

Job order production – overview of machines 2021

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Overview of machines

Manufacturing of precision parts

DMG / MORI SEIKI

- NEF 600
2-axes CNC universal turning machine
- CTX beta 1250 TC
4-axes CNC universal turning machine
- CTX gamma 2000 TC
5-axes CNC universal turning & milling machine
- DMC 60 U duoBLOCK®
5-axes CNC machining center
- DMC 125 U duoBLOCK®
5-axes CNC machining center



- DIXI 210
5-axes high precision universal machining center

Grinding:

- SBZ 6-L1400 **grinding center for three way machining**
- Internal grinding machine **RSI G**
- External cylindrical grinding machine **RSA G**
- Tangential grinding machine **MR 75 DGTplus**

Balancing:

- Balancing machine **CMT 700 H2PW**

Measuring:

- MMZ-G 205020 **coordinate measuring center**
- UMC 850 **coordinate measuring machine**
- MGF 22 **concentricity measuring machine**

NEF 600

2-axes CNC universal turning machine

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DMG / **MORI SEIKI**



Technical Data

swing	600 mm
max. turning diameter	600 mm
max. turning length	1.190 mm
travel X	398 mm
travel Z	1.250 mm
max. spindle speed	3,500 rpm
torque (40/100% duty cycle)	790 / 590 Nm
power (40/100% duty cycle)	37 / 28 kW
control	Siemens 840D SL
tool taper	VDI 40 DIN 5482
number of tool pockets	turret magazine for 12 tools

Turning machine for universal application with 12 station turret for internal and external turning tools as well as for driven tools for drilling and milling operations.

CTX Beta 800

4-axes CNC universal turning machine

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DMG **MORI SEIKI**



Technical Data

swing	700 mm
max. turning diameter	410 mm
max. turning length	800 mm
travel X	300 mm
travel Z	850 mm
max. spindle speed	5,000 rpm
torque (40/100% duty cycle)	700 / 600 Nm
power (40/100% duty cycle)	45 / 35 kW
control	Siemens 840D SL
tool taper	VDI 40 DIN 5482
number of tool pockets	turret magazine for 12 tools

Turning machine for universal application with 12 station turret for internal and external turning tools as well as for driven tools for drilling and milling operations.

CTX Gamma 2000 TC

5-axes CNC universal turning & milling machine

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Technical Data

swing	630 mm
max. turning diameter	630 mm
max. turning length	2,000 mm
travel X1	650 mm
travel Y1	400 mm
travel Z1	2,050 mm
max. main spindle speed	2,500 rpm
torque (40/100% duty cycle)	2,200 / 1,700 Nm
power (40/100% duty cycle)	52 / 40 kW
main drive	motor spindle ISM 102 Plus
tool taper	HSK-A 63 DIN 69893
number of tool pockets, total	120 pockets, chain magazine
pick-up magazine	8 long tools
control	Siemens 840D SL

DMC 60 U2 duoBlock

5-axes CNC universal machining center

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DMG / **MORI SEIKI**



Technical Data

travel X	600 mm
travel Y	700 mm
travel Z	600 mm
travel C	360 °
travel B	180 °
pallet size	630 x 500 mm
collision circle	Ø 879 mm
max. spindle speed	10,000 rpm
torque (40/100% duty cycle)	236 / 200 Nm
power (40/100% duty cycle)	42 / 36 kW
main drive	motor spindle
tool taper	HSK-A 63 DIN 69893
number of tool pockets, total	180
max. load capacity	600 kg
control	Siemens 840D SL

DMC 125 U3 duoBlock

5-axes CNC universal machining center

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DMG / **MORI SEIKI**



Technical Data

travel X	1,250 mm
travel Y	1,250 mm
travel Z	1,000 mm
travel C	360 °
travel B	180 °
pallet size	1,000 x 800mm
collision circle	Ø 1,499 mm
max. spindle speed	8,000 rpm
torque (40/100% duty cycle)	727 / 492 Nm
power (40/100% duty cycle)	28 / 19 kW
main drive	gear spindle
tool taper	HSK-A 100 DIN 69893
number of tool pockets, total	180
max. load capacity	2,000 kg
control	Siemens 840D SL

DIXI DHP 100 II

5-axes high precision universal machining center

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Technical Data

positional accuracy bidirectional A (ISO 230-2)	0.0020 mm
repeat accuracy R (ISO 230-2)	0.0015 mm
travel X	1,200 mm
travel Y	1,100 mm
travel Z	1,100 mm
travel B	360 °
pallet size	1,000 x 1,000 mm
max. spindle speed	12,000 rpm
torque	500 Nm
rated power	36 kW
control	Siemens 840D SL
tool taper	HSK-A 100 DIN 69893
number of tool pockets, total	205
max. load capacity	1,500 kg

SBZ 6-L1400

Grinding center for three way machining

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WEMA GLAUCHAU
Werkzeugmaschinenfabrik Glauchau GmbH

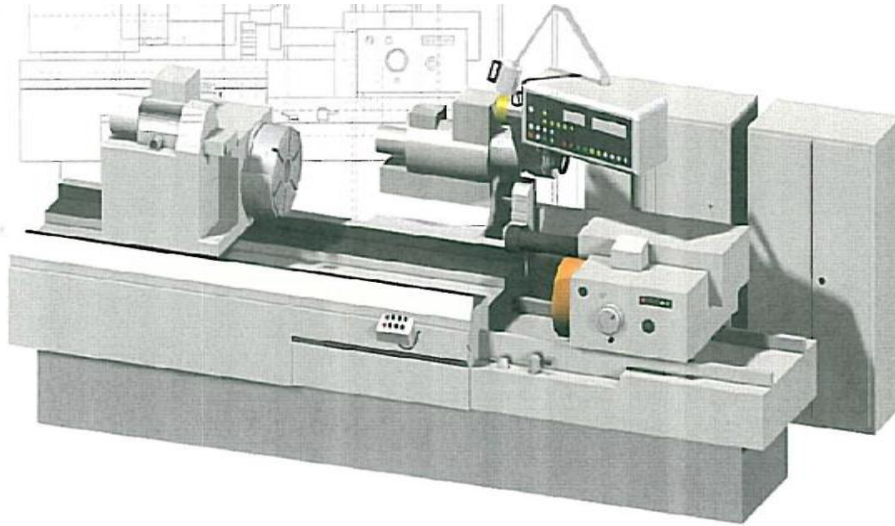


Technical Data

swing	650 mm
max. grinding diameter	650 mm
max. grinding depth	900 mm
max. grinding length	1,050 mm
max. travel (X1-axis)	150 mm
max. travel (X2-axis)	470 mm
max. travel (Z2-axis)	1,290 mm
grinding length Z2-axis	980 mm
grinding wheel diameter	Ø500 x 50 x Ø127 mm
speed range	1-795 rpm
drive power	7.5 KW
control	Siemens 840D

Internal grinding machine RSI G SIX 6/1 ALS

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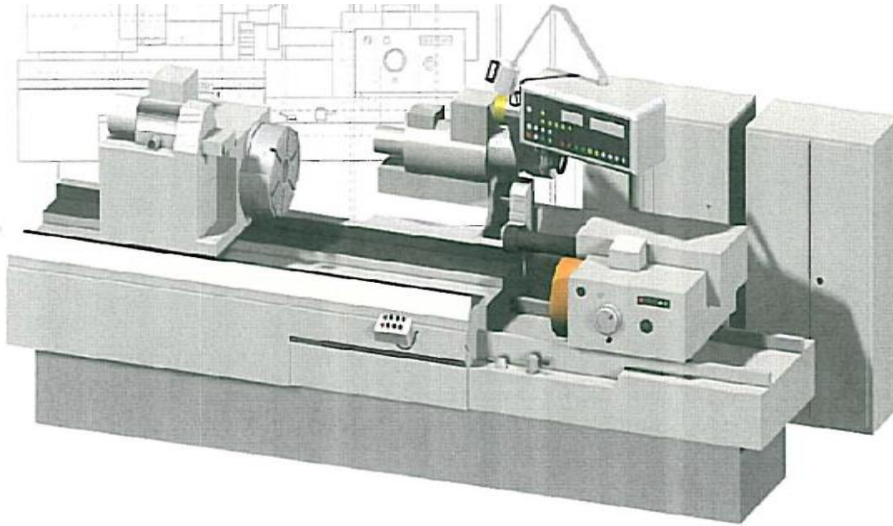


Technical Data

Working range		
Z	2,500	mm
Machining data		
max. grindable diameter	400	mm
max. speed	40 – 2,600	rpm
feed rate	35m/min	
rapid traverse	5 m/min	
max. workpiece weight	depending of workpiece	
tool taper	steady rest	
accuracy	5 μ	
max. internal grinding depth	600 mm	

External cylindrical grinding machine RSA G

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Technical Data

Working range		
Z	2,500	mm
Machining data		
max. grindable diameter	400	mm
max. speed	40 – 2,600	rpm
feed rate	35m/min	
rapid traverse	5 m/min	
max. workpiece weight	depending of workpiece	
tool taper	steady rest	
accuracy	5 μ	

Tangential grinding machine MR 75 DGT plus

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FAIRETTO



Technical Data

Working range

B - diameter	750	mm
Y - travel	350	mm
Z - travel	690	mm

Machining data

max. grindable diameter	900	mm
max. grinding height	650	mm
speed	1400	rpm
feed rate	0 - 2,000 mm/min	
rapid traverse	5 m/min	
max. workpiece weight	750 kg	

Balancing machine CMT 700 H2PW



Technical Data

drive	belt/cardan	
max. rotor weight	700 kg	
Rotor weight per bearing pedestal	350 kg	
max. diameter of rotor	1,200 mm (1,600 mm)	
min. distance bearing pedestal	160 mm	
max. distance bearing pedestal	??? mm	
roller on bearing journals	13 – 350 mm	
measuring range, unbalance	100 – 8,000 min ⁻¹	
minimum achievable residual unbalance	0.1 gmm/kg	
balancing of magnetic rotors	YES	

MMZ-G 205020

Coordinate measuring center

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Technical data

Dimension of machine

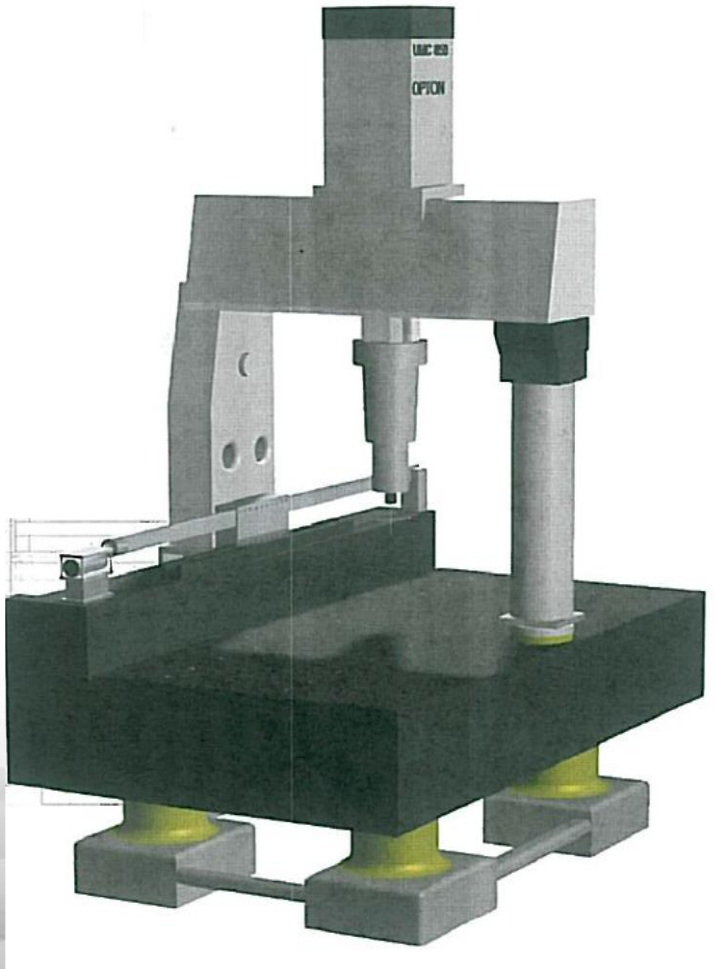
in X	4,100 mm
in Y	6,100 mm
in Z	6,430 mm

Measuring range of machine

in X	2,000 mm
in Y	5,000 mm
in Z	2,000 mm
weight	17,300 kg
input	3 kW
temperature range	20 °C ± 2 K
control	C99
software	CALYPSO

UMC 850

Coordinate measuring machine



Technical data

Working range / processing values

X	850 mm
Y	2400 mm
T	850 mm
max. workpiece weight	2.5 t
accuracy D1	$1.9 + l/200 \mu$
accuracy D3	$3.0 + l/200 \mu$

MGF 22

Concentricity measuring machine

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Technical Data

Working range / processing values

Z	1,300 mm
diameter clamping plate	600 mm
max. workpiece diameter	600 mm
max. workpiece weight	600 kg
accuracies	1,9 + l/200 μ
accuracy diameter clamping plate	0,2 μ

Overview of machines

Machining of large parts

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- Vertimaster VMG 6PS – **Turning, drilling and milling machining center in gantry design (as of 2022)**

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- CFZ 5.2 – **Two-column portal milling machine**
- CFZ 5.1 – **Two-column portal milling machine**

WOIAN

- Rapid 1/x – **Horizontal boring and milling machine**



SMTCL

- TH6513 – **Horizontal boring and milling machine**

WEILER

- Weiler E120/10500 – **Lathe**

ASCHERSLEBEN

- SZ 1600 – **Guideway grinding machine**
- SZ 2200 – **Guideway grinding machine**



Vertimaster VMG 6 PS

Turning, drilling and milling center in gantry design

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Capacity of workshop:

- very good accessibility
- gate with 8m width and 6m height
- overhead crane with max. 120 t bearing load
- staging area approx. 350 m²

Technical data

max. passage height	4,950	mm
max. passage width	8,000	mm
floorplate, length	15,000	mm
travel X	21,000	mm
Ø faceplate	6,000	mm
drive power	296	kW
max. speed	40	rpm
max. torque	323	kNm
support	Ø 560	mm
drive power	100	kW
head changer	6	pos.
tool changer	70	pos.
machining heads	GB1N, GB1XN, WB1N, UB1N, standard turning tool holder, reduction sleeve SK60/SK50	

CFZ 4.2

Two-column portal milling machine

ASCHERSLEBEN



Technical data

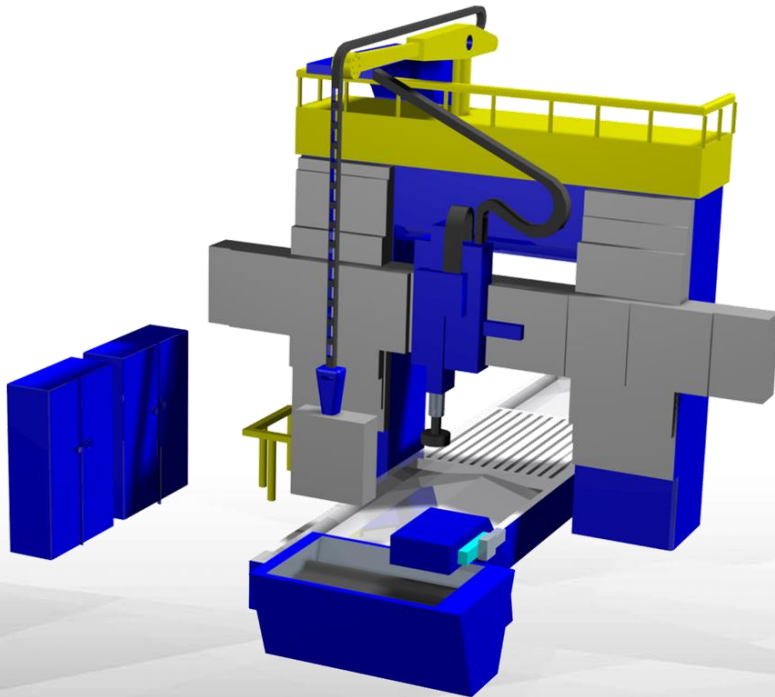
working range X	6,000	mm
working range Y	4,000	mm
working range Z	1,500	mm (RAM)
table	6,000x2,000	mm
RAM	240x280	mm
passage		
width	2,200	mm
height	2,000	mm
max. speed	6,000	rpm
rapid traverse	10,000	mm/min
reed rate	10,000	mm/min
table	2 – 6,000	mm/min
cross rail	2 – 1,600	mm/min
max. loading capacity	20,000	kg
machining heads	GB1, WB1	
control	Sinumerik 840D	
tool taper	SK50	

CFZ 5.1

Two-column portal milling machine

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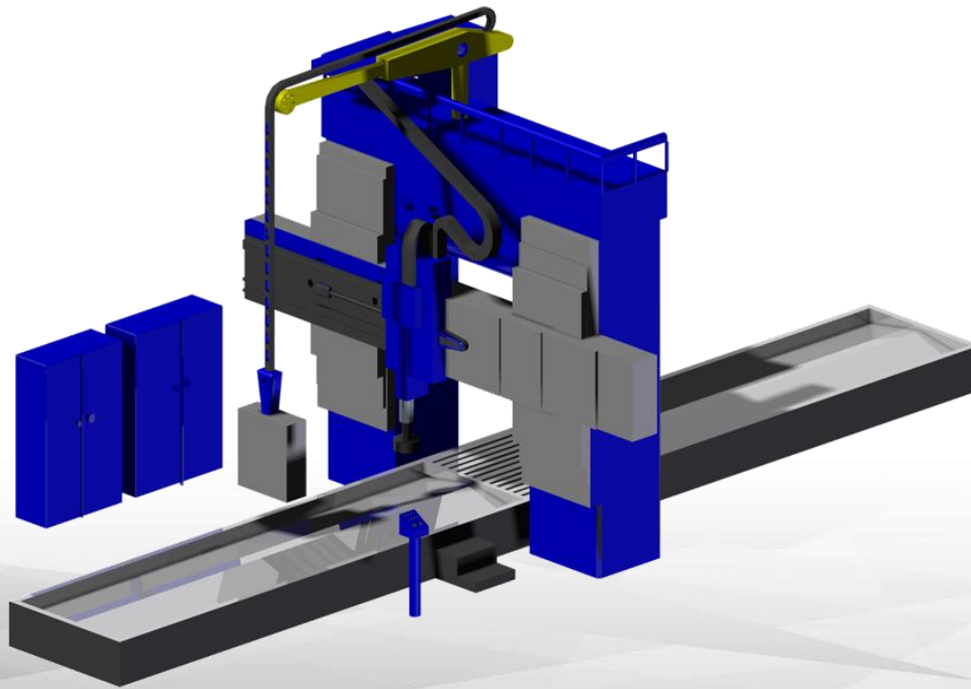
Technical data

working range X	5,500	mm
working range Y	4,000	mm
working range Z	1,000	mm (RAM)
table	5,200x2,500	mm
RAM	600x600	mm
passage		
width	3,000	mm
height	2,300	mm
max. speed	2,000	rpm
rapid travers	10,000	mm/min
feed rate		
table	2 – 6,000	mm/min
cross rail	2 – 1,600	mm/min
max. loading capacity	40,000	kg
machining heads	WFG VSL	
control	Sinumerik 840D	
tool taper	SK50	

CFZ 5.2

Two-column portal milling machine

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Technical data

working range X	12,000	mm
working range Y	3,000	mm
working range Z	2,200	mm
table	12,000x2,500	mm
RAM	600x600	mm
passage		
width	3,000	mm
height	2,300	mm
max. speed	2,000	rpm
feed rate	4,800	mm/min
max. loading capacity	20,000	kg
machining heads	WFGN WFGU VSL	
control	Sinumerik 840D	
tool taper	SK50	

Ascamill T2060

Portal milling machine



Technical data

working range X	6,200	mm
working range Y	4,800	mm
working range Z	1,100	mm
working range W	1,700	mm
table	6,000x2,000	mm
RAM	420x380	mm
passage:		
width	2,700	mm
height	2,500	mm
max. speed	4,000	rpm
rapid traverse	30,000	mm/min
feed rate	10,000	mm/min
max. loading capacity	20,000	kg
machining heads	GB1M, WB1M, UBMS	
control	Sinumerik 840D SL	
tool taper	SK50	

TH6513

Horizontal boring and milling machine

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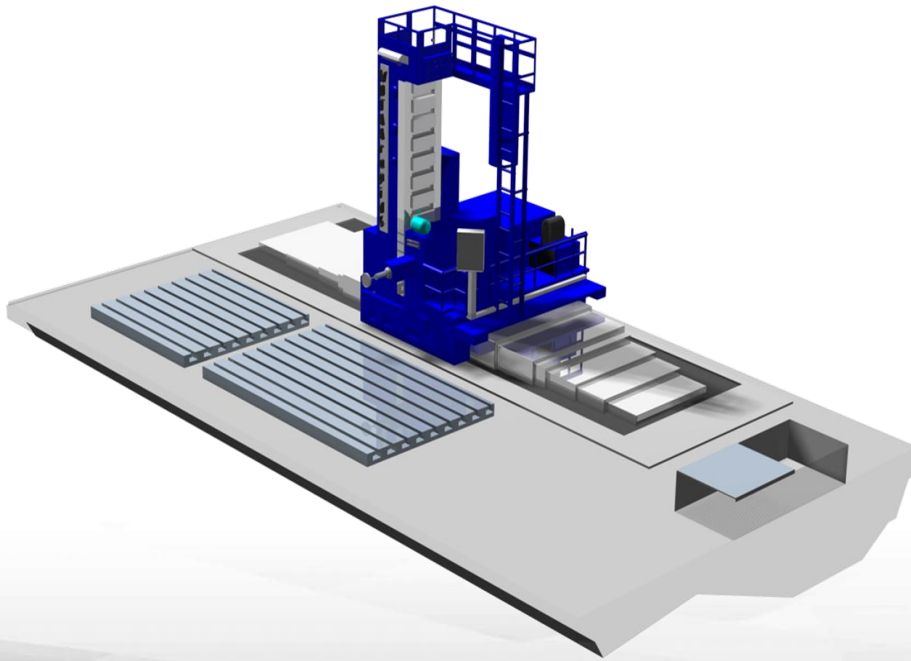
Technical data

working range X	3,000	mm
working range Y	1,600	mm
working range Z	2,000	mm
working range W	800	mm
working range B	360	Grad
table	1,820x1,600	mm
max. speed	2,000	rpm
max. feed rate	9,000	mm/min
max. loading capacity	10,000	kg
main drive	45	kW
machining heads	WFGU WB1 VSL	
control	Sinumerik 880	
tool taper	SK50	

BW4

Horizontal boring and milling machine Rapid 4

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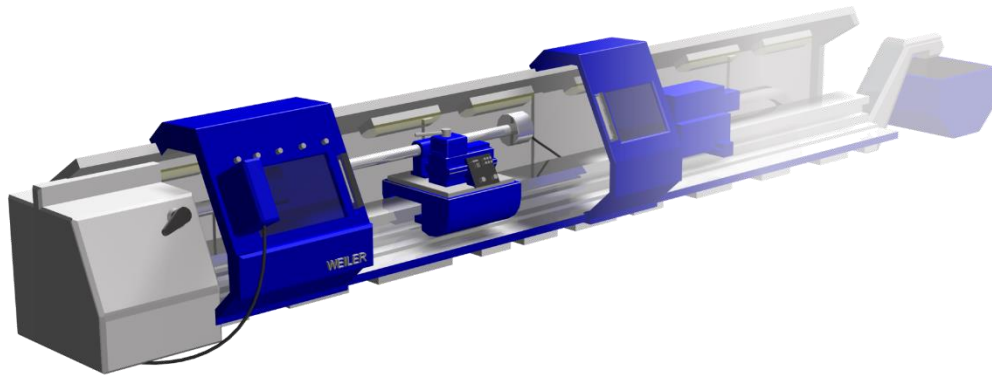


Technical data

working range X	11,000	mm
working range Y	2,900	mm
working range Z	600	mm
working range W	600	mm
table	2,000x1,800	mm
max. speed	2-1,200	rpm
max. feed rate	6	m/min
max. loading capacity	10 / 200	t
main drive	45	kW
machining heads	WFG	
control	Sinumerik 840D	
tool taper	SK50	

Weiler E 120 / 10500 Lathe

☑ **WEILER**

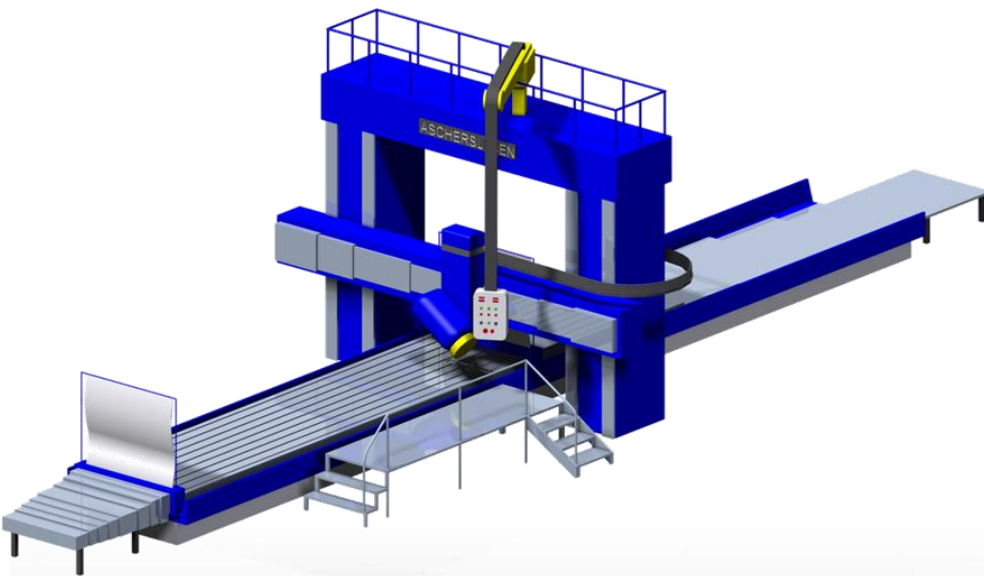


Technical data

turning length	10,500	mm
swing over bed	1,200	mm
swing over cross slide	830	mm
bed width	600	mm
lathe spindle		
cross section of turning tool	40x40	mm
spindle head (DIN55027)	size 15	
spindle diameter	235	mm
spindle bore	165	mm
quill taper of main spindle	metric 171	mm
max. speed	1 – 900	rpm
max. loading capacity	10,000	kg
metric threads	0,1 – 4000	

SZ 1600 guideway grinding machine

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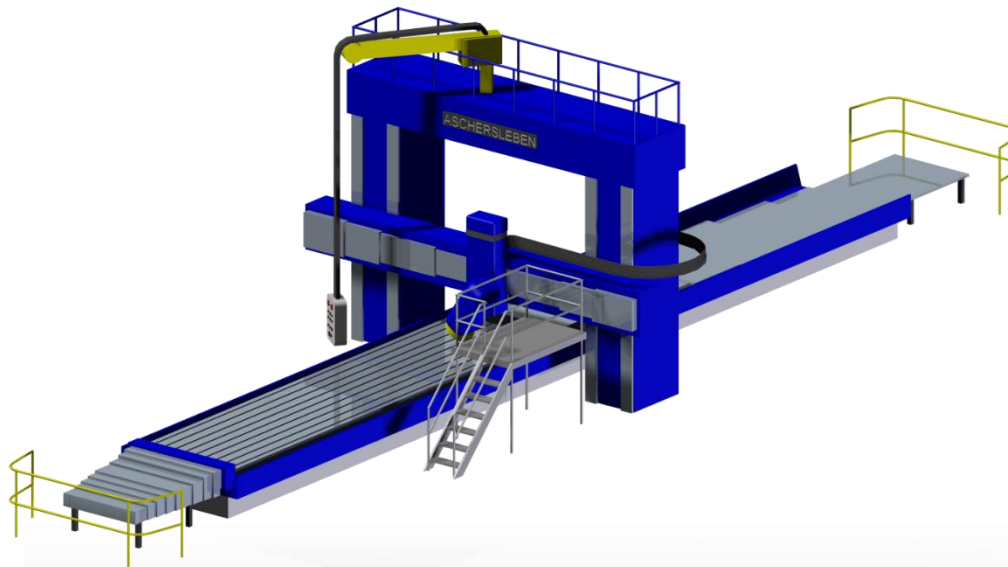


Technical data

working range X	12,000	mm
working range Y	1,600	mm
working range Z	1,600	mm
passage width	1,800	mm
passage height	1,600	mm
max. speed	1,000	rpm
max. speed universal grinder	2,800	rpm
feed rate	30	m/min
accuracy	4-5	µm
max. workpiece weight	25,000	kg

SZ 2200 guideway grinding machine

ASCHERSLEBEN



Technical data

working range X	8,000	mm
working range Y	2,200	mm
working range Z	2,400	mm
passage width	2,400	mm
passage height	2,600	mm
max. speed	960	rpm
Max. speed universal grinder	1,200	rpm
feed	30	m/min
accuracy	4-5	µm
max. workpiece weight	25,000	kg

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