepless hydraulic adjustment (reciprocate grinding)	1.000 – 24.000 mm/min	1.000 – 24.000 mm/min
Feed rate, electro-mechanical	5 – 5.000 mm/min	5 – 5.000 mm/min
Input resolution	0,0001 mm	0,0001 mm

### Y-AXIS (VERTICAL MOVEMENT)

Feed rate	0,1 – 2.000 mm/min	0,1 – 2.000 mm/min
Travel	380 mm	360 mm
Input resolution	0,0001 mm	0,0001 mm
Wheel head infeed per table stroke	0,0001 – 9,99 mm	0,0001 – 9,99 mm
Adjustable return section	0,0001 – 9.999,9 mm	0,0001 – 9.999,9 mm

### Z-AXIS (TRANSVERSE MOVEMENT)

Feed rate	0,1 – 2.000 mm/min	0,1 – 2.000 mm/min
Travel	225 mm	280 mm
Adjustable line feed per table double stroke	0,1 – 10 mm	0,1 – 10 mm
Continuous feed, steplessly adjustable	0,1 – 2.000 mm/min	0,1 – 2.000 mm/min
Input resolution	0,0001 mm	0,0001 mm

### MAIN SPINDLE DRIVE

Spindle speed (dependent on grinding wheel diameter)	100 – 4.200 min <sup>-1</sup>	100 – 4.200 min <sup>-1</sup>
Taper	1:6, 1:10*	1:10; 1:6*
Max. drive capacity	5,5 kW	9,3 kW
Cutting speed	35 m/s	35 m/s

\*optional

### GRINDING WHEEL

Max. diameter x max. width x bore	250 x 25 x 51 mm	300 x 30 x 76,2 mm
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### X-AXIS (TABLE MOVEMENT)

Voltage supply	400 V AC/50 Hz	400 V AC/50 Hz
Total connected load	7,5 kW	13,5 kW
Fuse	25 – 35 A	35 A

### SPACE REQUIREMENT(WITHOUT SAFETY DISTANCES, INCL. CONTROL CABINET/COOLANT SYSTEM)

Length x width x height	3.000 x 2.050 x 2.440 mm	3.200 x 2.050 x 2.440 mm
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### WEIGHT

Without control cabinet/with control cabinet	1.600/1.850 kg	2.250/2.500 kg
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## 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



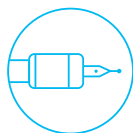
**Prevention**  
Maintenance  
Inspection



**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

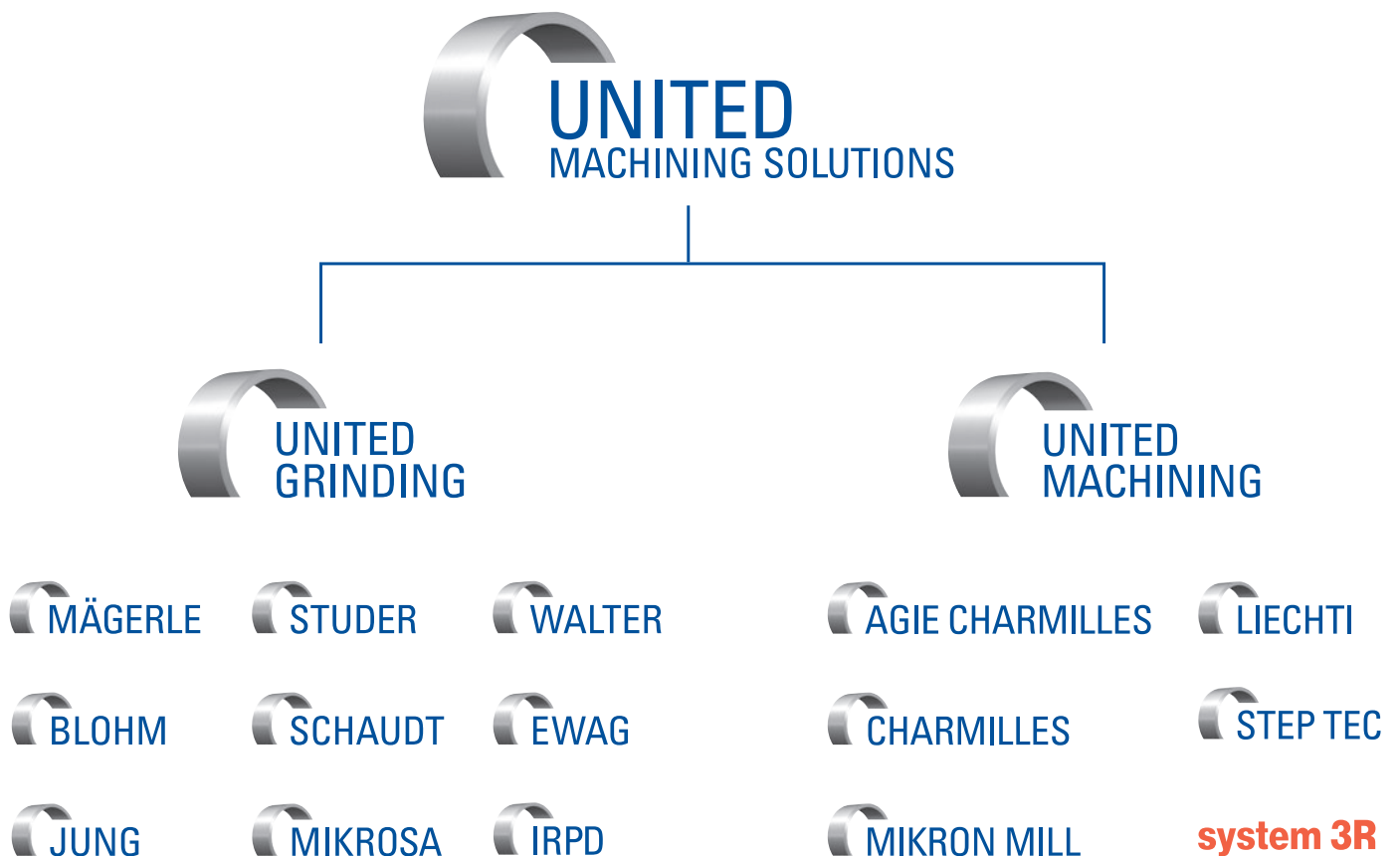
# UNITED MACHINING SOLUTIONS

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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