



# Stock of machine tools

## Large-batch machining

Turning lathes				
Name	Type	Max diameter of machined parts (mm)	Max length of parts	Other
Horizontal two-spindle turning center	MAZAK100MSY	51		interception 2 heads +axis Y
Vertical single-spindle turning centers	EMAG VL 5i	270		grabbing-reversing unit
Twin-spindle automatic turning lathes	MAZAK Quick Turn Nexus 250 II MS	380		rotary tools
Vertical automatic turning lathes	MAZAK Megaturn Nexus 900 M	920	800	rotary tools
Vertical automatic turning lathes	HWACHEON VT - 450	460	450	
Vertical double automatic turning lathes	DOOSAN V 450 T	460	450	
Centre lathes	DOOSAN Puma 2600M	376	760	rotary tools
Centre lathes	HWACHEON CUTEX 160	300	170	rotary tools
Centre lathes	HWACHEON Hi – TECH 100 B	210	350	rotary tools
Centre lathes	MAZAK Quick Turn Nexus250 II	264	515	
Centre lathes	TUJ – 560 Tarnów	560 (above bed) 340 (above slide)	145	
Turning lathes	TZC 32N1	630	200	

Milling machines			
Name	Type	Max dimensions of machined parts or table dimensions	Other
5-axis vertical milling centers	MAZAK Variaxis i – 600	Ø 700 x 450	full 5-axis
Vertical CNC machines	OKUMA Eurocenter V50	1020 x 510 x 525	4 <sup>th</sup> axis max Ø 280 x 600
Vertical CNC machines	OKUMA MB-46 VAE	560 x 460 x 460	
Vertical CNC machines	TOPPER TMV-850A	850 x 500 x 530	
Vertical CNC machines	TOPPER QVM -610A + APC	610 x 410 x 460	
Vertical CNC machines	FYJ	420 x 1280	
Vertical CNC machines	POS CE1000	1200x600	
Vertical CNC machines	DEPO MCFV 1060 NTD	1016 x 590 x 410	

Hobbing machines			
Name	Type	Max dimensions of machined parts or table dimensions	Other
CNC gear cutting machines	Gleason-Pfauter GP300	φ300 (nominal workpiece diameter) nominal module 6	7 axes

Gear shaping machines			
Name	Type	Max dimensions of machined parts or table dimensions	Other
CNC slotting machines	Gleason-Pfauter P300ES	φ300 (nominal workpiece diameter) φ450 (max. diameter of the workpiece rotation) nominal module 6	8 axes

Other			
Name	Type	Parameters	Other
Broaching machines		max force - 40 tonnes	
Marking machines	TECHNIFOR CN101		
Powder paint shop		max 1400 x 1700 x 1200	
Control and measurement devices	ZEISS CONTURA G2 ZEISS DURAMAX BROWN&SHARPE-DERBY KONTUROGRAF MAHR		

**Small-batch and single-piece machining**

Machining		
Name	Characteristics	Other
Bandsawing machines	max diameter 320 mm	
Slotting machines	stroke up to 350 mm	
Horizontal milling machines	table up to 390 x 1 500 mm	
Vertical milling machines	table up to 400 x 2 000 mm	
Milling-centering machines	up to Ø 160 x 900	L <sub>min</sub> ; Ø =120
Screwing machines	steel up to M16; cast iron up to M20	
Cylindrical grinder	up to max Ø 250 or L max 1200	max 250 kg
Internal grinders	Ø 40/ Ø 400 x 500 Ø 10/ Ø 160 x 200	
Surface grinders	L = 1000; Ø 750	
Spline grinders	Ø 25/ Ø 125 x 200/1350	
Center hole grinders	Ø 160 x 1000	
Face lathes	up to Ø 1130 x 500	
Centre lathes	up to Ø 420 x 2500	
Jig drilling machine	table 800 x 400	
Drilling machines	up to Ø 50	
Boring machines	max boring Ø 700 mm max body size 800 x 800 x 800	
Hobbing machines	up to module 12; max diameter 1 250 mm	max number of teeth 400
Fellows type slotting machines	module 1;25 – 10 outer diameter Ø 30/ Ø 1000 inner diameter Ø 120/ Ø 1000	max rim width 150
MAAG type slotting machines	min/max diameter of machined wheel 100/1200 min/max m 2/15 min/max number of teeth 8/350	max width 320
Gleason type planning machine for straight bevel gears	max diameter Ø 500; m10 min/max number of teeth 10/200	max rim width 90
Gear grinders	max pitch diameter Ø 800; min diameter of roots Ø 30; min/max m 1/14	

Additional Services		
Tool making and assembly work		
Welding	electric, gas and gas-shielded arc welding	
Heat treatment	annealing, quenching and tempering, hardening	
Box carburizing		
Induction hardening	high frequency	37 kW
Shot peening and sandblasting		
Painting	powder and wet painting	