

TECHNICAL DATA CNC-LATHE

manufacturer	WEINGÄRTNER
type	MPMC 1200S-8000
built	2010
control	SINUMERIK 840 D powerline



Working area

Turning Ø over bed and slide	1.380	mm	
Turning Ø over steady rest slide	1.150	mm	
Length (incl. horizontal machining)	8.000	mm	
turning length	9.000	mm	
Height of rotary axis above floor	1.250	mm	machine 900 mm under floor level
travel z-axis	10.000	mm	
Weight between chuck and tailstock	16.000	kg	
- between chuck, tailstock and steady rest	20.000	kg	

Headstock

Power at rotary operation – 103 kW

Driven by AC main spindle motor with automatic gearbox (i = 4:1)		
Drive power at the spindle	103	kW
Total speed range	0 – 1.000	min-1
Speed range I	0 - 250	min-1
Speed range II	250 – 1.000	min-1
Spindle nose DIN 55026	size 15	
Max. Torque range I	13.116	Nm
Max. Torque range II	3.279	Nm
Holding torque of the brake	10.000	Nm

C - axis - positioning mode

Drive by AC servo motor with bevel worm gear, gearbox will be hydro-mechanically coupled for C-axis operation

Measuring system resolution	+/- 0,001	°
Max. Torque	8.200	Nm
Speed range	0 - 20	min-1
Max. Rotation speed	120	°/sec
Accuracy (incremental installation angle measuring system)	+/- 3	"

Travel, feeds

Travel Z-axis	10.000	mm	
Travel X-axis	1.300	mm	
Travel Y-axis	800	mm	(+/- 400 mm)
Rapid traverse Y-X-Z	20	m/min	
Feed force Z-axis	70	kN	
Feed force Y-/X-axis	46	kN	
Measuring systems X-, Y- and Z-axis are linear scale			

Universal-Turning / Milling Unit DFE-G-1200/52 kW

Milling drive

AC main spindle motor	52	kW
Automatic gearbox	4:1	
Torque Gear range I	1.300	Nm
Torque Gear range II	325	Nm

B axis - CNC swivel axis

Swivelling range theoretically	360 °
Max. Swivel speed	90 °/sec
Max. Torque in interpolation	6.200 Nm
Holding torque clamping B-axis	20.000 Nm
Accuracy (angle measuring system)	+/- 3 "

Turn-Mill-Head PDFK HSK A 125T

Transmittable torque	1.500 Nm	
Transmittable power	52 kW	
Speed range	0 – 3.000 min-1	
Tool holder	HSK 125	
Spindle clamping in turning operation via Hirth gear with 2.5° pitch		
Holding torque	1.950 Nm	
Internal coolant supply max.	80 bar	50 l/min
Internal air supply	6 bar	

Tool magazine and tool manipulator

External tool magazine HSK A 125T

Taper size	HSK 125	
Number of tool places	120	
Tool length max.	1.000 mm	Only certain places
Tool-Ø max. with free sub-places	310 mm	
Tool-Ø max. with occupied sub-places	125 mm	
Tool weight max.	35 kg	

Tool magazine for long tools (deep-hole-drilling tools or boring bars)

Number of boring bar adapters	4 Stück
Diameter max.	160 mm
Max. tool length	1.450 mm

Tool manipulator HSK A 125T - CNC-controlled shuttle with double gripper unit

Rapid traverse	100 m/min	
Tool length with double gripper cycle	550 mm	Max.
Tool length with single gripper cycle	1.000 mm	Max.

2 pieces NC-positionable steady rest slides

equipped with 2 pieces self-centering steady rests make SMW

Clamping ranges steady rest 1	200 – 600 mm
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Clamping ranges steady rest 2	300 – 800	mm
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Quick-change three-point roller steady rests incl. water flushing on the lever arms, incl. adapter for quick-change mechanism, piping and quick-change coupling.

1 piece power chuck

Hydraulic power chuck make SMW, KNCS-NB 800

Hydraulic clamping cylinder with travel-dependent monitoring

Tailstock NC-positionable

Positioning speed max. 17,5 m/min

quill diameter 300 mm

Quill stroke 300 mm

Internal taper	6	MK
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CNC-control

SIEMENS, SINUMERIK 840 D power line

Electrical Equipment

Nominal voltage	400 V
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Connected load 300 A

Frequenc 50 Hz

Dimensions

Length x width x height ca.. 18 x 5,5 x 4,75 m

Machine weight ca.	101.000	Kg
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Equipment, Accessories

- Substructure in welded design with 2 hardened guide rails and 2 hardened linear guide rails.
- Headstock with AC main spindle motor 103 kW and C-axis with bevel gear and worm gear. Spindle head size 15. power chuck Ø 800 mm.
- Feed slide with machining column.
- Lead screw with driven nut, consisting of precision ball screw Ø 100/20 with hydraulic spindle support (Z-axis), travel 10,000 mm.
- Cross slide with precision ball screw drive Ø 80/10 with hydraulic weight compensation (X-axis), travel 1,300 mm. Offset slide with precision ball screw Ø 80/10 (Y axis), travel 800 mm.
- Universal turn-mill unit DFE-G-1200S with main and swivel drive for machining heads (B axis).
- Turning/milling head PDFK HSK A 125T, 52 kW, 1,500 Nm, 3,000 min-1
- Tailstock slide with CNC-controlled adjustment and spring-actuated slide clamping (W-axis).
- Tailstock upper part with hydraulically operated quill.
- 2 pcs. steady rest slides with CNC-controlled adjustment and spring-actuated slide clamping (V1 + V2-axes)
- Full machine enclosure with automatic safety doors
- CNC control SINUMERIK 840 D powerline, electronic handwheel
- Tool changer with 120 magazine places
- 4 magazine places for deep drilling tools
- Coolant system consisting of coolant tank, high-pressure pump 80 bar, band filter system, lifting pump with level monitoring.
- Chip conveyor longitudinal, ejection on right side of the machine
- Oil mist exhausting device make ABSOLENT, type ODF 2000
- 3-D-Touch-Probe for workpiece inspection
- Laser measuring device for tool control
- Div. tool holders

WEINGÄRTNER ROTOMILL MULTI PRODUCTION MACHINING CENTER MPMC 1200S-8000

In single-slide design with universal turn-mill unit for economical, automatic production of complex turned parts and housings, tubes and shafts in one clamping by turning, milling and (deep) drilling with interpolating B-axis.

The machine is equipped with a 7-axis CNC control system that allows linear interpolation of up to 5 axes.

The machine can be inspected under power after prior appointment.