#onestepahead

MACHINING TECHNOLOGY.

This is who we are

GROB-WERKE.

Technology at its best

STEP WITH US INTO A GREEN FUTURE.

At GROB, we strive for continuous progress and improvement. Not only do we strive to develop outstanding solutions and products for our customers, but we also seek to make a contribution to our environment and future generations. This is firmly anchored in our corporate philosophy and lived every day.

We therefore utilize photovoltaics and geothermal energy in our locations and support a wide variety of social projects. We also value SUSTAINABILITY in our internal departments. Our products are based on the highest energy efficiency and regenerative drive systems. We integrate our supplier network in reducing CO2 footprint.

OUR PRODUCT RANGE.

#machiningtechnology #universalmachiningcenters #assemblyplants #electromobility #automation #additivemanufacturing #digitalization #usedmachines #service

Concentrated competence worldwide

INTELLIGENT TECHNOLOGY IS HUMAN.

For generations, we at GROB have lived and experienced this principle by making our customer's requirements the focus of our work. The result is sophisticated technology creating more efficient production processes worldwide and delivering highest quality.

RESEARCH & DEVELOPMENT

With a high degree of creativity and technical intuition, as well as the best engineering expertise, our developers have worked hard to earn the reputation of being a technology leader.

ASSEMBLY

From pre-assembly to machine assembly to process commissioning – our employees demonstrate their expertise with optimally coordinated workflows.

ENGINEERING

With method development and structured problem solving, our employees in Engineering develop innovative concepts representing milestones for precision, dynamics, and reliability.

COMMISSIONING

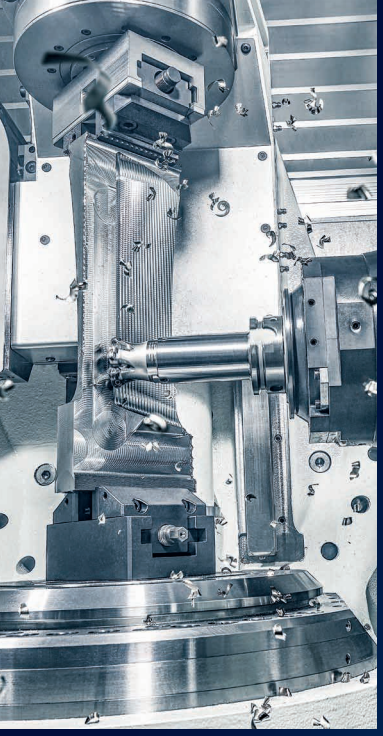
With simulation techniques and virtual commissioning, we achieve the highest adherence to delivery dates and product quality.

PRODUCTION

The high degree of vertical integration along the entire value creation chain, numerous machining technologies and our employees' distinctive specialist knowledge create the best conditions for state-of-the-art production.

TECHNICAL APPLICATION CENTERS

Our production plants in Germany, Brazil, the USA, China, Italy and India have technical application centers for the machining and electromobility sectors, where our customers can experience GROB technologies up close.



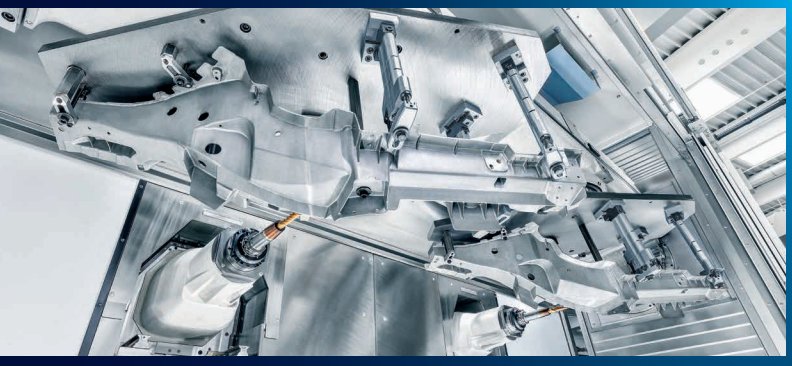

TAZ
TECHNOLOGIE- UND ANWENDUNGSZENTRUM

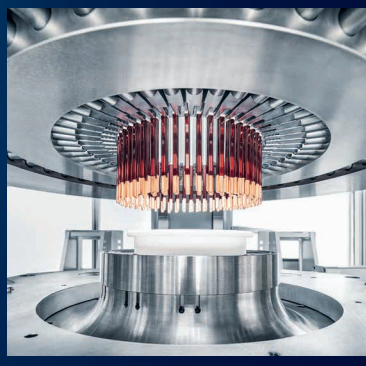

GROB
G550


GMP300


GROB G550 access

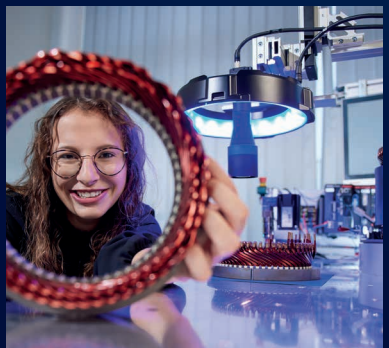

GMZ
GEBRAUCHT-
MASCHINENZENTRUM
GROB






GROB
G4P2050


Location
Operating ...
GROB-Line



Ensure the optimal solution for your success

GROB MACHINING TECHNOLOGY AT A GLANCE.

G-SERIES.

Machine concepts

Maximum part size/minimum footprint

Technical data

F-SERIES.

Machine concepts

Maximum part size/minimum footprint

Technical data

MOTORIZED SPINDLES.

G-Series/F-Series

AUTOMATION SOLUTIONS.

G-Series/F-Series

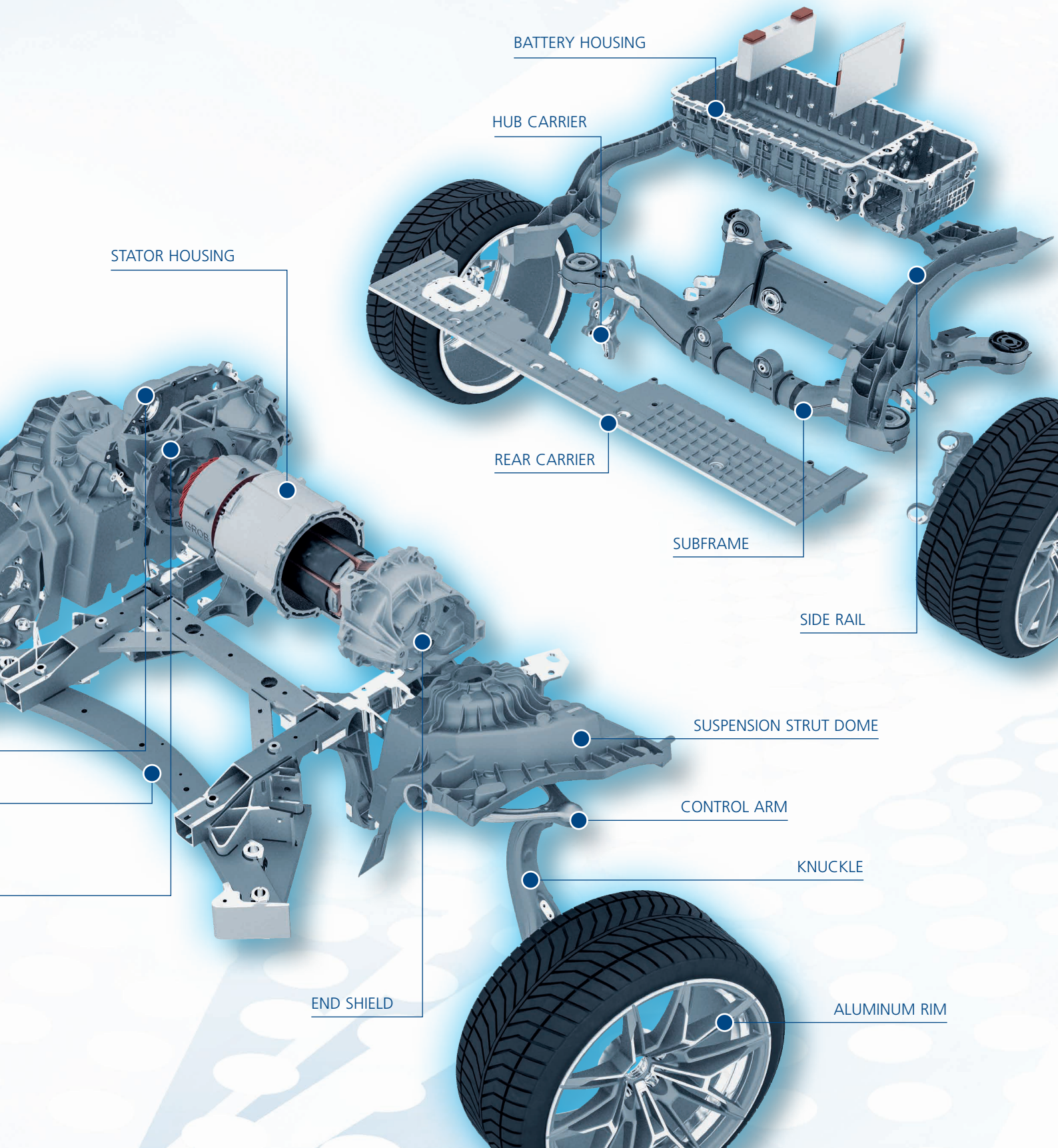
DIGITALIZATION.

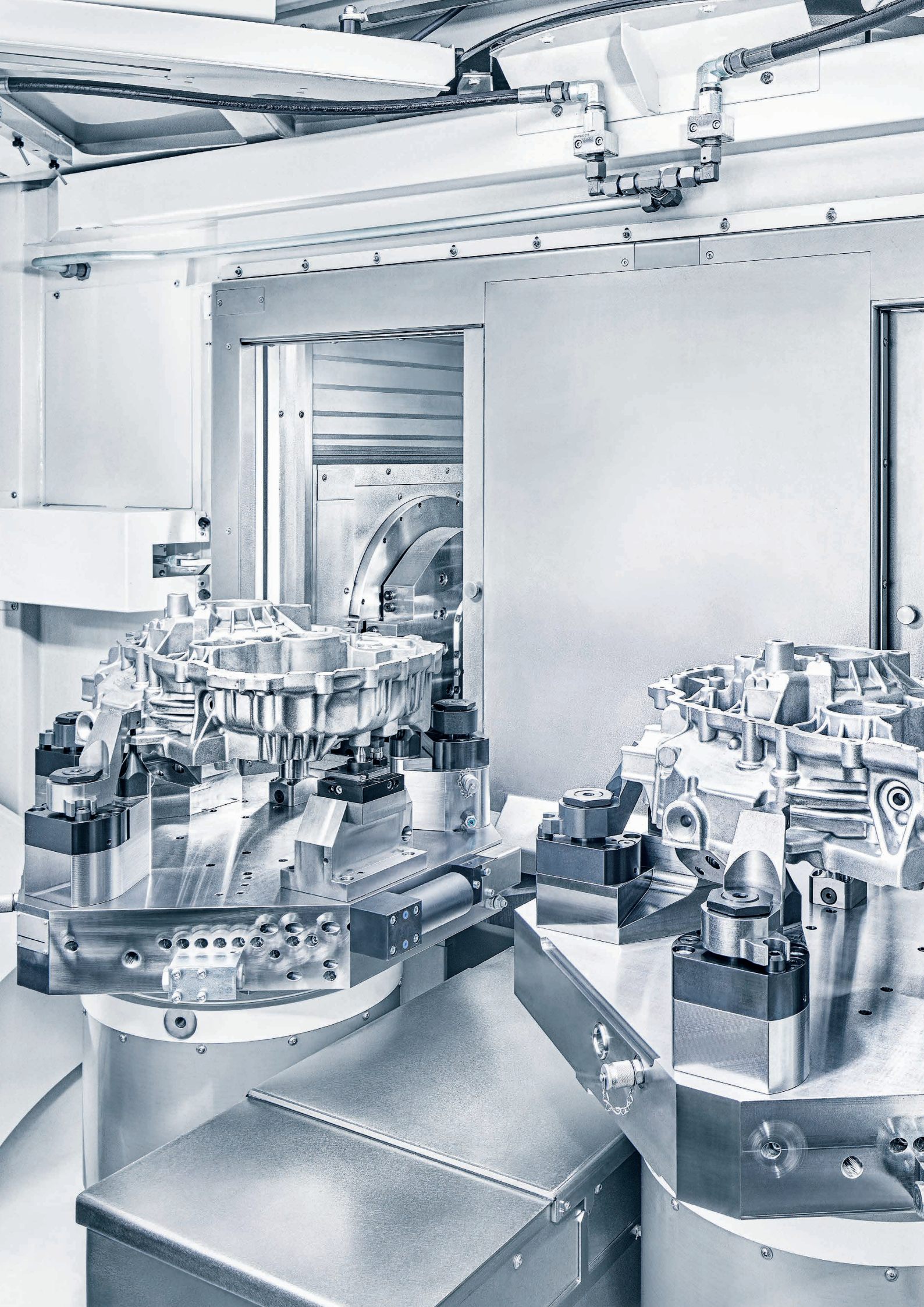
SERVICE.

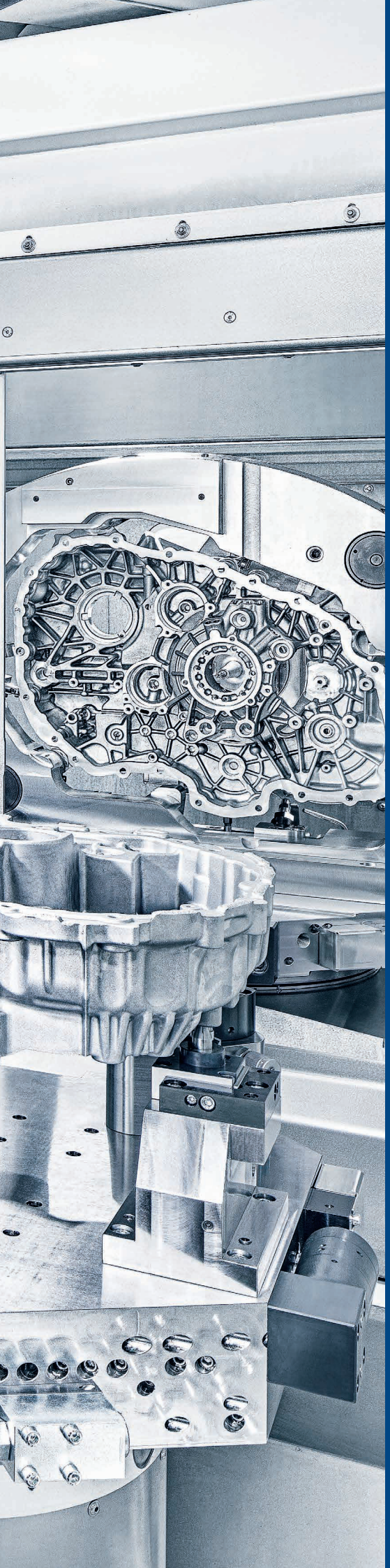
TRANSMISSION CASE

SUBFRAME

INTERMEDIATE HOUSING


BATTERY HOUSING
HUB CARRIER
STATOR HOUSING
REAR CARRIER
SUBFRAME
SIDE RAIL
SUSPENSION STRUT DOME
CONTROL ARM
KNUCKLE
END SHIELD
ALUMINUM RIM





Flexible, dynamic & productive

MACHINING TECHNOLOGY BY GROB.

Profound know-how and use of the latest technologies make GROB a recognized expert in the machining technology sector. GROB's machine concepts help you master any challenge.

- In-house tool and clamping fixture design as well as clamping fixture construction – ensure the optimal solution for your success
- Largest process and engineering experience among machine tool manufacturers
- Automation solutions tailored to your needs
- One single supplier responsible:
  From individual machines to turn-key production lines

OUR PORTFOLIO.

#G300 #G320 #G500 #G520 #G500F #G520F #G700F #G720F #G600F

Available as single and two-spindle machining centers

THE GROB G-SERIES.

GROB's G-series is designed specifically for use in flexible series production and provides the perfect solution for high-precision machining. No matter which machine concept you choose – your GROB machine can be stand-alone or interlinked with other machines in an automated production line.

Benefit from the **PROCESS RELIABILITY, EFFICIENCY**, and **DURABILITY** of our machine concept.

TILTING ROTARY TABLE

- Almost limitless machining potential thanks to the largest possible swivel range

CHIP DISPOSAL

- Uninterrupted part machining with chip disposal by a flume, material handling or direct discharge

HORIZONTAL MOTORIZED SPINDLE

- For meeting the toughest machining requirements

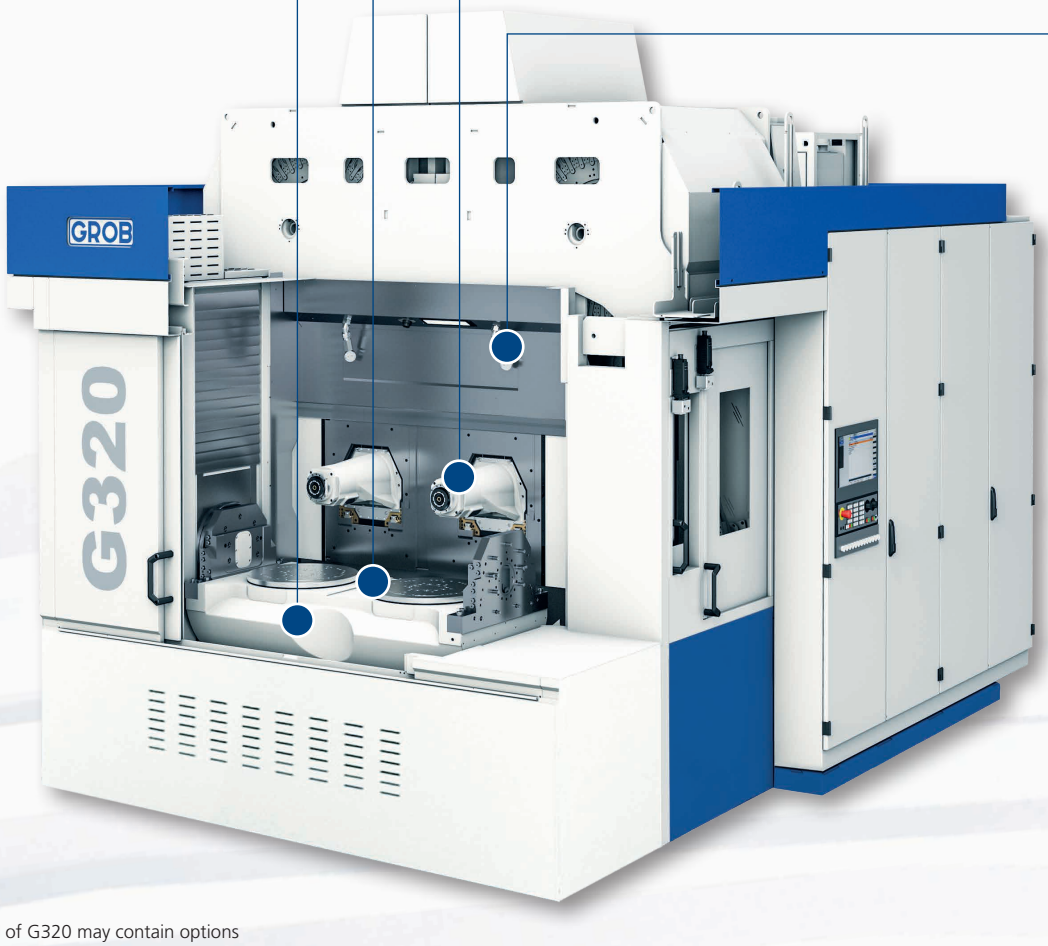
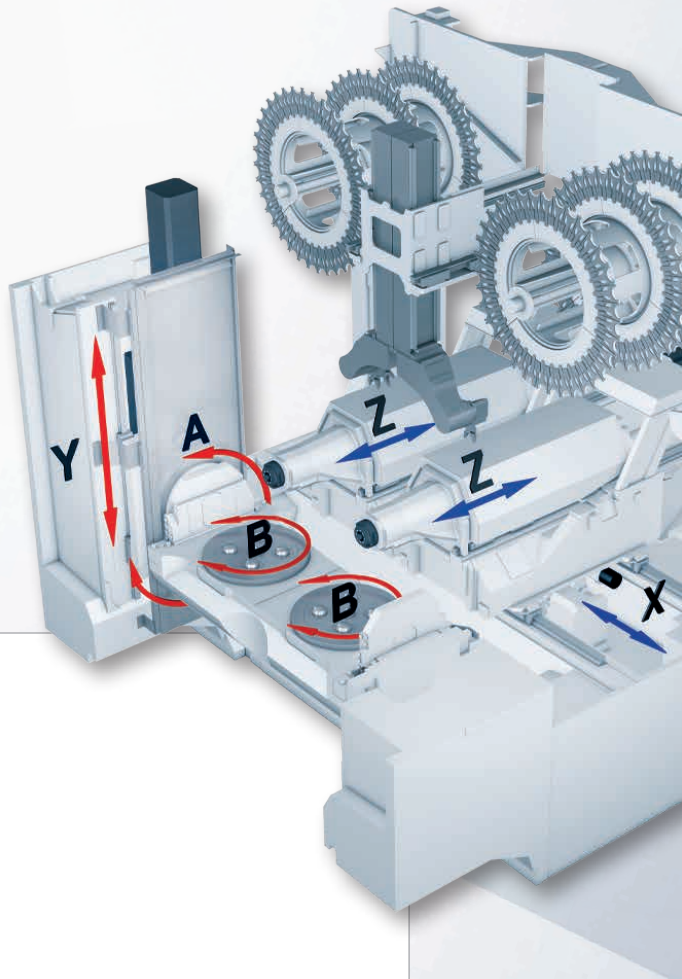


Illustration of G320 may contain options

"OVERHEAD" PART MACHINING

- Ideal for machining with MQL
- Best chip fall
- Low heat input by hot chips on the fixture
- Flexible for front and top loading



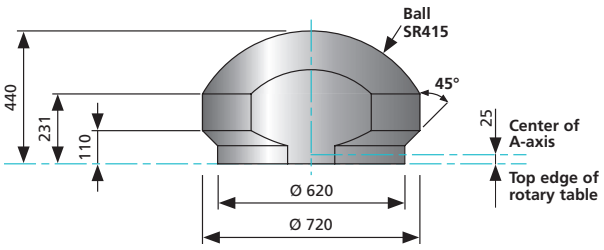
UNIQUE AXIS CONCEPT

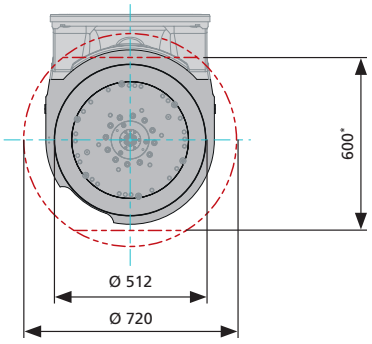
- Three linear axes and two rotary axes permit 5-sided machining
- The linear axes X and Z move the machining spindle
- Optimal temperature concept
- X- and Z-axis with optimized dynamics and rigidity

Maximum part size
Minimum footprint
G300

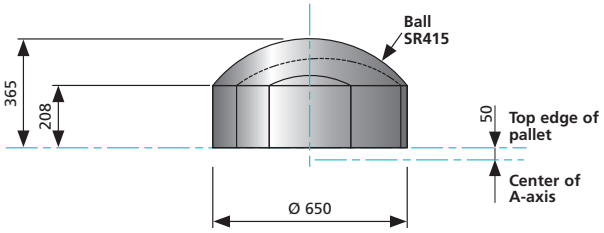
A- / B-axis max. [mm]	Top view max. [mm]

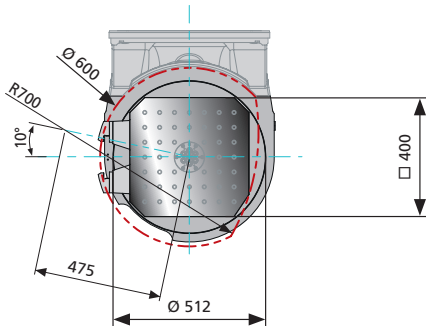
Basic machine



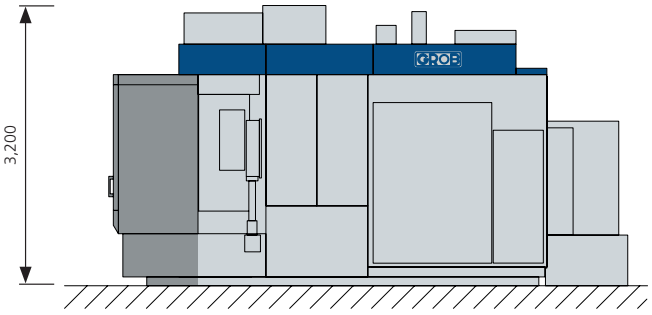


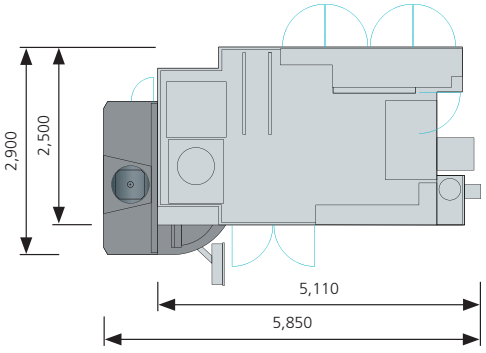
Basic machine with pallet changer





Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal; *Flattening for top/front loading

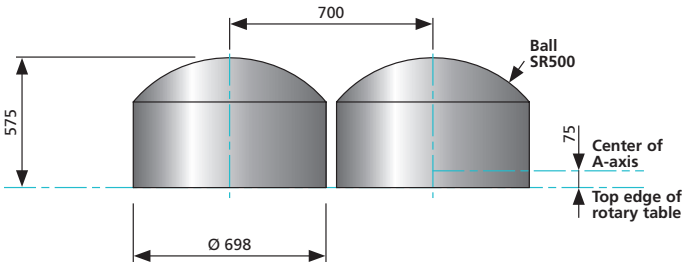
Illustrations may contain options

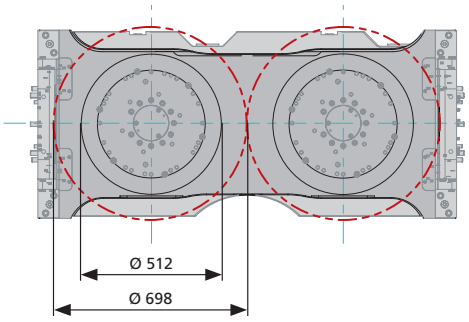
Maximum part size
Minimum footprint

G320

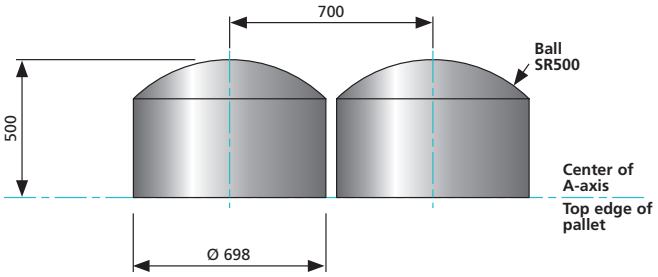
A-/B-axis max. [mm]	Top view max. [mm]

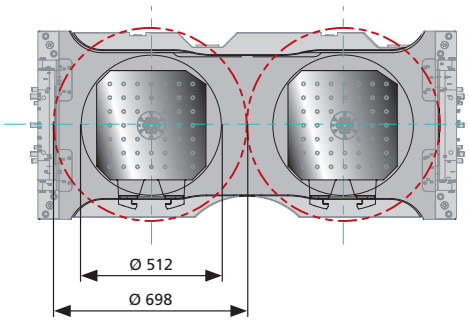
Basic machine



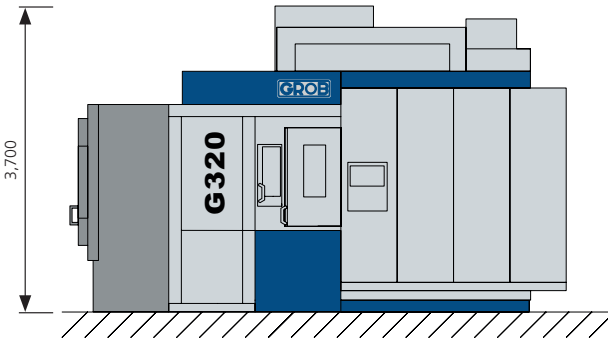


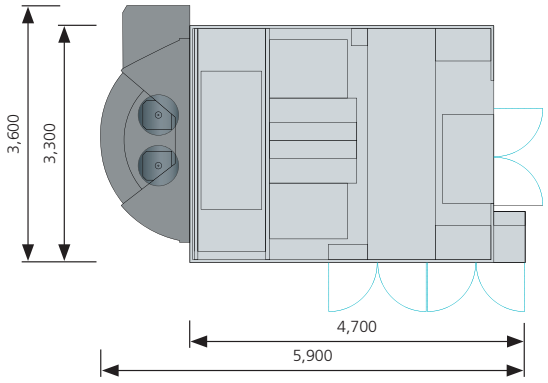
Basic machine with pallet changer





Basic machine with optional pallet changer





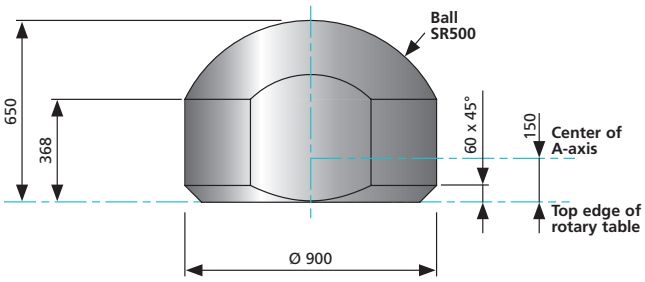
Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

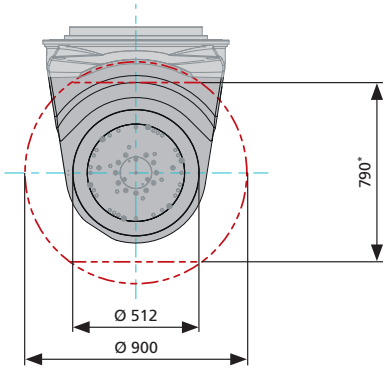
Illustrations may contain options

Maximum part size
Minimum footprint
G500

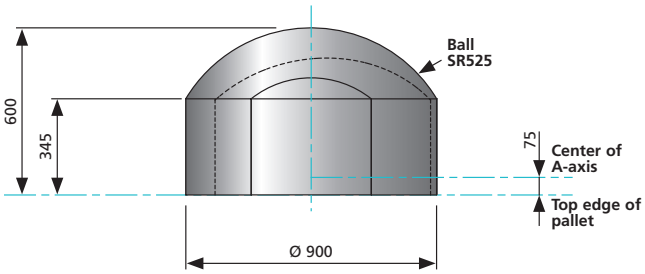
A- / B-axis max. [mm]	Top view max. [mm]

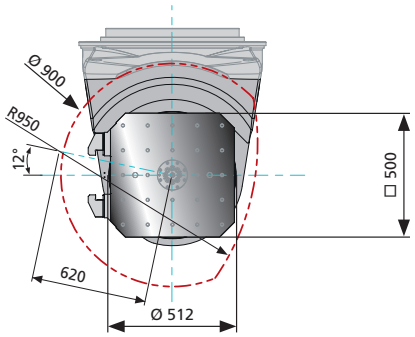
Basic machine



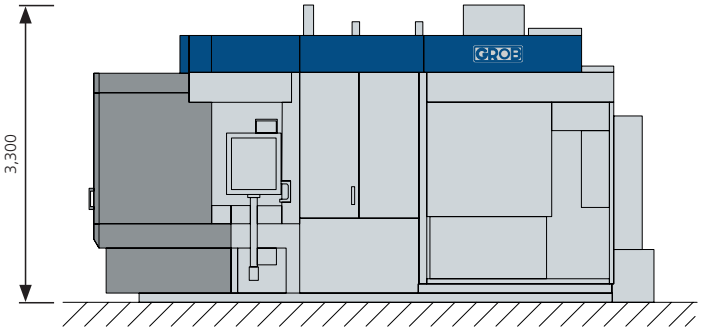


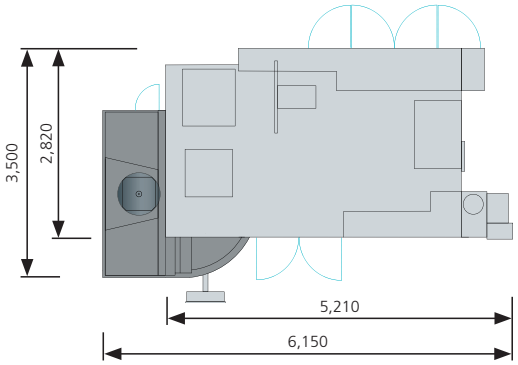
Basic machine with pallet changer





Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal; *Flattening for top/front loading

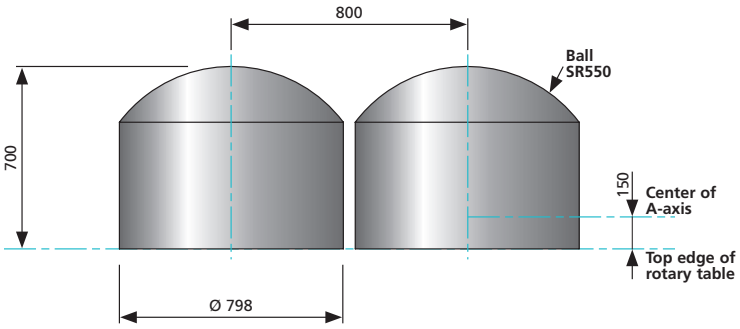
Illustrations may contain options

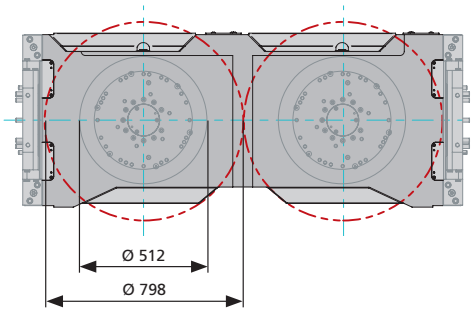
Maximum part size
Minimum footprint

G520

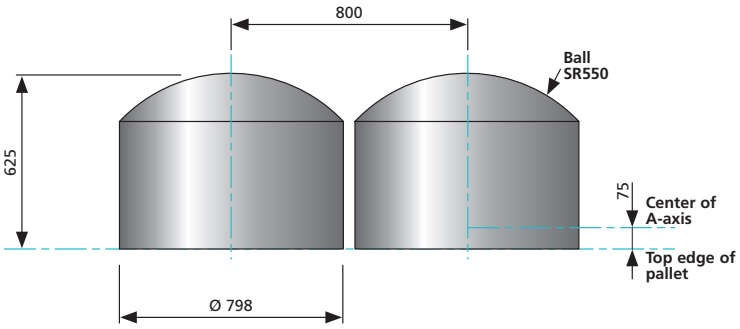
A- / B-axis max. [mm]	Top view max. [mm]

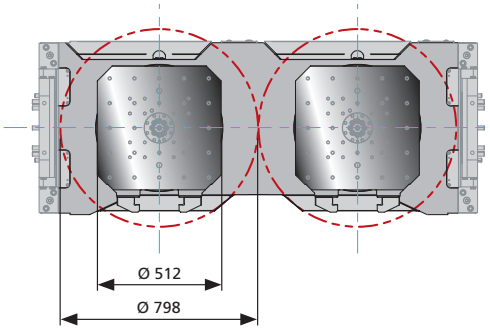
Basic machine



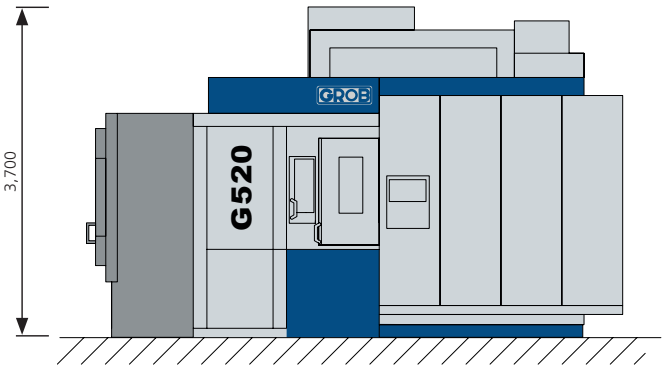


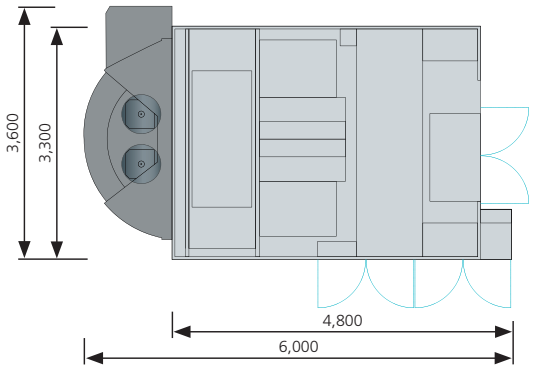
Basic machine with pallet changer





Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

Illustrations may contain options

Technical data – overview

G300 / G320 / G500 / G520

MACHINE TYPE	G300	G320
Spindle cut [mm]	—	700
Working travels in X-/Y-/Z-axis [mm]	600/770 (870)[6]/810	650/850/870
Max. speeds in X-/Y-/Z-axis [m/min]	95/45/100	95/60/120
Max. accelerations in X-/Y-/Z-axis [m/s²][1]	7.5/4/15	7.5/6/20.5
Max. feed forces in X-/Y-/Z-axis [kN] [1]	8/8/8	5/5/8
Positioning accuracy* in X-/Y-/Z-axis [mm]	0.006	0.006
Repeat precision of positioning* in X-/Y-/Z-axis [mm]	<0.0025	<0.0025

EXCERPT – MOTORIZED SPINDLE (further types on request)						Chip-to-chip time t_1 according to VDI 2852 [s] SIEMENS control system		
Spindle type	Speed n_{max} [rpm]	Tool interface for short hollow taper tools [5]	Diameter at the front spindle bearing [mm]	Max. drive power at 100%/40% duty cycle [kW]	Max. torque at 100%/40% duty cycle [Nm]	Pick-up magazine	Tool changer arm	Tool changer arm
4	12,000	HSK-A63	70	29/39	34.6/46.6	3.3	2.3	2.0
1	18,000	HSK-A63	70	29/39	34.6/46.6	3.3	2.3	2.0
5	12,000	HSK-A63	70	40/52	63.7/82.8	3.3	2.3	2.0
38	17,000	HSK-A63	70	40/52	63.7/85.9	3.3	2.3	2.0
2	8,000	HSK-A63	80	20/25	159/199	3.4	2.4	—
31	12,000	HSK-A100	100	40/50	161.4/185.5	—	2.8	2.5
6	6,000	HSK-A100	100	20/26	262/340	—	2.8	2.5
22	6,000 [2, 4]	HSK-A100	100	31.5/36	301/344	—	2.8	2.5
3	10,000	HSK-A100	100	20/26	262/340	—	2.8	2.5
7	9,000	HSK-A100	110	54/65	470/575	—	—	—

DISK-TYPE TOOL MAGAZINE	STM [7]		DTM		DTM		STM	DTM	DRS	STM	DTM	DRS
TOOL INTERFACE	HSK-A63		HSK-A63		HSK-A100		HSK-A63			HSK-A100		
Number of tool pockets per motorized spindle	40	34	77	67	37	32	36	69	105	18	33	51
Max. tool length [mm] ▸ Vertical disk arrangement	365		300	500	280	500	500			500		
Max. tool diameter [mm] ▸ No diameter restrictions for adjacent pockets	72		72		130		72			130		
▸ Diameter restrictions for adjacent pockets	170		170		280		170			280		
Max. tool weight [kg]	10		10		22		10			22		
Max. tilt moment around gripper groove [Nm]	12		12		40		12			40		

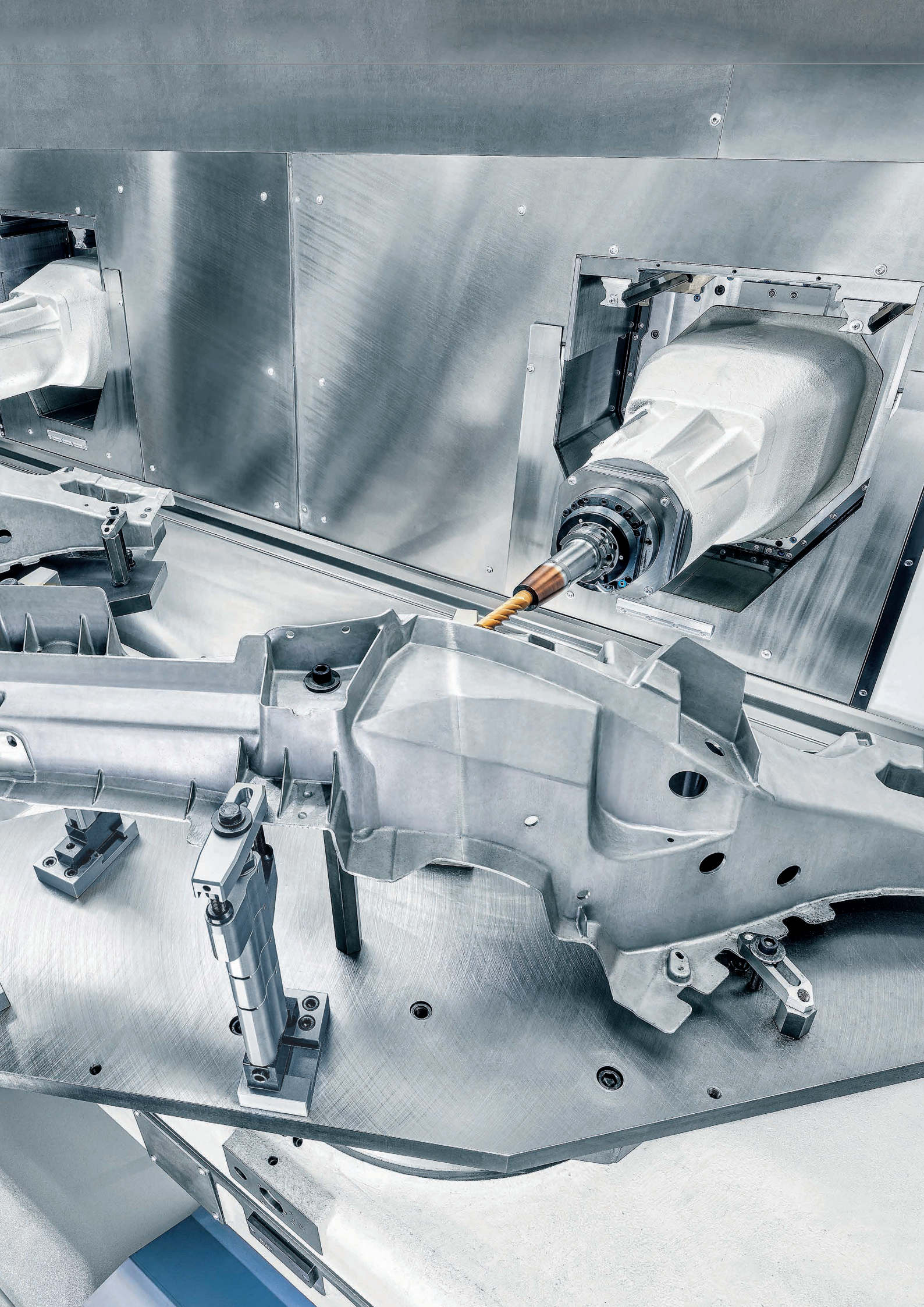
PART		
Table diameter [mm]	512	512
Table load [kg] (without/with pallet) (A-/B-axis)	400/340	2x325/2x275
Pallet size [mm]	400x400	400x400
Interference diameter [mm]	720	2x698
Number of media connections (without/with pallet changer)	11/6	11/8
CONNECTION RATINGS		
Power requirements at 3 AC 400 V/50 Hz [kVA]	> 42	> 42
Compressed air [bar]	5	5
WEIGHT (approx.)		
Total weight [kg] (without/with pallet changer)	15,000/17,500	20,000/27,000
PROCESS STAGES		
Automatic pallet changer	•	•
Pallet change time according to VDI 2852 [s] [3]	12	10

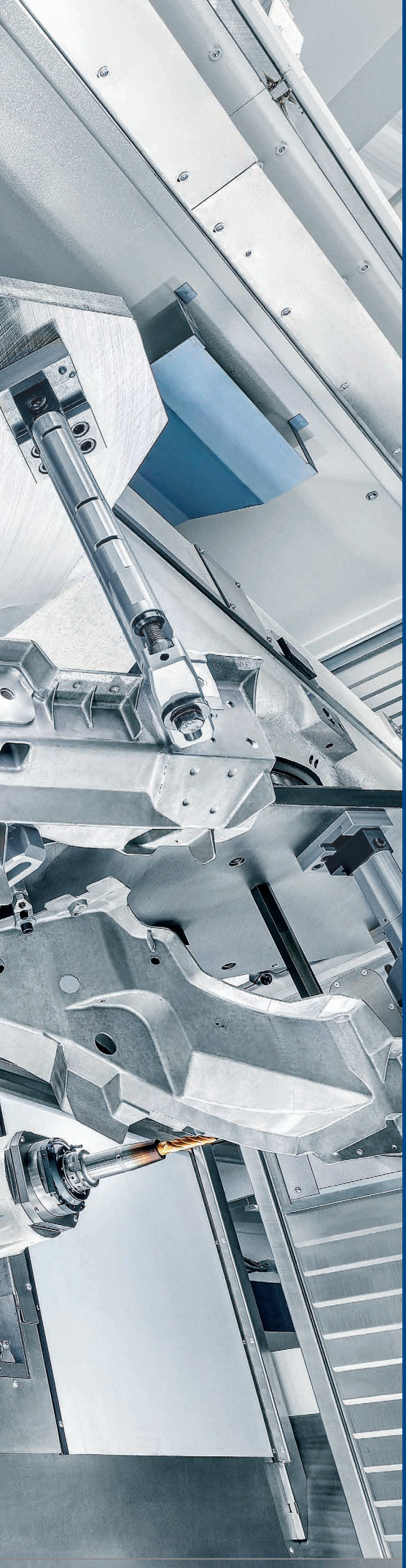
[1] Depends on motorized spindle type
[2] During a cross feed tool change, the chip-to-chip time is extended by +0.8 seconds
[3] Time without seating check system
[4] Available only in combination with a SIEMENS machine control system
[5] According to ISO 12164-1
[6] With pallet changer

	G500	G520
	—	800
	800/950 (1,055)[6]/905	750/1,000/870
	90/50/100	95/70/120
	9/4.5/15	7.5/5.5/20.5
	8/8/8[8]	5/5/8
	0.006	0.006
	<0.0025	<0.0025
Chip-to-chip time t_1 according to VDI 2852 [s] SIEMENS control system		
	Pick-up magazine: 3.4 / Tool changer arm: 2.6	Tool changer arm: 2.1
	3.4 / 2.6	2.0
	3.4 / 2.6	2.0
	3.4 / 2.6	2.0
	3.6 / 2.6	—
	4.8 / 3.0	2.5
	4.8 / 3.0	2.5
	— / 3.0	2.5
	4.8 / 3.0	2.5
	4.9 / 3.1	—
	STM[7] HSK-A63: 45, 39	STM[7] HSK-A100: 25, 23
	DTM HSK-A63: 87, 77	DTM HSK-A100: 47, 42
	STM HSK-A63: 36	DTM HSK-A63: 69
	DRS HSK-A63: 105	STM HSK-A100: 18
	DTM HSK-A100: 33	DRS HSK-A100: 51
	400	400
	400 / 600	400 / 600
	500	500
	70	118
	70	118
	72	130
	170	260
	170	280
	170	280
	10	22
	10	22
	10	22
	12	40
	12	40
	12	40
	512	512
	525/525	2x625/2x525
	500x500	500x500
	900	2x798
	11/8	11/8
	> 42	> 42
	5	5
	19,000/22,000	22,500/28,500
	•	•
	13	10

[7] Only available in combination with a pick-up magazine
[8] Feed forces depend on spindle type and HSK tool holder

STM = single disk-type tool magazine; DTM = double disk-type tool magazine; TDM = three disk magazine
Subject to technical changes without prior notice
* According to ISO230-2:2014





One step ahead

EQUIPPED FOR THE FUTURE.

Profound know-how and use of the latest technologies make GROB a recognized expert in the machining technology sector. GROB's machine concepts help you master any challenge.

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  From individual machines to turn-key production lines

OUR PORTFOLIO.

#G300 #G320 #G500 #G520 #G500F #G520F #G700F #G720F #G600F

Available as single and two-spindle machining centers

THE GROB F-SERIES.

The GROB F-series guarantees optimal conditions for efficient series production of frame structure and chassis parts, as well as battery housings. Regardless of which of the two machine concepts is selected, your GROB machine can stand alone, or be interlinked with other machines in an automated production line.

Benefit from the **PROCESS RELIABILITY, EFFICIENCY**, and **DURABILITY** of our machine concept.

OUTSTANDING DESIGN FOR MINIMUM QUANTITY LUBRICATION MACHINING

- Thanks to the A- and B-axis combination in the part and optimized work area design

UNHINDERED CHIP FALL AND OPTIMAL HEAT DISSIPATION

- Thanks to steep machine bed slants in the work area and optimized axis configuration

HIGH DYNAMICS AND SHORT CHIP-TO-CHIP TIMES

- Thanks to optimized and coordinated axis drives

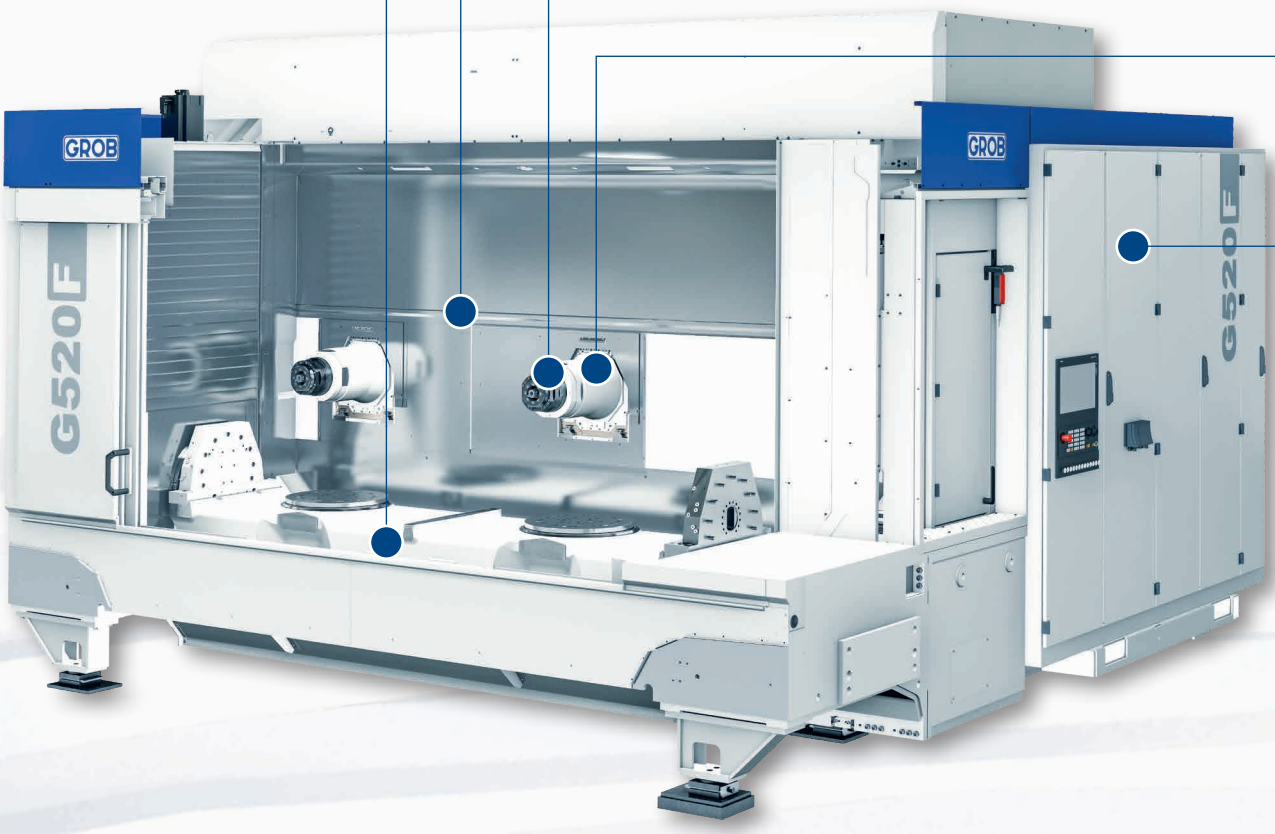


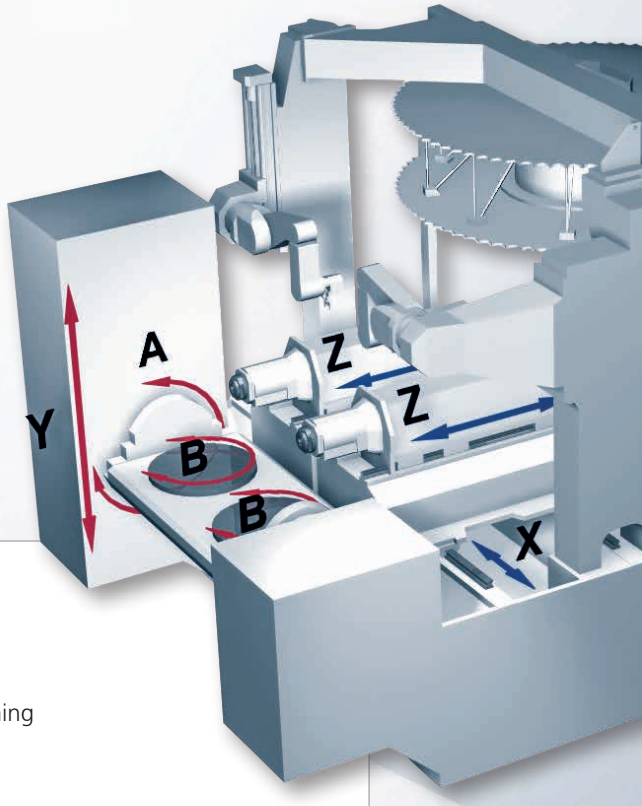
Illustration of G520F may contain options

HIGH MACHINING ACCURACY

- Thanks to the rigid design and horizontal spindles in cross slide construction

HIGH MANUFACTURING FLEXIBILITY

- Thanks to the modular design and ease of retooling



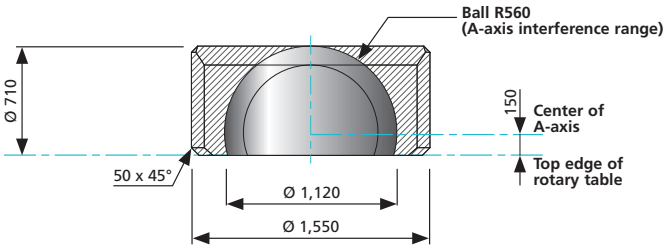
UNIQUE AXIS CONCEPT

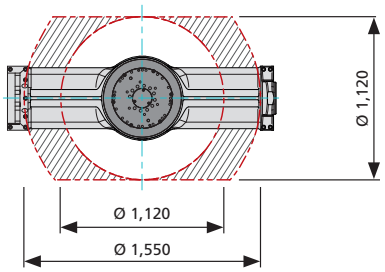
- Three linear axes and two rotary axes permit 5- and 6-sided machining
- The linear axes X and Z move the machining spindle
- Optimal temperature concept
- X-axis and Z-axis with optimized dynamics and rigidity

Maximum part size
Minimum footprint
G500F

A-/B-axis max. [mm]	Top view max. [mm]

Basic machine

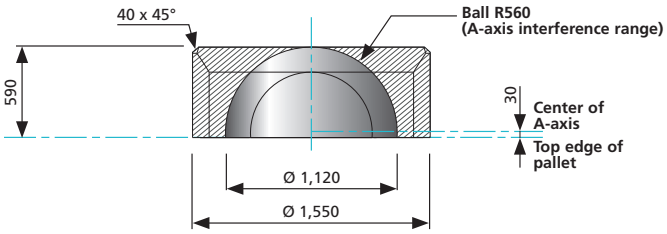


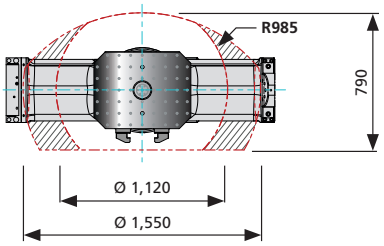


Unrestricted A-/B-axis operation for B-axis diameters ≤ 1,120 mm

Pendulum mode for B-axis diameters > 1,550 mm

Basic machine with pallet changer

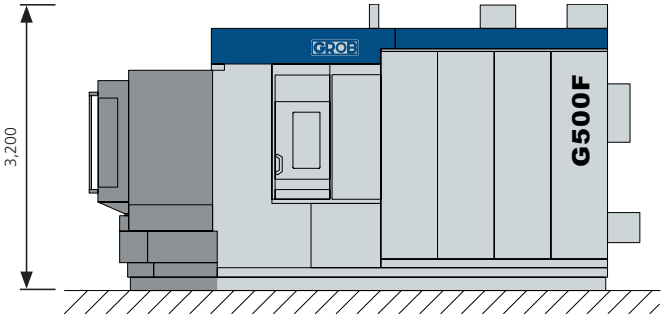


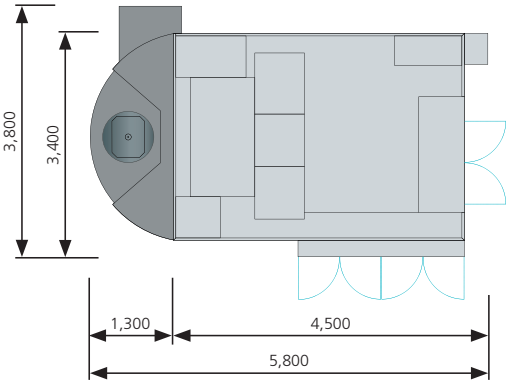


Unrestricted A-/B-axis operation for B-axis diameters ≤ 1,120 mm

Pendulum mode for B-axis diameters > 1,550 mm

Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

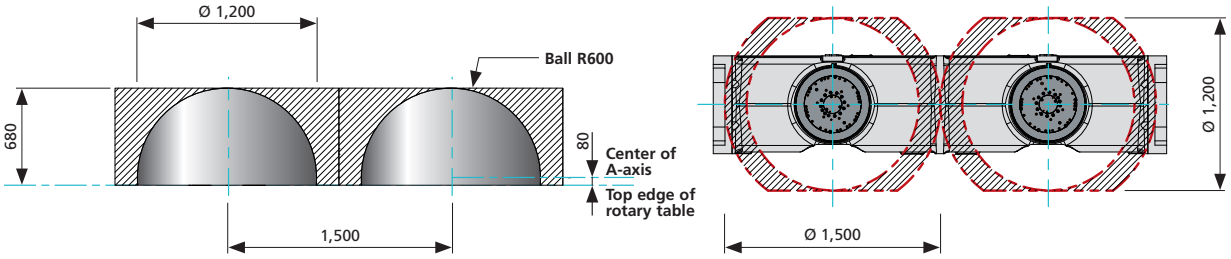
Illustrations may contain options

Maximum part size
Minimum footprint

G520F

A- / B-axis max. [mm]	Top view max. [mm]

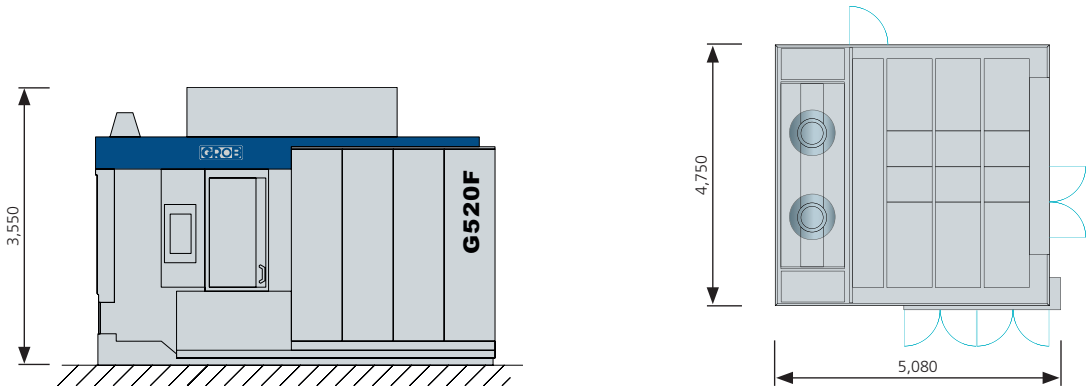
Basic machine



Unrestricted A-/B-axis operation for B-axis diameters ≤ 1,120 mm

Pendulum mode for B-axis diameters ≥ 1,550 mm

Basic machine



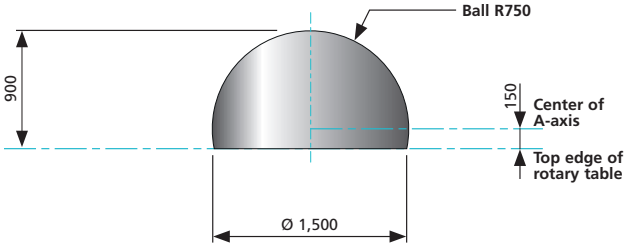
Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

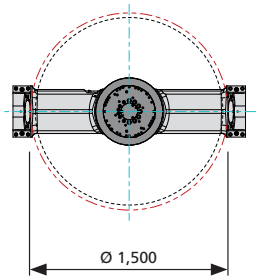
Illustrations may contain options

Maximum part size
Minimum footprint
G700F

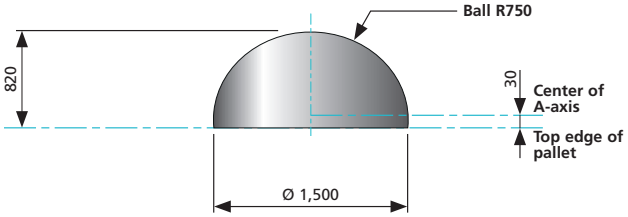
A- / B-axis max. [mm]	Top view max. [mm]

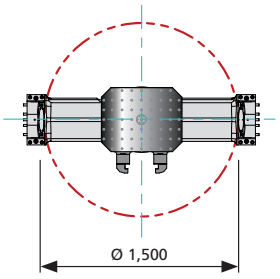
Basic machine



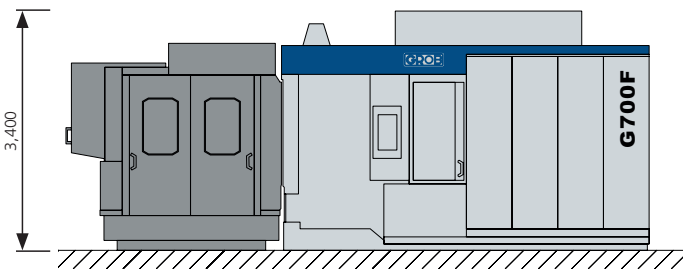


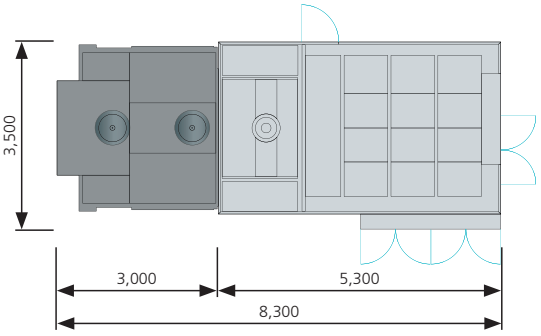
Basic machine with pallet changer





Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

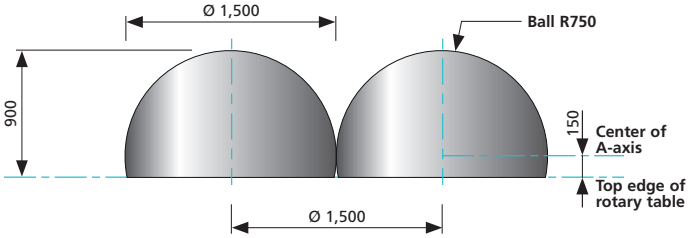
Illustrations may contain options

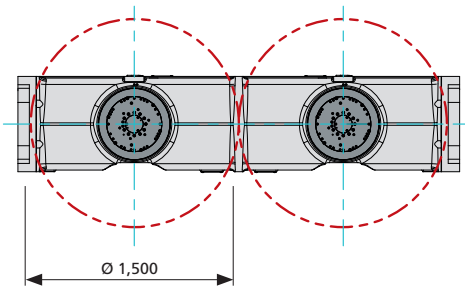
Maximum part size
Minimum footprint

G720F

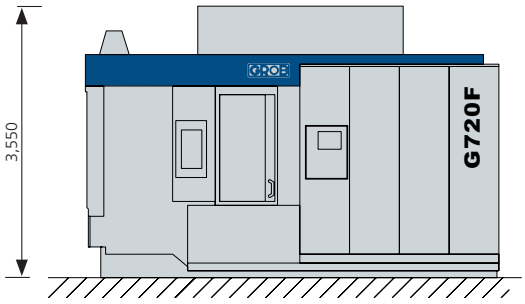
A- / B-axis max. [mm]	Top view max. [mm]

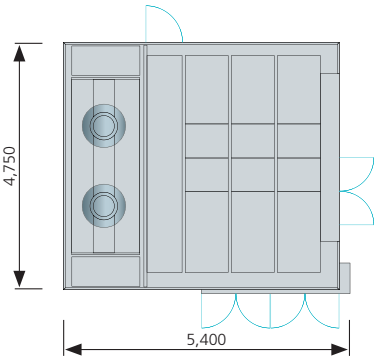
Basic machine





Basic machine





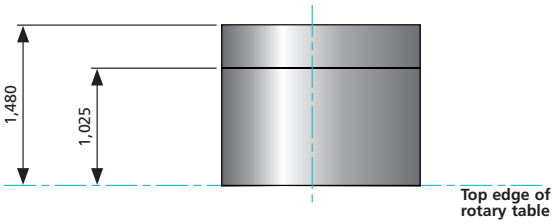
Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

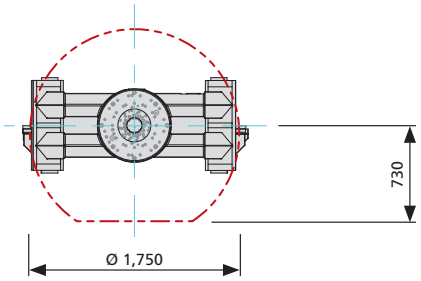
Illustrations may differ

Maximum part size
G600F

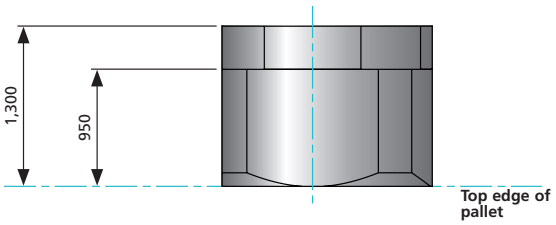
A- / B-axis max. [mm]	Top view max. [mm]

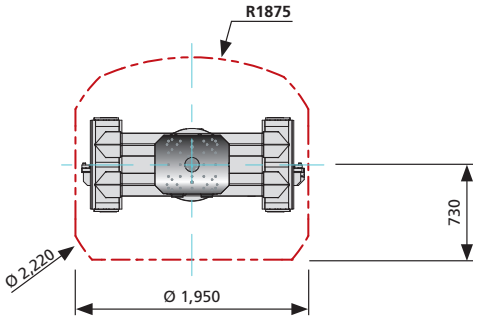
Basic machine with standard interference range



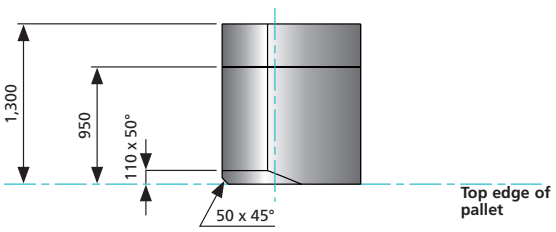


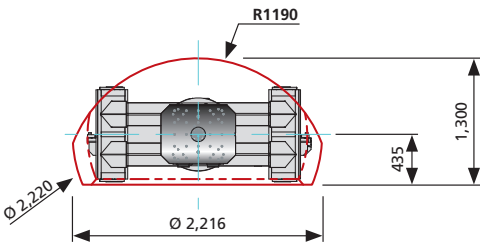
Basic machine with max. interference range with/without optional pallet changer with displacement axis





Basic machine with optional pallet changer





Dimension values [mm] not taking into account preventive maintenance and operating areas or emulsion and chip disposal

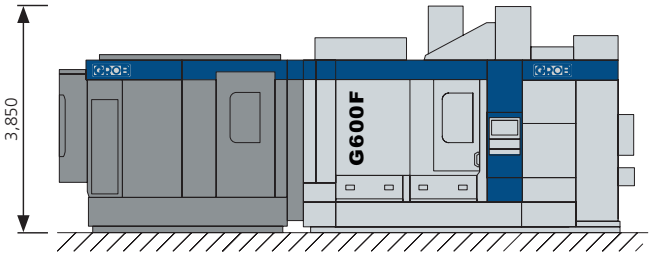
Illustrations may contain options

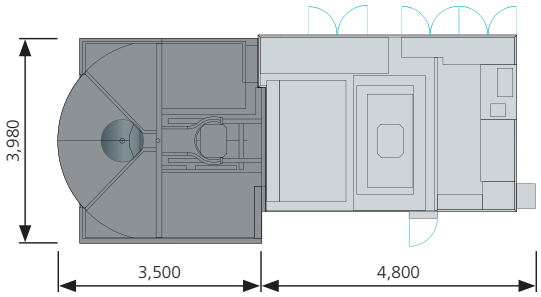
Minimum footprint

G600F

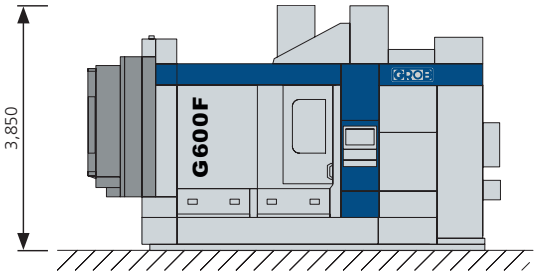
Side view max. [mm]	Top view max. [mm]

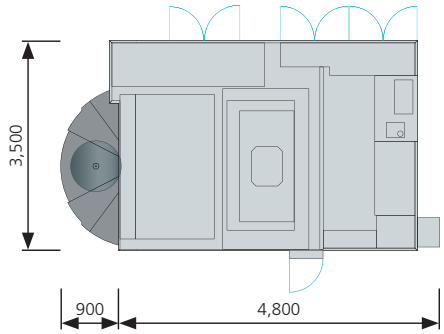
Basic machine with optional pallet changer and displacement axis





Basic machine with optional pallet changer





SPECIFIC CONCEPT ADVANTAGES

- Optimized view of the work area
- Small footprint combined with the maximum work area
- Version with AC-kinematics and long travel paths in the X-, Y- and Z-axes
- Highly dynamic, 5- to 6-sided machining
- Automation possible with manual/automatic front loading or automatic top loading
- Motorized spindle head with 180° swivel range supported on both sides
- Automatic chip transport to the rear of the machine

Technical data – overview

G500F/G520F/G700F/G720F/G600F

MACHINE TYPE	G500F	G520F
Spindle cut [mm]	—	1,500
Working travels in X-/Y-/Z-axis [mm]	1,550/875/790	1,450/1,200/1,035
Max. speeds in X-/Y-/Z-axis [m/min]	70/50/90	80/50/100
Max. accelerations in X-/Y-/Z-axis [m/s²] (1)	6.5/4.5/11	8/4/14
Max. feed forces in X-/Y-/Z-axis [kN] (1)	5/5/5	5/5/5
Positioning accuracy* in X-/Y-/Z-axis [mm]	0.01	0.01
Repeat precision of positioning* in X-/Y-/Z-axis [mm]	<0.005	<0.005

EXCERPT – MOTORIZED SPINDLE (further types on request)

Spindle type	Speed n_{max} [rpm]	Tool interface for short hollow taper tools (2)	Diameter at the front spindle bearing [mm]	Max. drive power at 100%/ 40% duty cycle [kW]	Max. torque at 100%/ 40% duty cycle [Nm]	Chip-to-chip time t_1 according to VDI 2852 [s] SIEMENS control system and tool changer arm	
4	12,000	HSK-A63	70	29/39	34.6/46.6	2.6	2.7
1	18,000	HSK-A63	70	29/39	34.6/46.6	2.6	2.7
5	12,000	HSK-A63	70	40/52	63.7/82.8	2.6	2.7
33	18,000	HSK-A63	70	20/26	26/34	—	—
38	17,000	HSK-A63	70	40/52	63.7/85.9	2.6	2.7
31	12,000	HSK-A100	100	40/50	161.4/185.5	—	3.2
3	10,000	HSK-A100	100	20/26	262/340	—	3.2

DISK-TYPE TOOL MAGAZINE	STM		STM	DTM	DTM	
TOOL INTERFACE	**HSK-A63**		**HSK-A63**		**HSK-A100**	
Number of tool pockets per motorized spindle	60		40	80	40	35
Max. tool length [mm]						
▸ Vertical disk arrangement	400	500	400	400	400	635
Max. tool diameter [mm]						
▸ No diameter restrictions for adjacent pockets	70		70		130	
▸ Diameter restrictions for adjacent pockets	170		170		260	
Max. tool weight [kg]	8		8		22	
Max. tilt moment around gripper groove [Nm]	12		12		40	

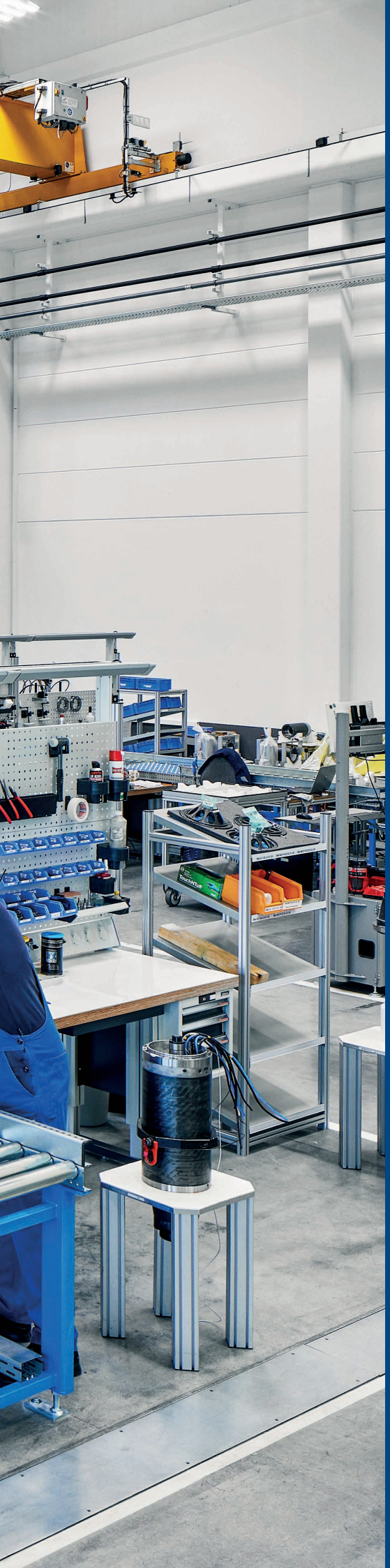
PART		
Table diameter [mm]	512	512
Table load [kg] (without/with pallet)	640/460	2x750/2x635
Pallet size [mm]	500x630	500x630
Interference diameter [mm] (oscillating)	1,120 (1,550)	2x1,200 (2x1,500)
Number of media connections (without / with pallet changer)	11/8	11/–
CONNECTION RATINGS		
Power requirements at 3 AC 400 V/50 Hz [kVA]	at least 47	at least 79
Compressed air [bar]	5	5
WEIGHT (approx.)		
Total weight [kg] (without/with pallet changer)	18,500/23,000	35,000
PROCESS STAGES		
Automatic pallet changer	•	—
Pallet change time according to VDI 2852 [s] (4)	10	—

(1) Depends on the motorized spindle type
(2) According to ISO 12164-1
(3) Pallet changer with displacement axis
(4) Time without seating check system

	G700F				G720F				G600F		
	—				1,500				—		
	1,450/990/1,035				1,450/1,200/1,035				1,730/1,265/1,100		
	60/75/100				80/50/100				95/60/50		
	6.5/5.5/14				8/4/14				9.5/7/4.5		
	6/6/6				5/5/5				3/3/3		
	0.01				0.01				0.01		
	<0.005				<0.005				<0.005		
	Chip-to-chip time t_1 according to VDI 2852 [s] SIEMENS control system and tool changer arm										
	2.9				2.9				—		
	2.9				2.9				—		
	2.9				2.9				—		
	—				—				3.3		
	2.9				2.9				—		
	3.4				3.4				—		
	3.4				3.4				—		
	STM	**DTM**	**STM**	**DTM**	**STM**	**DTM**	**DTM**		**STM**	**DTM**	**DRS**
	HSK-A63		**HSK-A100**		**HSK-A63**		**HSK-A100**		**HSK-A63**		
	80	160	40	80	40	80	40	35	50	117	177
	400	600	400	635	400	600	400	635	465		
	70		130		70		130		70	72	
	170		260		170		260		170		
	8		22		8		22		8		
	12		40		12		40		12		
	512				512				615		
	750/635				2x750/2x635				1,150/635/(1,000)[3]		
	500x630				500x630				500x630		
	1,500				2x 1,500				2,220		
	11/8				11/–				12/8		
	at least 47				at least 79				at least 37		
	5				5				5		
	27,000/33,500				35,000				20,400/22,100/(27,400)[3]		
	•				—				•		
	26				—				11		

STM = single disk-type tool magazine; DTM = double disk-type tool magazine *According to ISO 230-2:2006
Subject to technical changes without prior notice


GROB



The heart of our machines

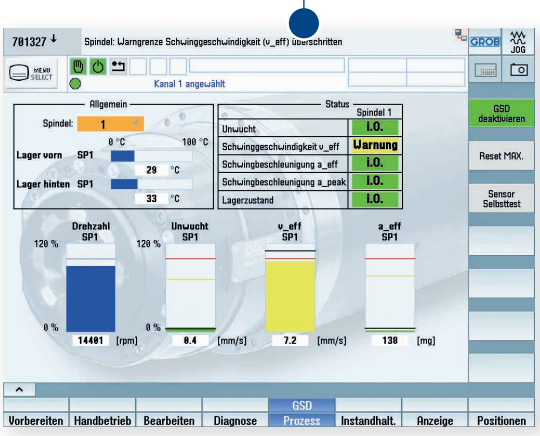
MOTORIZED SPINDLES BY GROB.

Besides the broad range of spindles, the motorized spindles designed and produced by GROB itself are the preferred choice for optimized process design. These are perfectly tailored to our machining centers and have optimized quality features.

- In-house development tailored to market requirements
- Inventory of the main spindles
- Global repair centers
- Replacement program ensures short delivery times, attractive prices, and sustainability

Machine components

MOTORIZED SPINDLES BY GROB.



GROB SPINDLE DIAGNOSTICS (GSD) – OPTION

GROB Spindle Diagnostics is a system that automatically monitors the condition of the motorized spindle. It also monitors the vibrations that occur during machining.

- System for automatic condition monitoring of the motorized spindle
- Vibrations that occur are monitored during machining and switched off if they are exceeded
- Service life of the motorized spindle extended through identification of critical operating states
- Perfect process optimization is possible
- Machine downtimes avoided through scheduled maintenance

GROB CHIP-IN-SPINDLE DETECTION SYSTEM (SiS) – OPTION

The system is able to detect tool clamping faults at an early stage caused by 10 µm or larger chips caught between the contact surface of the HSK and the front edge of the spindle (detailed information upon request).

- Reject components and radial runout avoided
- Damage caused by machining faults prevented
- Better process stability

Spindle types –
Availability at a glance!

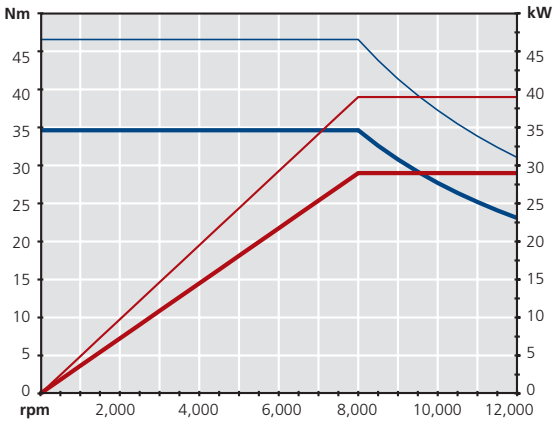
SPINDLE TYPE ◂▸ MACHINE											
Tool interface for short hollow taper tools in acc. with ISO 12164-1	**HSK-A63**	**HSK-A63**	**HSK-A63**	**HSK-A63**	**HSK-A63**	**HSK-A63**	**HSK-A100**	**HSK-A100**	**HSK-A100***	**HSK-A100**	**HSK-A100**
Spindle type	4	1	5	33	38	2	31	6	22	3	7
Max. spindle torque at 100 %/40 % duty cycle [Nm]	34.6/ 46.6	34.6/ 46.6	63.7/ 82.8	26/ 34	63.7/ 85.9	159/ 199	161.4/ 185.5	262/ 340	301/ 344	262/ 340	470/ 575
Spindle bearing Ø at front bearing [mm]	70	70	70	70	70	80	100	100	100	100	110
Speed n_{max} [rpm]	12,000	18,000	12,000	18,000	17,000	8,000	12,000	6,000	6,000	10,000	9,000
Max. drive power at 100 %/40 % duty cycle [kW]	29/ 39	29/ 39	40/ 52	20/ 26	40/ 52	20/ 25	40/ 50	20/ 26	31.5/ 36	20/ 26	54/ 65
G300	•	•	•	—	•	•	•	•	•	•	—
G320	•	•	•	—	•	—	•	•	•	•	—
G500	•	•	•	—	•	•	•	•	•	•	•
G520	•	•	•	—	•	—	•	•	•	•	—
G500F	•	•	•	—	•	—	—	—	—	—	—
G520F	•	•	•	—	•	—	•	—	—	•	—
G700F	•	•	•	—	•	—	•	—	—	•	—
G720F	•	•	•	—	•	—	•	—	—	•	—
G600F	—	—	—	•	—	—	—	—	—	—	—

*Motorized spindle with cross-feed; in combination with a SIEMENS control system

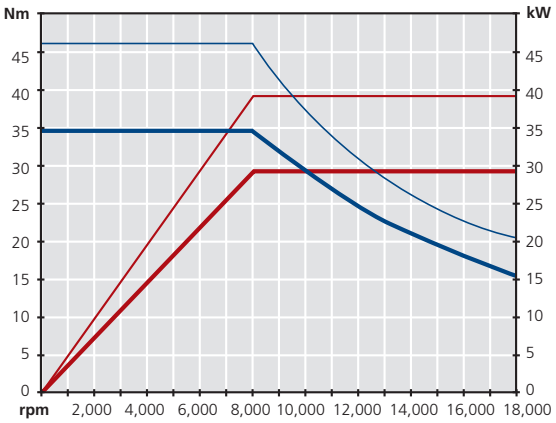
Torque – rotational speed – output

MOTORIZED SPINDLE VERSIONS.

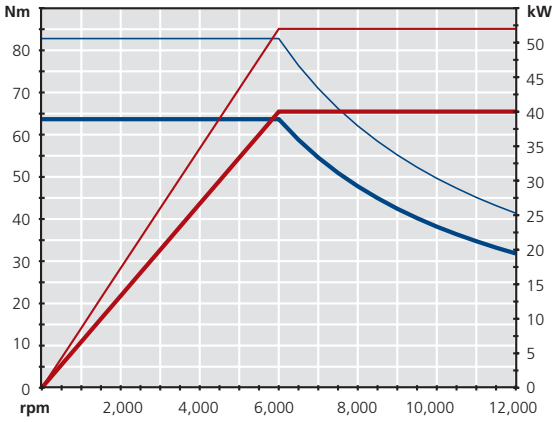
TYPE 4:
HSK-A63 ▸ Motorized spindle 47 Nm, 12,000 rpm



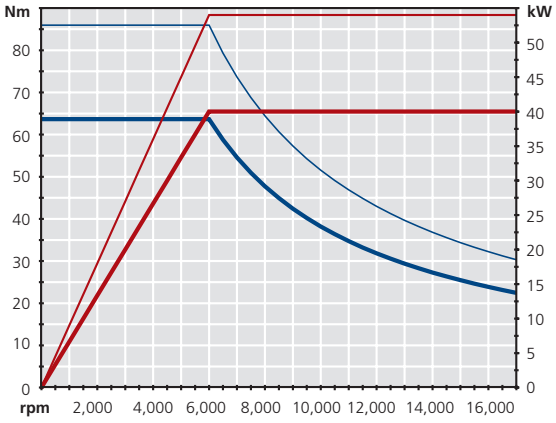
TYPE 1:
HSK-A63 ▸ Motorized spindle 47 Nm, 18,000 rpm



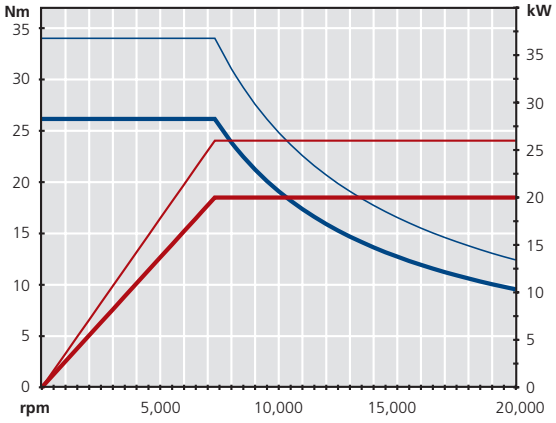
TYPE 5:
HSK-A63 ▸ Motorized spindle 83 Nm, 12,000 rpm



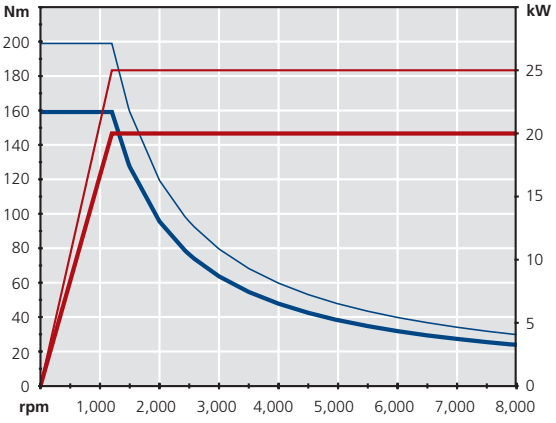
TYPE 38:
HSK-A63 ▸ Motorized spindle 86 Nm, 17,000 rpm



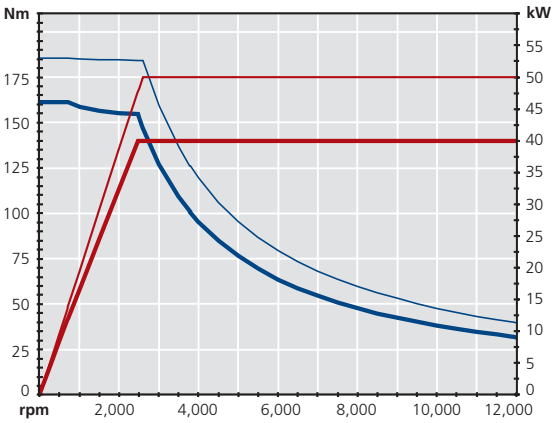
TYPE 33:
HSK-A63 ▸ Motorized spindle 34 Nm, 18,000 rpm



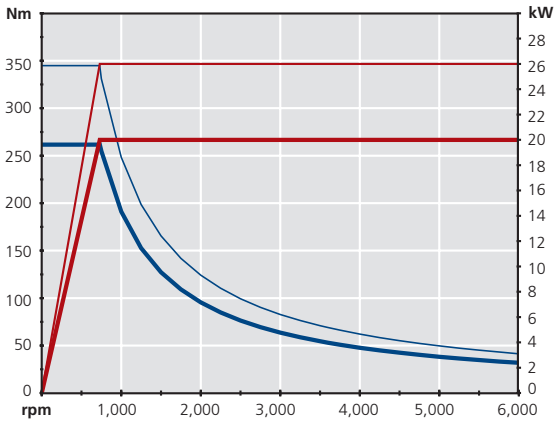
TYPE 2:
HSK-A63 ▸ Motorized spindle 199 Nm, 8,000 rpm



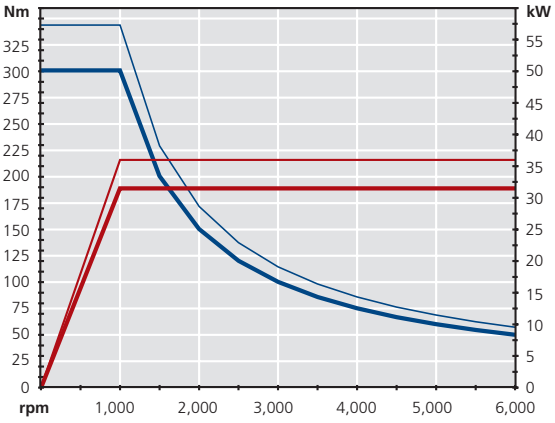
TYPE 31:
HSK-A100 ▸ Motorized spindle 186 Nm, 12,000 rpm



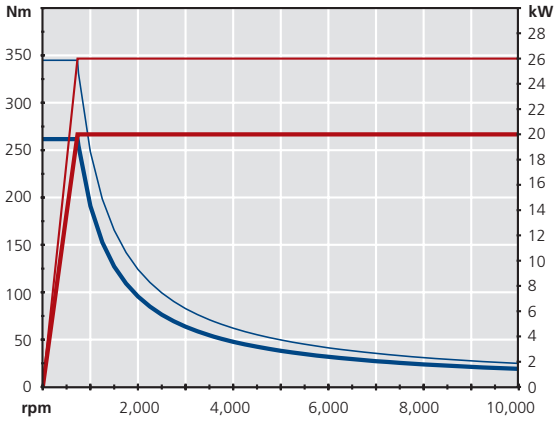
TYPE 6:
HSK-A100 ▸ Motorized spindle 340 Nm, 6,000 rpm



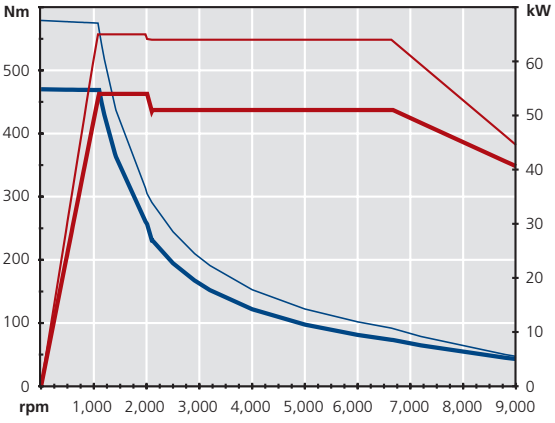
TYPE 22:
HSK-A100 ▸ Motorized spindle 344 Nm, 6,000 rpm

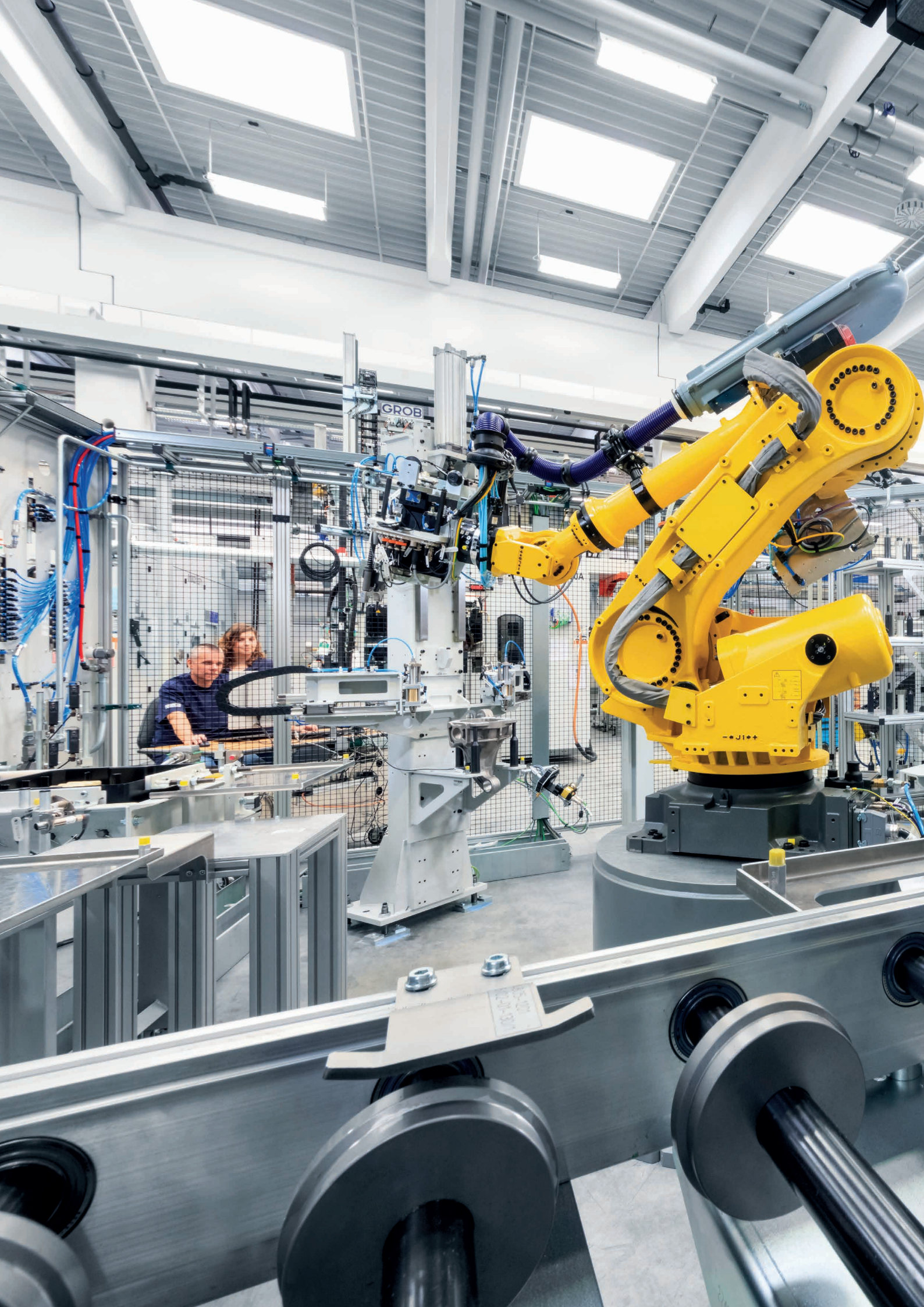


TYPE 3:
HSK-A100 ▸ Motorized spindle 340 Nm, 10,000 rpm



TYPE 7:
HSK-A100 ▸ Motorized spindle 575 Nm, 9,000 rpm




GROB

The ideal automation solution for your project

AUTOMATION MADE BY GROB.

Our customers in small, medium, and large-scale production have been relying on GROB automation solutions for decades. The experience gained is fed straight into our automation solutions, making GROB a strong partner – for solutions with pallet or part storage systems to highly flexible, turn-key manufacturing lines. GROB automation technology allows you to flexibly adapt to capacities and guarantees pallet and part handling perfectly in tune with your needs.

- Mechanical machining and automation from a single source
- Optimal automation for your production plant
- Responsibility for quality and scheduling with one partner
- Turn-key project management

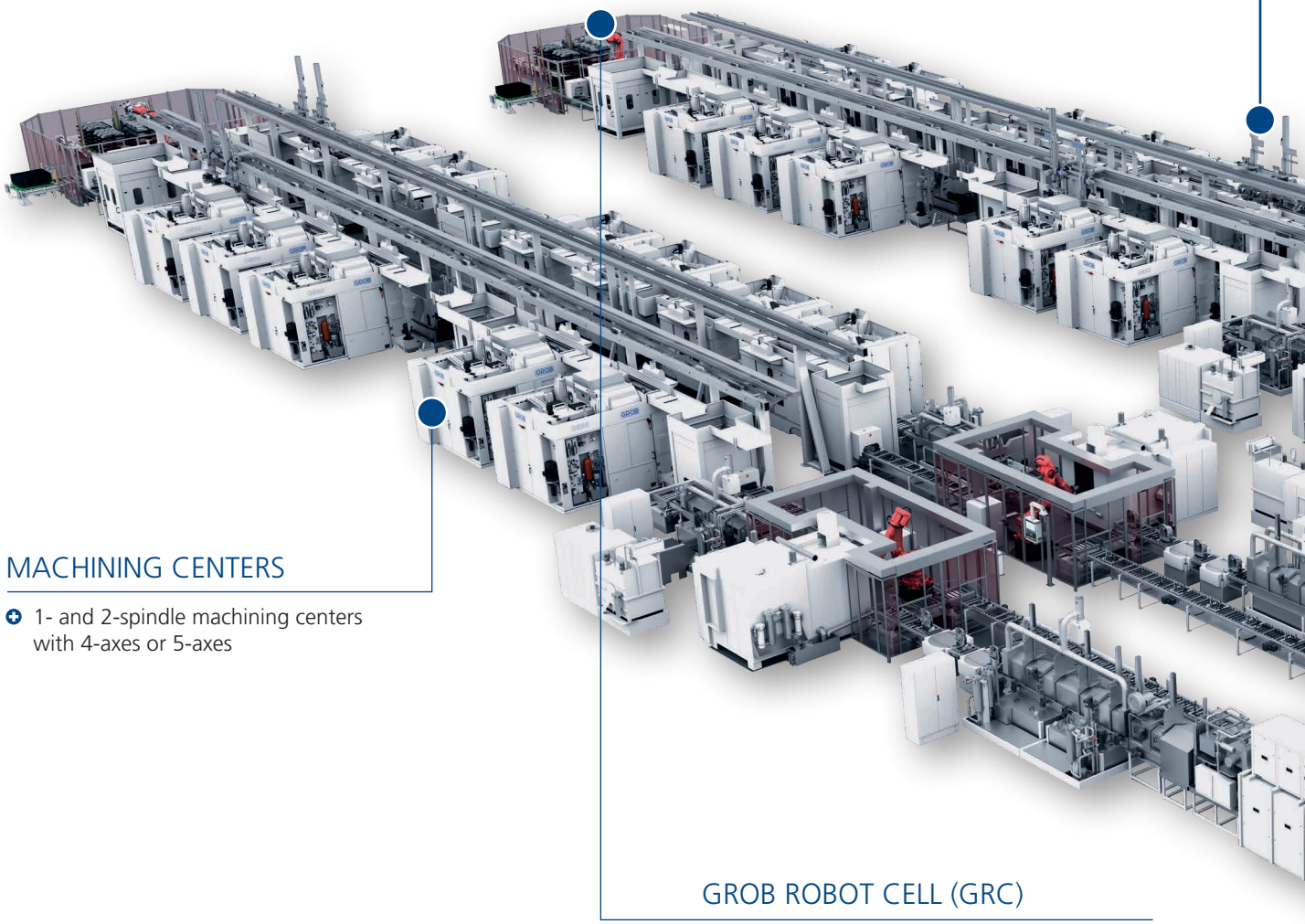
OUR AUTOMATION PORTFOLIO.

#swivelchangers #lineargantries #GRC #flexiblemanufacturingsystems #turnkeysystem

Turnkey manufacturing lines

ALL VALUE ADDED FROM A SINGLE SOURCE.

The customer plant illustrated has one highly efficient GROB manufacturing line for machining transmission cases and clutch housings. In this turn-key project, GROB designed and built the machining centers, and also the complete automation system. The linear gantry can be designed as an I- or H-loader. It has one or two vertical axes per carriage.



MACHINING CENTERS

- 1- and 2-spindle machining centers with 4-axes or 5-axes

GROB ROBOT CELL (GRC)

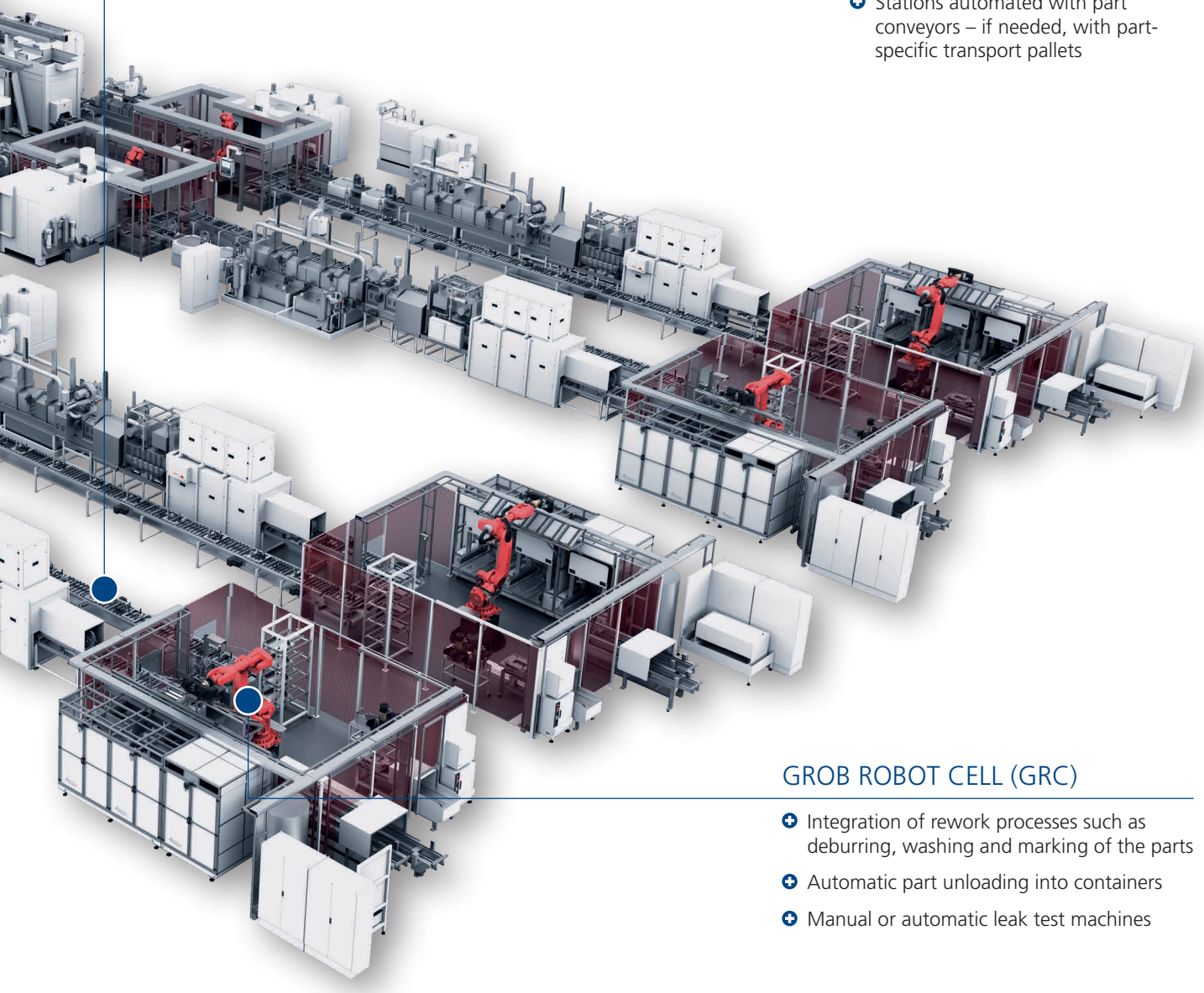
- Modular design provides a concept tailored to your needs
- NOK drawer for part discharge
- Various storage options allow the provision of raw parts parallel to main machining times

HIGHLY DYNAMIC GROB LINEAR GANTRIES

- Designed as I- and H-loaders

TRANSPORTATION AND AUTOMATION COMPONENTS

- Stations automated with part conveyors – if needed, with part-specific transport pallets

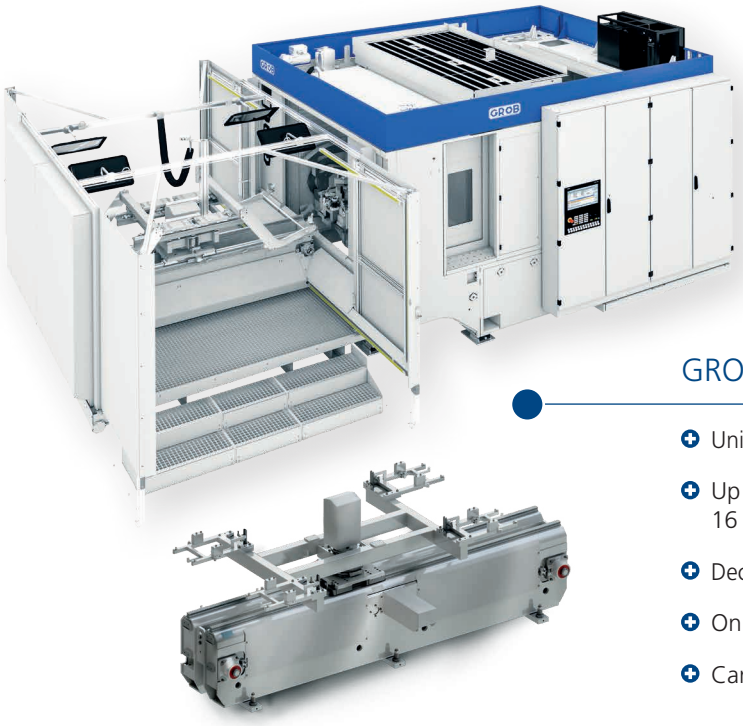


GROB ROBOT CELL (GRC)

- Integration of rework processes such as deburring, washing and marking of the parts
- Automatic part unloading into containers
- Manual or automatic leak test machines

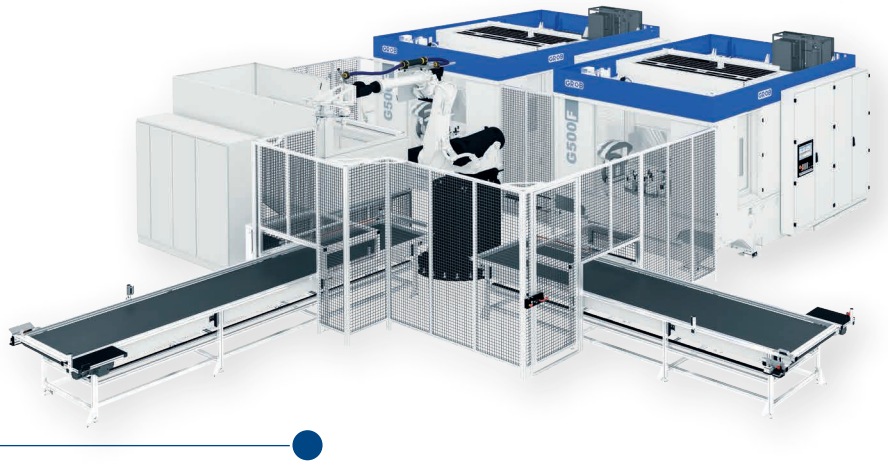
Automation overview

THE IDEAL AUTOMATION SOLUTION FOR YOUR PROJECT.



GROB SWIVEL CHANGER

- Unique loading system for up to 2 machines per unit
- Up to 8 swivel changer units and up to 16 machines under one linear gantry
- Decoupling of the automation during machine run times
- Only one fixture set required
- Can be upgraded from manual to automatic loading



GROB ROBOT CELL (GRC)

- Automation to fit your needs
- Loading directly into the work area via double gripper
- Integration of accompanying processes, e. g. deburring, washing, or marking of the parts
- Standardized components allow quick installation and short commissioning times

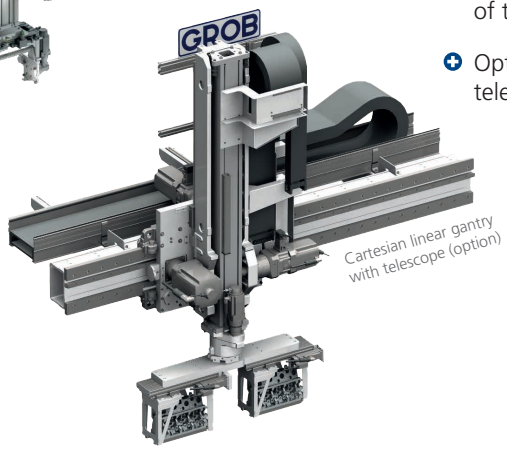
AUTOMATION SYSTEM

- Usable for all GROB machines
- Zone and combination drive possible
- Individual adjustment of the roller conveyor height
- Adaptable to third-party products

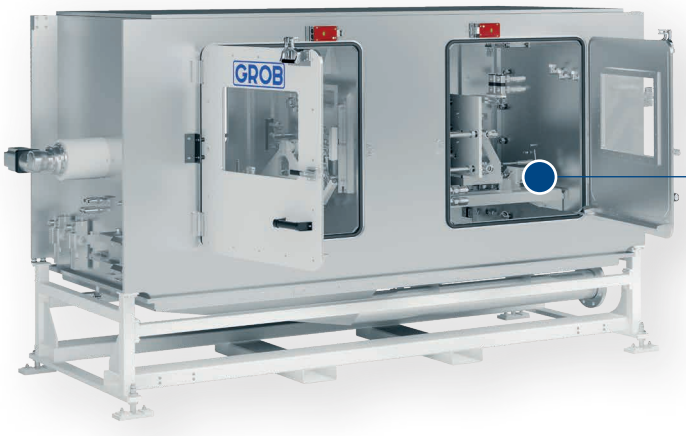
Cartesian linear gantry

CARTESIAN LINEAR GANTRY

- Fully automated direct loading from above
- Available in three different versions
- High efficiency thanks to simultaneous movement of both the horizontal and vertical level
- Top loading provides free accessibility of the machine on the ground
- Optionally available as a version with telescope for low hall heights



Cartesian linear gantry with telescope (option)



GROB BLOW-OFF BOX

- Unique solution on the market
- Cleaning with compressed air
- One-stop solution, perfectly integrated into our automation solutions


GROB
Maschinendetails

Moving into a digital future

INDUSTRY 4.0.

Transparency and connectivity – our modular GROB-NET[4]Industry web applications let you network and digitalize your production processes across all plants to make your production even more efficient. From planning to engineering to maintenance, GROB-NET[4]Industry combines relevant modules for increasing productivity and offers you an all-round package for modern production in the Industry 4.0 era.

- GROB[4]LINE – watch the machine on your smartphone
- GROB[4]ANALYZE – machine feedback for the CIP
- GROB[4]INTERFACE – easy route to machine communication
- GROB[4]CARE – service and maintenance portal
- GROB[4]TRACK – machine axes in view at all times

OUR SOFTWARE PORTFOLIO.

#grobnet4industry #interactiveapplication #cloud4machine

Friendly, committed, competent

GROB SERVICE.

From 24-hour service and a comprehensive range of spare parts and training courses to professional machine maintenance and analysis: The GROB service spectrum offers you a comprehensive range of products and services and is available to you worldwide thanks to our global production plants and service branches.

- Worldwide service network
- Available 24/7/360
- One hotline for everything
- We are right where our customers are

OUR SERVICE PORTFOLIO.

#hotline #webshop #serviceagreements #replacementparts #repaircenter #overhaul&optimization #motorizedspindleservice #grobtechnicalacademy

Worldwide throughout the machine service life

GROB – GLOBAL AND INTERNATIONAL.

From Bavaria to the world: Since our founding in 1926 in Munich, we as a global, family-managed company have been on a constant growth trajectory developing and manufacturing systems and machine tools. Our customers include the world's leading automotive manufacturers, their suppliers, and renowned companies from the aerospace, mechanical engineering, and other industries. With our production facilities in Germany, Brazil, the USA, China, Italy and India, as well as 14 worldwide service centers and sales branches, we are represented around the globe, ensuring the highest quality.

FOUNDED IN 1926

NORTH AMERICA

Bluffton, Ohio, USA
Detroit, Michigan, USA
Querétaro, Mexico

6 PLANTS

14 SALES
AND SERVICE BRANCHES WORLDWIDE

SOUTH AMERICA

São Paulo, Brazil

Our global production sites

Mindelheim, Germany

São Paulo, Brazil

EUROPE

Mindelheim, Germany
Pianezza, Italy
Stratford-upon-Avon, Great Britain
Hengelo, Netherlands
Senlis, France
Baar, Switzerland
Poznań, Poland
Győr, Hungary

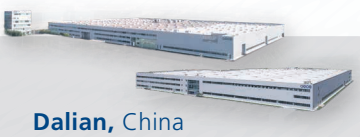
24/7 SUPPORT

8,300 EMPLOYEES WORLDWIDE

ASIA

Dalian, China
Bangalore, India
Beijing, China
Shanghai, China
Yokohama, Japan
Suwon, South Korea
Haiphong, Vietnam
Bangkok, Thailand

Bluffton, USA



Dalian, China

Pianezza, Italy

Bangalore, India

www.grobgroup.com

GROB-WERKE GmbH & Co. KG

Pioneers in designing and building highly innovative production and automation systems for over 95 years.

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