



**Saipa Heavy Dies Manufacturing Company**



**Horizontal Machining Center**

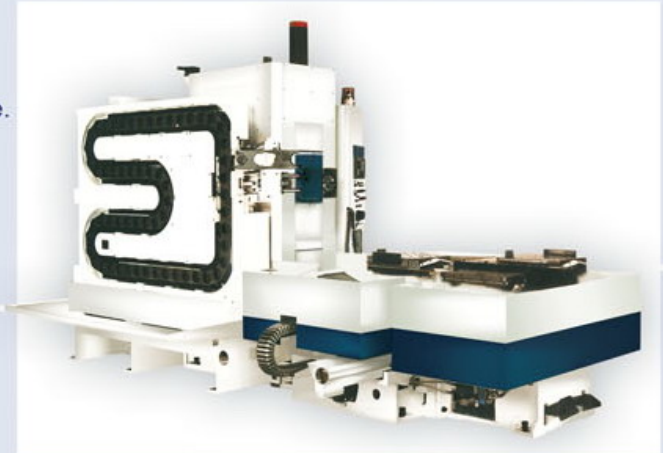
**MCH-500**

High Precision  
High Rigidity  
High Performance

## MCH-500

### FEATURES AND CONSTRUCTION

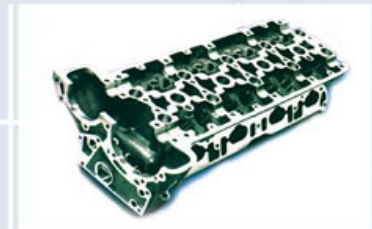
High-precision, high-efficient machines lead in the coming age. Greeting the new era with various performance.



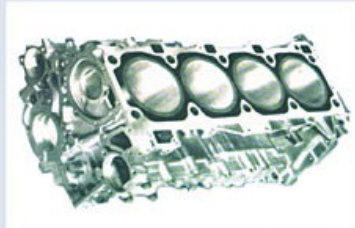
Gear housing



Cylinder head



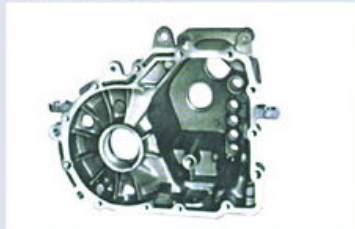
Cylinder block



Distributor pump housing



Clutch housing



Swivel bearing





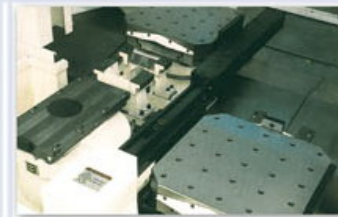
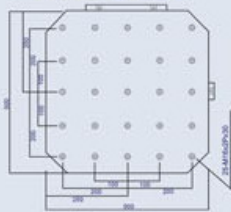
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# MCH-500

Spindle: 100 mm in diameter, mounted with NN type double row roller bearings, especially good for heavy duty cutting. Direct gear drive is employed for spindle with auto gear change. Full power output can be obtained from merely 196 rpm. Spindle and transmission gears are equipped with a forced cooling system to reduce heat and ensure accuracy. The headstock is mounted on the sliding surface of the column with 8-faces wraparound enhancing rigidity and allowing heavy duty cutting. Headstock and column are symmetric construction designed, which can minimize the thermal deformation.



### PALLET SIZE



### Auto. Pallet Changer (A.P.C.)

Shuttle type designed to save space. A paddle for pallet rotation is available to make loading/unloading workpiece convenient. A hydraulic-driven shuttle arm is used for pallet changing to ensure excellent reliability of A.P.C. movement.

## Machine Specifications

MODEL	MCH-500	
TABLE	METRIC	INCH
Pallet dimensions	500x500 mm	20"x20"
Min. indexing angle	1°	
Max. table load	800 kg	1760 lb

TRAVEL		
Longitudinal travel (X)	750 mm	29.5"
Vertical travel (Y)	680 mm	26.8"
Cross travel (Z)	600 mm	23.6"
Distance of spindle end to table center	180-780 mm	7.1"-30.7"
Distance of spindle center to table surface	50-730 mm	2"-28.7"

SPINDLE		
Spindle nose	BT50	
Spindle speeds	20-3500 r.p.m	
Spindle speed range	Infinite variable	

FEED		
Cutting feed	1-5000 mm/min	0.01-2007/min
Rapid traverse	15m/min	590"/min
Min. input increment	0.001 mm	0.0001"

ATC (Automatic tool Changer)		
Tool Storage capacity	60	
Max. tool Dia. X Length	Ø110x400 mm	Ø4.3"x15.7"
Max. tool weight	20kg	44 lb
Tool selection	Bi-Direction	

MOTORS		
Spindle motor (Rated output for 30 mnutes)	18.5kw(25HP)	
Drive motors X axis, Y axis, Z axis	2.8 kw (3.8HP)	

MACHINE SPACE AND WEIGHT		
Floor space	3050x4726 mm	120.1' "x 186.1"
Machine weight	15,000 kg	33,040 lb

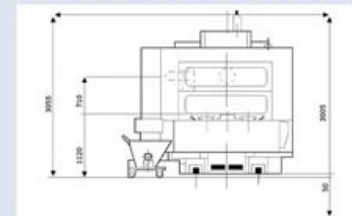
### STANDARD

1. SPINDLE COOLING DEVICE
2. HEAT EXCHANGER
3. AUTOMATIC PALLET CHANGER WITH MANUAL ROTATION
4. REMOVABLE TYPE MANUAL PULSE GENERATOR
5. X.Y.Z. LINEAR SCALE
6. FLOOD COOLANT DEVICE
7. COOLANT TANK
8. SPIRAL TYPE CHIP CONVEYORS
9. SPINDLE LOAD METER
10. SPINDLE SPEED METER
11. AUTOMATIC POWER CUT-OFF DEVICE
12. CALL LIGHT
13. WORK LIGHT
14. TOOL KIT

### OPTION

1. ATC TOOL STORAGE : 90
2. COOLANT SYSTEM: SHOWER COOLANT, COOLANT GUN, OIL HOLE COOLANT.
3. OIL MIST DEVICE
4. FLAT TYPE CHIP CONVEYOR
5. CHIP WAGON
6. AUTOMATIC CENTERING DEVICE
7. TOOL BREAKAGE DETECTION DEVICE
8. TOOL LENGTH MEASURING DEVICE
9. TOOL PRESETER
10. ADDITIONAL CALL LIGHT
11. BUZZER DEVICE

## MCH-500 Machine Dimensions





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