

MCM Tank 5AX_TH_1300 5 Axis Horizontal Machining Centre with Tilting Head

SPECIFICATION

Tank 5AX_TH_1300

Work Area

X-axis stroke	1300mm
Y-axis stroke	1400mm
Z-axis stroke	1400mm
X/Y/Z axes thrust	2000daN
X/Y/Z rapid feed speed	50m/min
X/Y/Z axes acceleration	5m/s ²

Pallet

Pallet dimensions	630 x 800mm 800 x 800mm
Max. fixture height	1300mm
Max. fixture rotation diameter	1400mm
Max. fixture dimensions	1400 x 1120mm (TBD according to automation solution)

Rotary Table

Maximum rotation speed	20rpm (worm screw transmission) 40rpm (torque motor transmission - Option)
Maximum load allowed on pallet	1500kg / 2000kg
Minimum resolution	0,0001 degrees

TILTING HEAD UNIT

Option 1 - Worm Screw Transmission

Rapid rotation speed	20rpm
A-Axis tilting angle (standard version)	175 degrees (+80 / -95)
Maximum torque (standard version)	8700Nm
Minimum resolution	0,0001 degrees

Option 2 - Torque Motor Transmission

Rapid rotation speed	40rpm
A-Axis tilting angle (standard version)	175 degrees (+80 / -95)
Maximum torque (standard version)	3600Nm

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Minimum resolution	0,0001 degrees
Accuracy (as per ISO 230-2 Standards)	
Accuracy of positioning - linear axis (A)	5µm
Systematic positional deviation - linear axis (M)	3µm
Repeatability - linear axis (R)	4µm
Accuracy of positioning - circular axis (A)	4 arc sec
Systematic positional deviation - circular axis (M)	2 arc sec
Repeatability - circular axis (R)	3 arc sec
Spindle	
Tool taper	HSK 100 / ISO 50 / HSK 63
Max. speed	From 6000rpm to 30000rpm
Max. power	Upto 115kW
Max. torque	Upto 1300Nm
Accessories included	Variable preloading bearings
Tool Magazine	
Type	Modular rack with tool movement system and exchange arm
Tool taper	HSK 100 / ISO 50 / CAPTO C6
Number of tools (standard version)	80 / 99
Number of tools (Option - upto)	399 - 599 - 999
Tool mass	35kg (HSK 63 15)
Maximum length	460 / 550/600mm (Depending on the configuration) (HSK 63 350)
Maximum diameter	325mm (HSK 63 200)
Tool changing time	2.5sec (HSK 100) / 3.0 (ISO 50)
Coolant Treatment Unit (Basic Version)	
Chip conveyor type	Scraping type
Total tank capacity	1500 litres
Filter type	Self cleaning (40 microns)

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Standard low pressure system

	Flow rate	300litres/min (to be divided into the various machine functions)
	Pressure	2 bar
nozzles	Piece washing with	300 litres/min (250 microns)

Standard high pressure system

Flow rate	28 / 40 litres/min
Pressure	20 / 80 bar