







Compact milling centre for 5-axis machining

MAXXMILL 350

MAXXMILL 350 is the ideal vertical milling centre for complex 5-axis machining of small workpieces in small or medium quantities. It is the ideal machine for tool and mould making, mechanical, precision and medical engineering, optical industry, contract manufacturing and further education facilities. MAXXMILL 350 can accurately and economically process workpieces on 5 sides in a single set-up.





Housing (cast steel)





Pump housing (aluminium)

[Engineering]

Highlights

- 5-axis machining in a single set-up
- Top thermostability
- Top machining precision
- Modern moving column concept
- Massive swivel-rotary table with ø 400 mm provides high stability and precision
- Compact machine design
- Cutting-edge control technology from Siemens or Heidenhain
- Extensive options such as water-cooled motor spindle with 24000 rpm, chain magazine with 50 positions ISO30 / HSK-A40, etc.
- Optimal chip removal
- Attractive price-performance ratio
- Made in the Heart of Europe



The swivel-rotary table has a flexible clamping surface with a diameter of 400 mm and can be loaded with 50 kg. A workpiece with a maximum edge length of 250 x 250 x 225 mm can be processed on 5 sides with optimum results.



With $+/-100^{\circ}$ swivel range the B-axis provides a larger work area compared with the products from other manufacturers. The C-axis can be rotated by 360° without limitation.

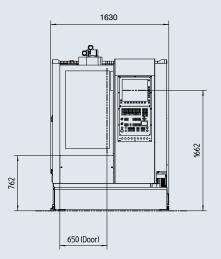


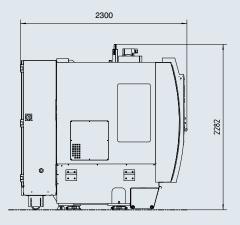
The tool magazine is equipped with 20 (optionally 30) ISO 30 tool stations. A chain magazine with 50 ISO30/HSK-A40 stations is also available as an option.



MAXXMILL 350 is equipped with cutting-edge control technology. Heidenhain TNC620 and Siemens 840D sl are the newest products on the market and provide an optimal use of CNC control to the operator and to the programmer.

Assembly plan





[Technical data]



MAXXMILL 350

Swivel range B-axis+/-100°Range of rotation C-axis (rotary table)0 - 360°Feed	Travel and tolerances	
Travel in Y250 mm (9.8")Travel in Z300 mm (11.8")Distance spindle nose - table (min max.)70 / 370 mm (2.8 / 14.6"Swivel range B-axis+/-100°Range of rotation C-axis (rotary table)0 – 360°Feed0Rapid motion speed X-Y-Z-axis30 m/min (1181.1 ipm)Max. rotational speed B-axis20 rpmMax. rotational speed C-axis25 rpmMax. feed force X-axis3000 N (674.4 lbs)Max. feed force Y-axis3000 N (674.4 lbs)Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis4 / 3 / 3 m/s²Swivel-rotary table5Table diameter400 mm (15.7")Table-floor distance860 mm (33.8")Number of T-grooves5Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Travel in X	
Travel in Z300 mm (11.8")Distance spindle nose - table (min max.)70 / 370 mm (2.8 / 14.6"Swivel range B-axis+/-100°Range of rotation C-axis (rotary table)0 - 360°Feed-Rapid motion speed X-Y-Z-axis30 m/min (1181.1 ipm)Max. rotational speed B-axis20 rpmMax. rotational speed C-axis25 rpmMax. feed force X-axis3000 N (674.4 lbs)Max. feed force Y-axis3000 N (674.4 lbs)Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis4 / 3 / 3 m/s²Swivel-rotary table-Table diameter400 mm (15.7")Table floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight50 kg (110.2 lb)Main spindle (mechanical spindle)50 - 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	(without 100 mm extra distance for tool change)	350 mm (13.8")
Distance spindle nose - table (min max.)70 / 370 mm (2.8 / 14.6"Swivel range B-axis+/-100°Range of rotation C-axis (rotary table)0 - 360°Feed	Travel in Y	250 mm (9.8")
Swivel range B-axis+/-100°Range of rotation C-axis (rotary table)0 - 360°Feed	Travel in Z	300 mm (11.8")
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Max. rotational speed B-axis20 rpmMax. rotational speed C-axis25 rpmMax. feed force X-axis3000 N (674.4 lbs)Max. feed force Y-axis3000 N (674.4 lbs)Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis4/ 3 / 3 m/s²Swivel-rotary table400 mm (15.7")Table diameter400 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Feed	
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Max. feed force X-axis3000 N (674.4 lbs)Max. feed force Y-axis3000 N (674.4 lbs)Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis4 / 3 / 3 m/s²Swivel-rotary table4/ 3 / 3 m/s²Table diameter400 mm (15.7")Table-floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Max. rotational speed B-axis	20 rpm
Max. feed force Y-axis3000 N (674.4 lbs)Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis4 / 3 / 3 m/s²Swivel-rotary table400 mm (15.7")Table diameter400 mm (15.7")Table-floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Max. rotational speed C-axis	25 rpm
Max. feed force Z-axis3000 N (674.4 lbs)Max. acceleration X-Y-Z-axis3000 N (674.4 lbs)Swivel-rotary table7Table diameter400 mm (15.7")Table-floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Max. feed force X-axis	3000 N (674.4 lbs)
Max. acceleration X-Y-Z-axis4/3/3 m/s²Swivel-rotary table	Max. feed force Y-axis	3000 N (674.4 lbs)
Swivel-rotary tableTable diameter400 mm (15.7")Table-floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Max. feed force Z-axis	3000 N (674.4 lbs)
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Table-floor distance860 mm (33.8")Number of T-grooves5Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)50 - 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with coupling	Swivel-rotary table	
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Groove spacing75 mm (2.9")Groove wide14 mm (0.55")Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)Spindle speed50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Table-floor distance	860 mm (33.8")
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Max. permissible workpiece weight (evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)Spindle speed50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Groove spacing	75 mm (2.9")
(evenly distributed)50 kg (110.2 lb)Main spindle (mechanical spindle)Spindle speed50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Groove wide	14 mm (0.55")
Main spindle (mechanical spindle)Spindle speed50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Max. permissible workpiece weight	
Spindle speed50 – 12000 rpmMaximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	(evenly distributed)	50 kg (110.2 lb)
Maximum torque33 Nm (S6) (30.2 ft/lbs)Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Main spindle (mechanical spindle)	
Maximum power7 kW (S6) (9.4 hp)Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Spindle speed	50 – 12000 rpm
Tool taper ISO 30DIN 69871Pull studsDIN 69872ADrivedirect with couplingMain spindle (motor spindle)	Maximum torque	33 Nm (S6) (30.2 ft/lbs)
Pull studs DIN 69872A Drive direct with coupling Main spindle (motor spindle)	Maximum power	7 kW (S6) (9.4 hp)
Drive direct with coupling Main spindle (motor spindle)	Tool taper ISO 30	DIN 69871
Main spindle (motor spindle)	Pull studs	DIN 69872A
	Drive	direct with coupling
Spindle speed 50 – 24000 rpm	Main spindle (motor spindle)	
	Spindle speed	50 – 24000 rpm
Maximum torque 38 Nm (27.9 ft/lbs)	Maximum torque	38 Nm (27.9 ft/lbs)
Maximum power 16 kW (21.5 hp)	Maximum power	16 kW (21.5 hp)
Tool taper HSK-A40	Tool taper	HSK-A40

Tool magazine	
Number of tool stations	20 (30, 50) ISO 30
	30 (50) HSK-A40
Tool changing type	Changer arm
Tool management	random
Tool changing time (tool - tool)	2 sec.
Max. tool diameter	63 mm (2.5")
Max. tool diameter	
(without neighbouring tool)	100 mm (3.9")
Max. tool length	200 mm (7.9")
Max. tool weight	5 kg (11.0 lb)
Total tool weight supported by the magazine	60 / 70 / 100 kg
	(132.3 / 154,3 / 220,5 lb)
Coolant	
Tank capacity	120 I (31.7 gal)
Standard pump pressure	2 bar (29.0 PSI)
Max. operating rate at 2 bar	40 l/min (10.6 gal/min)
Pneumatics	
Min. pressure supply	6 bar (87.1 PSI)
Min. volume capacity	200 NI/min
Lubrication system	
Spindle	Grease
Caged roller ways	Oil / central lubrication
Ball screws	Oil / central lubrication
Dimensions	
Total height	2300 mm (90.6")
Floor space L x D	1630 x 2300 mm
	(64.2 x 90.6")
Weight	3800 kg (8.377 lb)
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