

MÄGERLE AG MASCHINENFABRIK

Precision, quality and flexibility are key attributes of the products manufactured by Mägerle AG Maschinenfabrik. A technology leader for high performance surface and profile grinding systems, the company founded in 1929 primarily specializes in customized solutions.

At the heart of the international success of our high quality Swiss machinery is the unique design principle of the MÄGERLE modular system. Thanks to state-of-the-art technology, MÄGERLE can offer customers from many branches of industry reliable grinding centers. The high machining precision of the custom special-purpose machines ensures that our customers remain competitive.

Alongside decades of accumulated expertise, our highly motivated and dedicated employees play a key role in the success of the company.





SWISS PRECISION

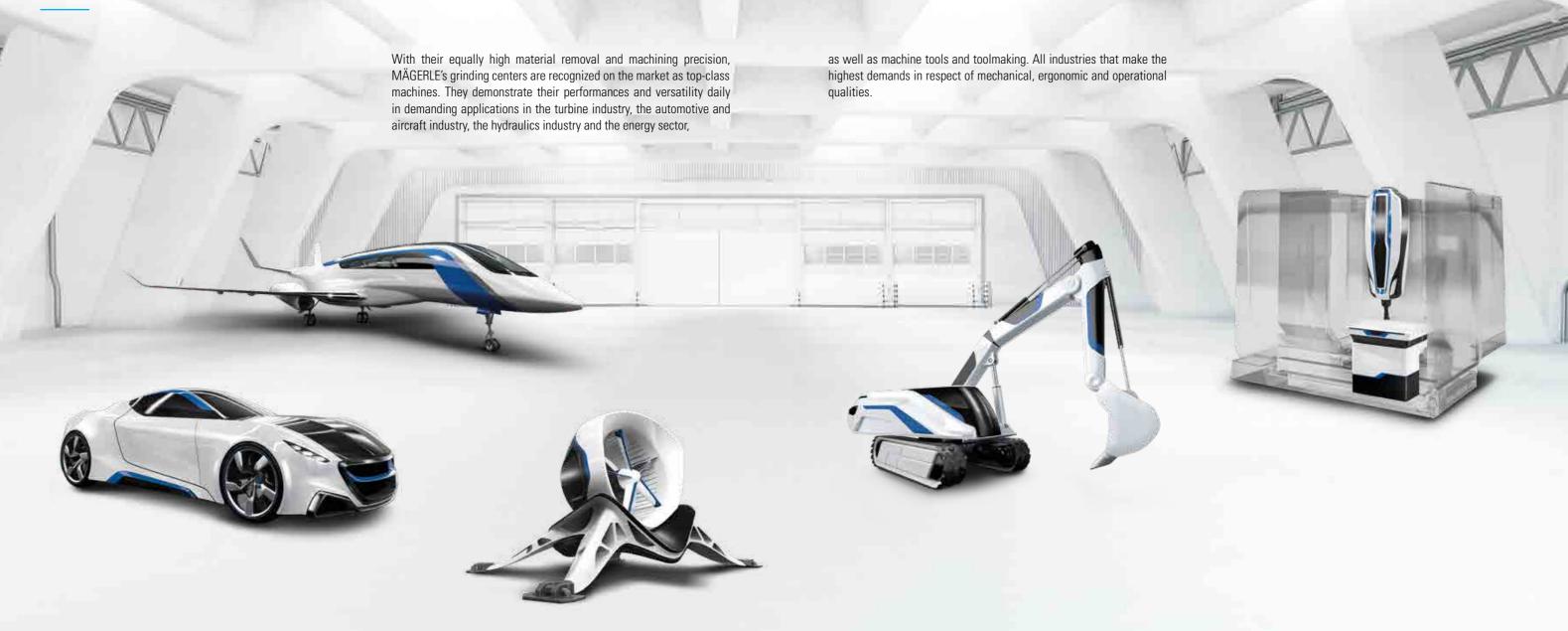
In 2002, MÄGERLE moved into the new building in Fehraltorf. The exterior of the award-winning structure reflects what is hidden inside: engineering skill and world class machine tools. With an increased production area, MÄGERLE created new space for further growth.

A STRONG PARTNER

As part of the UNITED GRINDING Group, MÄGERLE is firmly embedded within the cooperation network of the leading grinding solutions manufacturers. Access to an international sales and service network means we can be where our customers are around the world. The synergy, which arises from being part of a group of companies, boosts MÄGERLE's position in the top quality segment.

4 MÄGERLE

FOR DEMANDING TASKS











5-AXIS GRINDING CENTERS



MFP 30

The compact MFP 30 5-axis grinding center is ideally suited for grinding complex geometries, particularly those of blades and vanes or heat shields for aviation turbines. The compact and space-saving design allows optimal use of the available production area and enables an effective production flow.



MFP 50 / 51

The MFP 50 and MFP 51 combine flexibility and performance in a compact design. These grinding and machining centers show their top form when dealing with challenging workpieces. Processes such as grinding with continuous dressing, milling and drilling can be carried out to perfection in a single clamping. The intelligent design principle takes production quality, safety and cost efficiency to a new level.



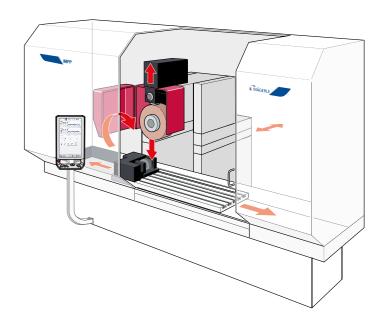
MFP 100

The MFP 100, designed for versatility and productivity, is characterized by its large working envelope and flexible tool changer. It is considered specifically for those markets where multi-feature machining of heavy and complex parts in a few clamping operations is required.

SURFACE AND PROFILE GRINDING MACHINES

MOVING TABLE MACHINES

With the MFP series, MÄGERLE comprehensively covers the requirements for surface and profile grinding machines. The moving table series are specialized in creep feed grinding as well as profile and surface grinding.



MOVING COLUMN MACHINES

With the MGC, MÄGERLE offers a series in moving column design with versatile configuration options for a wide range of applications:

> MGC FT with Stationary Workpiece Carrier

Highest load bearing capacity for large and heavy workpieces

> MGC ST with Swivel Table

Maximum productivity in batch production

> MGC RH with Rotary Table

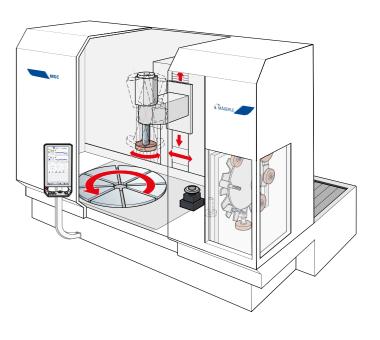
First-class results for Hirth gears and curvic couplings

> MGC RV with Swivel Vertical Spindle

Huge versatility at the highest performance level

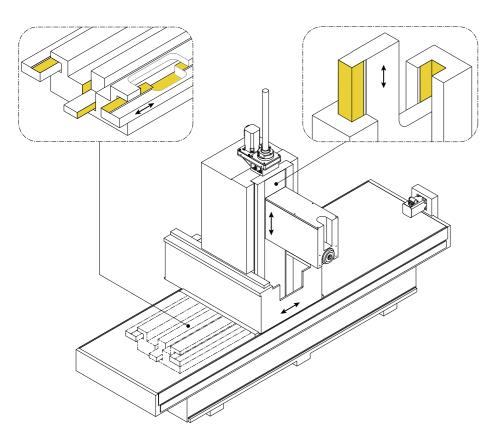
> MGC Special

Tailor-made grinding centers for specific requirements





HYDROSTATIC GUIDEWAYS



The unique design principle of MÄGERLE grinding systems forms the basis for the overall machine quality. The axis structure is supported by hydrostatic wrap-around guideways on a thin oil film and is completely separated from the machine bed. As a result, MÄGERLE grinding machines can withstand high loads without signs of wear — even in long-term use. The oil film has a vibration-damping effect and guarantees high-precision machining of simple or complex workpieces.

POWERFUL DRIVES

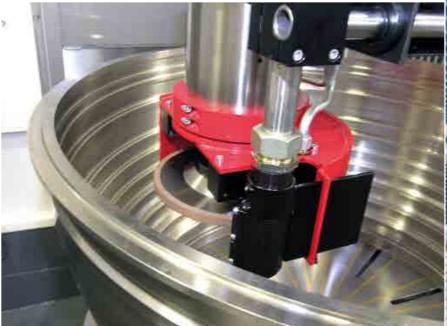
PRECISE AND RELIABLE DOWN TO THE SMALLEST DETAIL

MÄGERLE guarantees precision and reliability down to the smallest detail of its grinding machines. Water-cooled direct drive motors for the grinding spindles ensure maximum performance in demanding continuous operation. An optional balancing system dynamically balances unequal forces in the rotating grinding wheel.

FRONT-RUNNER IN GRINDING POWER

Powerful motors from 25 kW to 115 kW drive the spindles on MÄGERLE grinding machines and lead to outstanding results in respect of removal capacity. MÄGERLE surface and profile grinding machines combine top quality with maximum productivity.



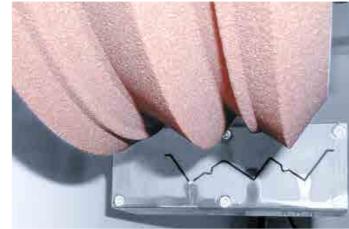




COOLING INTELLIGENCE

COST-SAVING COOLING INTELLIGENCE

The NC systems currently used in MÄGERLE grinding centers allow precise positioning of the coolant supply together with the respective grinding wheel geometry over two NC axes. An optional profile adjustment enables precise application of the coolant to the workpiece zones for machining. Minimal coolant amounts thus provide maximum cooling capacity. Labyrinth seals with a sealing air arrangement protect all bearings in the machining area from impurities and contribute to the long working life of the overall system.

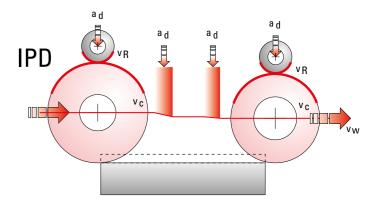


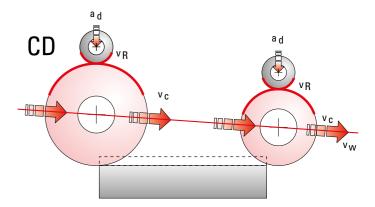


DRESSING METHOD

The dressing of the grinding wheels is a crucial factor for the efficiency of the grinding process. With overhead and table dressing devices, MÄGERLE provides professional solutions for the various requirements of this process step.

The overhead principle unfolds its potential especially in the continuous dressing (CD) and the in-process dressing (IPD). Table dressing devices are used for fixed or rotating dressing tools, where the rotating principle produces optimal results in full form dressing, crushing or CNC dressing. MÄGERLE uses servomotors for driving the dressing devices; these can be freely programmed across the entire rpm range.









MFP 30

COMPACT SOLUTION FOR HIGH PRODUCTIVITY

The compact MFP 30 5-axis grinding center from MÄGERLE is ideally suited for grinding complex geometries, particularly those of blades and vanes or heat shields for aviation turbines. The workpieces to be machined are ergonomically loaded into the work area directly from the front. Heavy workpieces with a clamping fixture can be loaded from the top using a crane. The compact and space-saving design allows optimal use of the available production area and enables an effective production flow.

The powerful drive of the high-performance spindle enables different grinding processes to be combined, such as creep feed grinding with aluminum oxide or grinding with CBN. The full performance and a high torque are available even at low spindle speeds. With the robust tool holders, wide machining contours with high material removal rates can be achieved. The grinding process can use emulsion or oil. The high-performance spindle offers optimal machining conditions for demanding grinding and high speed milling processes in a single clamping.





TECHNICAL DATA MEP 30

TECHNICAL DATA IVIET 30						
X-axis	longitudinal stroke	mm	500			
	travel speed	mm/min	050,000			
Y-axis	vertical stroke	mm	450			
	travel speed	mm/min	030,000			
Z-axis	transverse stroke	mm	500			
	travel speed	mm/min	030,000			
Power grinding w	heel drive S6-40% duty cycle	kW	26			
Rpm range		min ⁻¹	012,000			
Profile dressing d	evice, roll width, max.	mm	307			
Profile dressing d	evice, roll diameter, max.	mm	200			
Tool changer posi	itions	n/pos	24			
Grinding wheel d	imensions (D x T x H)	mm	300 x 60 x 76.2			



MFP 50



MFP 50 / 51

HIGH FLEXIBILITY FOR DEMANDING APPLICATIONS

The MÄGERLE MFP 50 and MFP 51 combine flexibility and performance in a compact design. As a 5- or 6-axis system, these CD grinding and machining centers show their top form when dealing with challenging workpieces. Processes such as grinding, milling and drilling can be carried out to perfection in a single clamping. High productive benefit together with simple operation are the result. The intelligent design principle takes production quality, safety and cost efficiency to a new level. The coolant nozzle, controllable via two axes, allows unrestricted freedom of movement and precise positioning of the coolant jet. In terms of automation a variety of solutions are available for production cells from a single

The MFP 51 grinding center has an extended range of functions. The tool changer with 68 positions and the automatic diamond roll change enable efficient machining of several different workpieces without altering the tooling. The coolant supply can be ideally adapted to the process with the automatic nozzle changer, enabling optimal grinding results.



TECHNICA	AL DATA	MFP 50	MFP 51	
X-axis	longitudinal atraka	mm	500	500
V-9XIS	longitudinal stroke	mm	500	500
	travel speed	mm/min	030,000	050,000
Y-axis	vertical stroke	mm	650	650
	travel speed	mm/min	020,000	030,000
Z-axis	transverse stroke	mm	650	650
	travel speed	mm/min	020,000	030,000
Maximum continu	ous power grinding wheel drive	kW	25/50	25/50
Rpm range		min ⁻¹	010,000	012,000
V-axis profile dress	sing device, roll width, max.	mm	215	60
Tool changer posit	ions	n/pos	24	68
Nozzle changer po	sitions (optionally)	n/pos	-	6
Grinding wheel dir	mensions (D x T x H)	mm	300 x 60 x 76.2	300 x 60 x 76.2



MFP 100

FULLY AUTOMATIC COMPLETE MACHINING OF COMPLEX WORKPIECES

The MFP 100, designed for versatility and productivity, is characterized by its large working envelope and flexible tool changer.

It is considered specifically for those markets where multi-face machining of heavy and complex parts in a few clamping operations is required.

The two-axis NC table can be conveniently loaded from above or from the front, manually, with a crane or with a robot. The tool changer of the MFP 100 works twice as fast as conventional solutions. The dual gripper changes grinding wheels and associated diamond dressing rolls simultaneously. This can significantly reduce the idle time. The strength of the MFP 100 is also in its machining variety. Loading of the tool changer is possible with any desired tools, such as drills, milling cutters, CBN wheels or measuring probes.



TECHNICAL DATA MEP 100

TEGINICAL DATA WITE 100					
X-axis	longitudinal stroke	mm	1,000		
	travel speed	mm/min	040,000		
Y-axis	vertical stroke	mm	950		
	travel speed	mm/min	030,000		
Z-axis	transverse stroke	mm	750		
	travel speed	mm/min	030,000		
Maximum continu	ous power grinding wheel drive	kW	50		
Rpm range		min ⁻¹	010,000		
V-axis profile dres	sing device, roll width, max.	mm	100		
Tool changer posit	ions	n/pos	30/60		
Nozzle changer po	sitions (optionally)	n/pos	6		
Grinding wheel di	mensions (D x T x H)	mm	300 x 100 x 76.2		

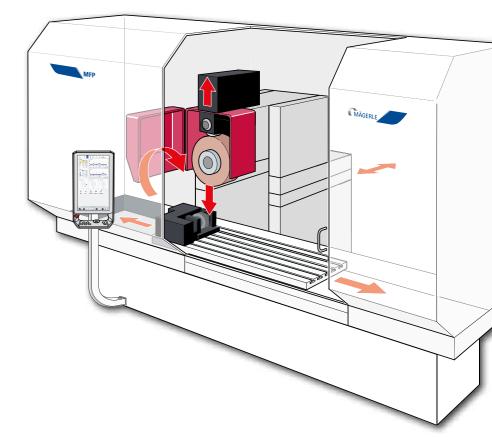




MFP SURFACE AND PROFILE GRINDING MACHINE

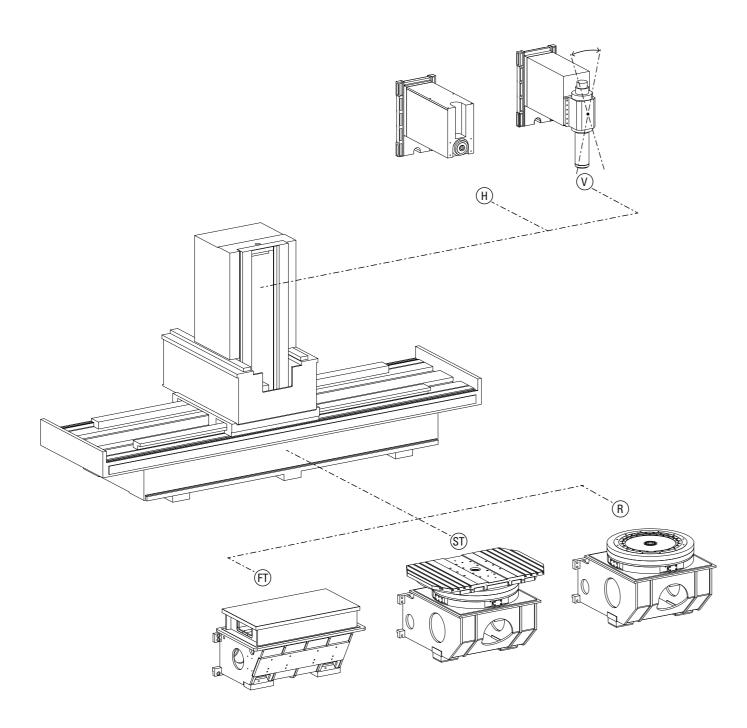
CONSTANT PRECISION IN 24/7 CONTINUOUS OPERATION

With the MFP series, MÄGERLE comprehensively covers the requirements for surface and profile grinding machines. The moving table series are specialized in creep feed grinding as well as profile and surface grinding. They demonstrate their full performance potential in applications where workpieces must be produced in large batches and with high stock removal volumes in the customary high MÄGERLE precision. Thanks to their robust construction, the machines in the MFP series also master these requirements in hard 24/7 continuous operation. The machine has a modular design, table lengths and vertical strokes across a large range can be freely combined with different additional axes and special components. This flexible modular system enables diverse machine configurations, which are precisely geared to the specific user requirements.



TECHNICAL DATA MFP			080	125	160	220	260	
X-axis	longitudinal stroke	mm	800	1,250	1,600	2,200	2,600	
	travel speed	mm/min	30,000	30,000	30,000	30,000	30,000	
Y-axis	vertical stroke	mm	450 / 650	450 / 650	450 / 650	450 / 650	450 / 650	
t-axis	vertical stroke	mm	450 / 650	750	750	750	750	
	travel speed	mm/min	10,000 1)	10,000 ¹⁾	10,000 ¹⁾	10,000 1)	10,000 1)	
7 avia	transverse stroke		200 / E00	350 / 500	350 / 500	350 / 500	350 / 500	
Z-axis	transverse stroke	mm	300 / 500	750	750 / 900	750 / 900	750 / 900	
	travel speed	mm/min	10,000 1)	10,000 ¹⁾	10,000 1)	10,000 1)	10,000 1)	
V-axis profile dressing device, roll widths mm			167 / 207 / 247 / 307 ²⁾					
Roll diame	eter max.	mm		160				
Rpm max.		min ⁻¹	6,000					
Grinding s	pindle drive – power	kW	25 / 50 / 75 / 115 ²⁾					
Rpm range	9	min ⁻¹	5,000 (optionally 8,000)					
Grinding wheel diameters mm		400 / 500 / 600 2)						
Grinding wheel widths mm		160 / 200 / 240 / 300 ²⁾						
Table size / grinding area mm				longitudinal s	troke x transverse stroke			
1) Optional	lv 20.000 mm/min							

²⁾ Depending on machine size and model



LEGEND

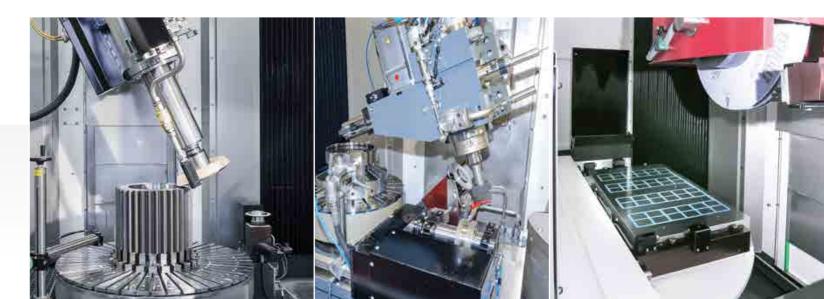
- FT MGC with stationary console
- ST) MGC swivel table
- RH MGC with rotary table and horizontal spindle
- (RV) MGC with rotary table and swivel vertical spindle



MODULAR SYSTEM FOR INDIVIDUALLY **DESIGNED HIGH-QUALITY PRODUCTS**

assembled high-quality products. Using tried

velops a complete solution which is precisely the grinding centers to excel with proven reli-MÄGERLE grinding machines are individually tailored to a specific workpiece or family of ability. In the MGC series, the vertical axis can parts. Each axis stroke is defined according to be optimally matched to the workpiece height and tested standard components, MÄGERLE, the respective workpiece dimensions. The use and the required grinding depth, thanks to in close collaboration with the customer, de- of dependable standard components allows three different machine bed heights.

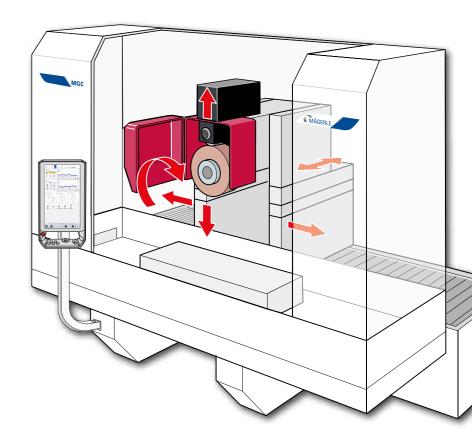




MGC FT WITH STATIONARY WORKPIECE CARRIER

HIGHEST LOAD BEARING CAPACITY FOR LARGE AND HEAVY WORKPIECES

The MGC FT grinding center with stationary table is designed for the high-precision processing of large and heavy workpieces. With a broad range of different table sizes and vertical strokes, this machine meets the highest requirements in respect of load bearing capacity. Like all models in the MGC series, this grinding center is also based on the proven modular concept. Thanks to its variety of configurations with one or several spindles in a horizontal or vertical arrangement as well as a multitude of additional components, the MGC with fixed console is also one of the front-runners in its category with regard to flexibility.



TECHNICAL DATA MGC FT			080	140	210	260	330	440	550
X-axis	longitudinal stroke	mm	800	1,400	2,100	2,600	3,300	4,400	5,500
	travel speed	mm/min	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Y-axis	vertical stroke	mm	450 / 650 900	650 / 900	650	650 / 900	650 / 900	650	650
	travel speed	mm/min	10,000 1)	10,000 1)	10,000 1)	10,000 1)	10,000 1)	10,000 ¹⁾	10,000 ¹⁾
Z-axis	transverse stroke	mm	500 / 750	500 / 750	500 / 750	500 / 750	500 / 750	750	750
	travel speed	mm/min	10,000 1)	10,000 1)	10,000 1)	10,000 1)	10,000 1)	10,000 ¹⁾	10,000 1)
V-axis prof	ile dressing device, roll widths	mm	167 / 207 / 247 / 307 ²⁾						
Roll diame	ter max.	mm	160						
Rpm max.		min ⁻¹	6,000						
Grinding sp	oindle drive – power	kW			25 / 5	50 / 75 / 115 ²⁾			
Rpm range		min ⁻¹	5,000 (optionally 8,000)						
Grinding wheel diameters mm		400 / 500 / 600 ²							
Grinding w	inding wheel widths mm		160 / 200 / 240 / 300 ²⁾						
Table size / grinding area mm			longitudinal stroke x transverse stroke						
1) Ontionall	., 20 000 mm/min								

¹⁾ Optionally 20,000 mm/min

²⁾ Depending on machine size and model

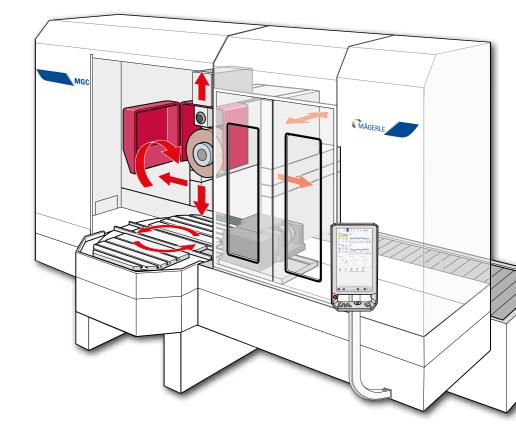




MGC ST WITH SWIVEL TABLE

MAXIMUM PRODUCTIVITY IN BATCH PRODUCTION

Similar to the MFP series, the MÄGERLE Grinding Center delivers superb results for creep feed grinding as well as for profile and surface grinding. In its swivel table version, the MGC ST is also designed for maximum production capacity. The 180° swiveling table allows loading and unloading of workpieces while machining is in operation. Non-productive times for workpiece change are thus largely eliminated. This results in maximum productivity for small and large batches, as well as in special applications. In conjunction with the automatic loading and unloading system, the MGC ST frees up additional resources. The openly accessible swivel table also provides the ideal interface.

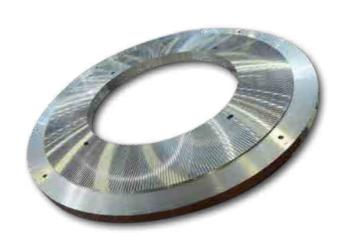


210 260	140	130	TECHNICAL DATA MGC ST			
2,100 2,600	1,400	800	mm	longitudinal stroke	X-axis	
20,000 20,000	20,000	20,000	mm/min	travel speed		
450 / 650 / 900 650 / 900	650 / 900	450 / 650	mm	vertical stroke	Y-axis	
10,000 1) 10,000 1)	10,000 1)	10,000 ¹⁾	mm/min	travel speed		
500 / 750 500 / 750	500 / 750	300 / 500	mm	transverse stroke	Z-axis	
10,000 1) 10,000 1)	10,000 1)	10,000 ¹⁾	mm/min	travel speed		
07 / 247 / 307 ²⁾	167 / 207		mm	V-axis profile dressing device, roll widths mm		
160	mm	Roll diameter max.				
6,000	min ⁻¹		Rpm max.			
0 / 75 / 115 2)	25 / 50 /		kW	pindle drive – power	Grinding sp	
ptionally 8,000)	5,000 (opti		min ⁻¹	Rpm range		
⁷ 500 / 600 ²⁾	400 / 500 / 600 ²⁾				Grinding wheel diameters	
00 / 240 / 300 ²⁾	160 / 200		mm	Grinding wheel widths		
760 x 325 ²⁾ 1,000 x 485	760 x 325 ²⁾ 1,000 x 485	760 x 325	mm	Swivel table +/- 180° with 2 clamping surfaces (L x W)		
5	10,000 ¹⁾ 167 / 20 25 / 5 5,000 (c) 400 , 160 / 20 760 x 325 ²⁾	10,000 1)	mm/min mm mm min ⁻¹ kW min ⁻¹ mm mm	travel speed file dressing device, roll widths ster max. pindle drive – power heel diameters wheel widths le +/- 180°	V-axis profined in the second of the second	

¹⁾ Optionally 20,000 mm/min

²⁾ Depending on machine size and model



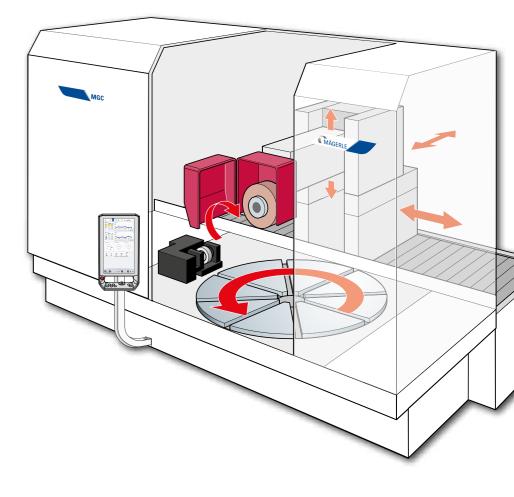




MGC RH WITH ROTARY TABLE

FIRST-CLASS RESULTS FOR HIRTH GEARS AND CURVIC COUPLINGS

With table diameters of up to 2.5 meters and a maximum load bearing capacity of 15 tons, the MGC RH grinding center is unequalled throughout the world. Well-known companies in the turbine industry rely on this powerful concept. This grinding center is unrivalled particularly when it comes to machining turbine disks with Hirth gears and curvic couplings of the highest quality. The direct-drive rotary table mounted on hydrostatic bearings ensures the necessary precision, with a positioning accuracy of less than three angular seconds.



TECHNICAL DATA MGC RH			140	210	260
X-axis	longitudinal stroke	mm	1,400	2,100	2,600
	travel speed	mm/min	20,000	20,000	20,000
Y-axis	vertical stroke	mm	450 / 650 / 900 / 1,200	450 / 650 / 900 / 1,200	650 / 900
	travel speed	mm/min	10,000 1)	10,000 1)	10,000 ¹⁾
Z-axis	transverse stroke	mm	300 / 500	500 / 750	500 / 750
	travel speed	mm/min	10,000 1)	10,000 1)	10,000 1)
Grinding spindle drive – power		kW		25 / 50 / 75	
Rpm range	9	min ⁻¹		5,000 (optionally 8,000)	
Grinding wheel diameters mm		mm		400 / 500 / 600 2)	
Grinding wheel widths mm		mm		160 / 200 / 240 / 300 2)	
Rotary table diameters mm		800 / 1,000 / 1,200	800 / 1,000 / 1,200	1,200 / 1,500 / 2,000 / 2,500	
1) Ontional	l. 20 000 mm/min				

¹⁾ Optionally 20,000 mm/min

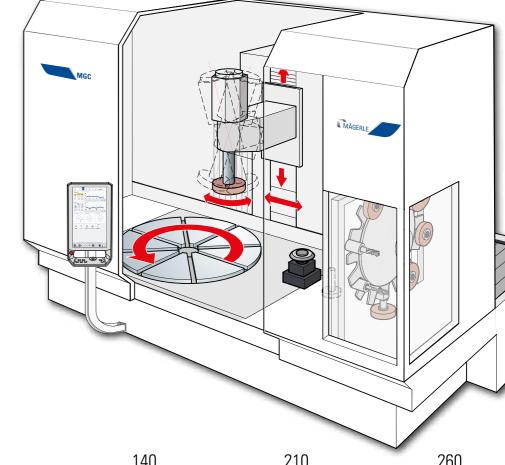
²⁾ Depending on machine size and model



MGC RV WITH SWIVEL VERTICAL SPINDLE

HUGE VERSATILITY AT THE HIGHEST PERFORMANCE LEVEL

Versatility with the highest production quality level is the outstanding strength of this vertical grinding machine. It demonstrates its capabilities particularly in the manufacture of bearing rings, where optimum runout characteristics are required for maximum smooth running. Equipped with rotary table and fully automatic tool changer, this vertical grinding machine can master other functions in addition to grinding. Whether turning, milling, drilling, reaming or boring, this system delivers the same impressive results. The vertically arranged spindle swivels in the range of $\pm 50^{\circ}$ offering plenty of space for machining a wide variety of workpieces. An interchangeable measuring probe guarantees that each individual workpiece is machined in a single clamping with consistently high perfection.



TECHNICAL DATA MGC RV			140	210	260
X-axis	longitudinal stroke	mm	1,400	2,100	2,600
	travel speed	mm/min	20,000	20,000	20,000
Y-axis ve	vertical stroke	mm	650 / 900	650 / 900	650 / 900
	travel speed	mm/min	10,000 1)	10,000 1)	10,000 1)
Z-axis	transverse stroke	mm	500	500	500
	travel speed	mm/min	10,000 1)	10,000 ¹⁾	10,000 ¹⁾
Grinding spindle drive - power		kW		25 / 35	
Rpm range	е	min ⁻¹		5,000 15,000 ²⁾	
Tool chang	ger positions	n/pos		424	
Grinding wheels widths mm		mm		300 / 400 ²⁾	
Tool lengths mm		mm	300		
Tool holder type		type		HSK-B80 / HSK-B100 ²⁾	
Rotary table diameters mm		800 / 1,000 / 1,200	1,200 / 1,500	1,500 / 2,000	
1) Ontionally 20 000 mm/min					

¹⁾ Optionally 20,000 mm/min

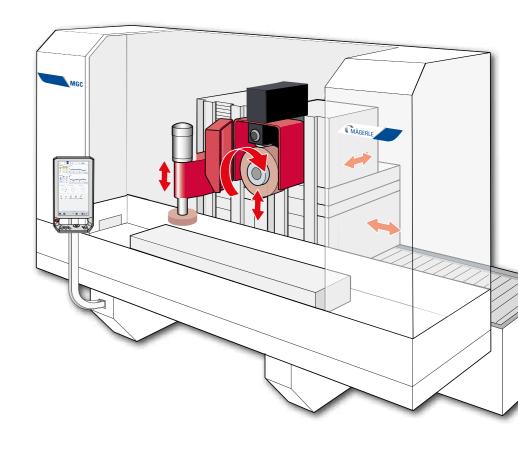
²⁾ Depending on machine size and model



MGC SPECIAL

TAILOR-MADE GRINDING CENTERS FOR SPECIFIC REQUIREMENTS

The standardized components of the MÄGERLE modular concept can be freely configured to provide individual solutions. This makes possible the production of grinding centers fully tailored to exact customer specifications. Single and multiple spindle systems with a horizontal or vertical arrangement can be combined as desired with stationary workpiece carriers, swivel table and rotary table, in any dimensions. The result in all cases is a made-to-measure tool, which fulfills the high requirements on manufacturing quality in the turbine, automotive, machine tool and bearing sectors with optimal cost effectiveness.



TECHNICAL DATA MGC SPECIAL WITH EXTENDED MACHINE CONFIGURATIONS

X-axis	longitudinal stroke	mm	max. 5,500
	travel speed	mm/min	up to 20,000
Y-axis	vertical stroke	mm	450 / 650 / 900 / 1,200
	travel speed	mm/min	up to 20,000
Z-axis	transverse stroke	mm	500 – 900
	travel speed	mm/min	up to 20,000
V-axis profile dressing device, roll widths		mm	167 – 307
Grinding spindle drive – power		kW	25 – 115
Rpm range	е	min ⁻¹	up to 24,000
Tool chang	ger positions	n/pos	424
Grinding v	wheel widths	mm	30 – 1,150
Rotary table diameters		mm	1,000 – 2,500
Rotary table variants		Rota	ary indexing table, rotary table with hydrostatic bearings
Spindle configurations			Horizontal, vertical, swivel spindle(s), special spindles,
	oningui ationo		multiple spindle configurations

32 MÄGERLE > C.O.R.E.

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

C.O.R.E. helps us make your production fit for the digital future.

It's based on a new operating system, C.O.R.E. OS, that equips the machine with intelligence.

Thanks to the uniform C.O.R.E. software architecture, exchanging data between UNITED GRINDING machines is easy. The integrated umati API can be used to communicate with third-party systems as well. It also offers access to UNITED GRINDING Digital Solutions™ products directly on the machine. C.O.R.E. not only establishes the technical foundation for this and other IoT and data applications, it also forms the basis of revolutionary yet uniform operation.

What does this mean for you?

- The user-friendly, intuitive, and uniform operation makes work easier for machine setters, machine operators, and maintenance staff
- Standardized data collection and intelligent processing of data creates transparency and supports process optimization
- The uncomplicated and consistent use of modern digital software solutions is guaranteed - directly on the machine
- The technical platform for the use of modern IoT and data applications has been established

C.O.R.E. PANEL — THE FUTURE OF OPERATION

Intuitive

Thanks to intuitive design with self-explanatory icons, navigation through the machine menu and process steps is quick and easy. Instead of buttons, the user is presented with a modern and clearly arranged multi-touch display.

User-friendly

Electronic key switch (RFID)

Bluetooth V4.0 for headset connection

Integrated front camera

2x USB 3.0 portsAdjustable tilt

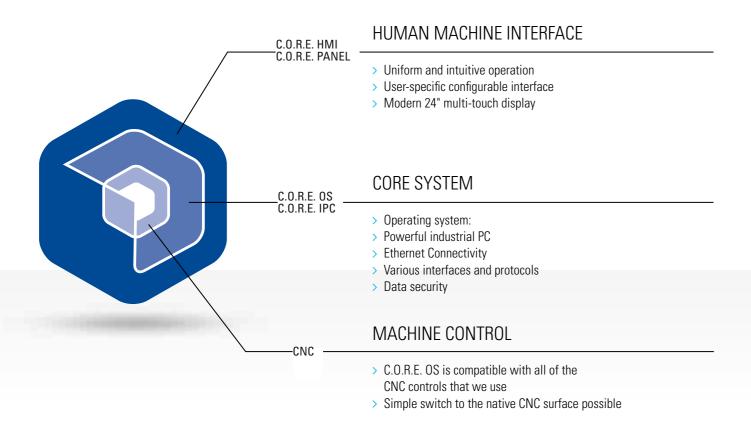
Each user configures their own user interface individually. This is called up automatically with the RFID chip after logging in. When the user leaves the machine, the panel switches to "Dark Factory Mode."

Production progress and the machine state are also clearly visible from a distance. And thanks to the ergonomic design, the panel can be tilted and individually adjusted easily.

Efficient

The uniform and intuitive operating philosophy reduces training time. The configurable and role-specific interface helps prevent errors and increases the efficiency and quality of programming. Information can be exchanged quickly and in realtime via the front camera and Bluetooth headset. UNITED GRINDING Digital Solutions™ products can be used directly on the panel.

C.O.R.E. ELEMENTS



INDUSTRIAL **INTEGRATED** MULTI-TOUCH DISPLAY FRONT CAMERA **医医医压多物理** 01:17:53 目. Bit a SFI F-FXPI ANATORY **CONFIGURABLE ICONS** DISPLAY 720 1000 STANDARDIZED **ERGONOMIC FUNCTION KEYS OVERRIDE SWITCH** PREST NAME NO. **Technical Specifications** 24" Full HD multi-touch display 16-position rotary override switch

34 MÄGERLE > CUSTOMER CARE

WE ARE HERE FOR YOU!

BRAND 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



Warranty extension



Material Spare parts Replacement parts



Qualification Production support



Prevention Maintenance Inspection



Service

Customer service Customer consultation HelpLine Remote service



Rebuild Machine overhaul Assembly overhaul



Retrofit Modifications Retrofits

UNITED GRINDING DIGITAL SOLUTIONS™

your machines' efficiency and increasing overall productivity under the UNITED GRINDING Digital Solutions™ brand.

We develop solutions to support you in simplifying processes, boosting Find out more about UNITED GRINDING Digital Solutions™ services on our website in the Customer Care section.

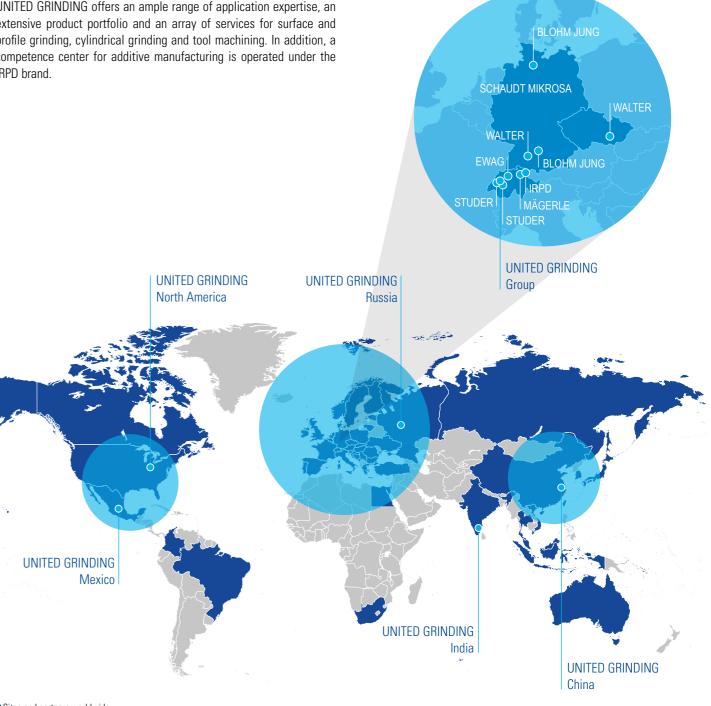


UNITED GRINDING GROUP

UNITED GRINDING Group is one of the world's leading manufacturers of precision machines for grinding, eroding, laser, measuring and combination machining. With around 2,500 employees at more than 20 production, service and sales sites, the Group is organized in a customer-oriented and efficient way.

With its brands MÄGERLE, BLOHM, JUNG, STUDER, SCHAUDT, MIKROSA, WALTER, and EWAG as well as competence centers in America and Asia UNITED GRINDING offers an ample range of application expertise, an extensive product portfolio and an array of services for surface and profile grinding, cylindrical grinding and tool machining. In addition, a competence center for additive manufacturing is operated under the IRPD brand

«We want to make our customers even more successful»



■ Sites and partners worldwide



Mägerle AG Maschinenfabrik Allmendstrasse 50 CH-8320 Fehraltorf Tel. +41 43 355 66 00 sales@maegerle.com

maegerle.com

