





Xiamen Takam Machinery Co., Ltd. 260 North Tongji Road, Tong'an district, Xiamen city 361100, China Tel:+86-0592-7896855 Website: www.takam.com INTRODUCING
THE TAKAM
M-One APC Series

High Speed CNC Vertical Auto Pallet Change Machining Center

With globe demand increasing, limited factory floor space, and shortage of labor force.

Many companies have been looking for solutions that can help with these increasing problems.

Look no further, Takam machinery once again has the solution to increase production with the uses of smaller limited factory floor space. Introduction the M-One APC Series. With the M-One APC Series get 25% to 60% increase in productivity from one machine.

By not having to stop the machine after every machining cycle, this machine can work non-stop while you are changing your work pieces.

Not only can this machine increase your productivity, it can also decrease the usage of your plant floor.

The M-One Series machine only needs an extra 30% of your floor space compare to a standard vertical machining center.

Takam machinery once again brings the M-One APC Series machining center with "endless innovation".





FOUNDATION FOR QUALITY

The Perfect Platform No matter what the project a house, a skyscraper, or a suspension bridge the soundness of the structure is determined by the sturdiness of the foundation. The same principle applies to our APC machining centers. It all starts with the base and column structures. How well the machine cuts is tied to the sturdiness of the basic structure.

High Quality Industrial Cast-Iron Structure Cast iron provides up to ten

times the damping capacity of steel. That's why Maple uses cast iron for all major components.

Our castings are reinforced with heavy ribs to resist flex and damp vibrations, and inspected thoroughly before and after machining to ensure they are free of flaws.

Wide-Stance Design Our wide-stance design allow maximum structural loading with efficient use of materials. They provide a rigid and stable machining platform that resists flex, distributes cutting forces effectively, and making the machine more stable regardless of the direction of the cutting force.

Ball screw

M-One models uses high accuracy ballscrews con-structed of high quality importanted materials that have been heat treated to prevent wear from usage.

Also, the ballscrews are created with inner tubing. This design reduces noise from ballscrews travel by 20-40% compare to other standard ballscrews.



Linear guideway roller

All M-One series models uses roller type linear guide way. High strength rollers have a great weight load capacity. Furthermore, the roller type guide ways are designed to have unbelievable tilt resistance. With P-grade roller type linear guide ways, perfect flatness is guarantied from every part machined.



Spindle Features

Belt Driven (Standard Equipment)

2-Step Gear Box (Heavy Duty Equipment)



Built in (High Speed Equipment)

In-Line (Mid Range Equipment)

Control Panel



4 way swival control panel

The M-One APC model machining center futures one and only 4 way swival control panel. By being able to swival multiple axis, the user can adjust the monitor to the perfect viewing position that the operator desires.



Chip removal back wash

The M-One APC Series does not stop working. Therefore all M-One APC series come with standard chip removal back wash system. With the limited amount of time allowed to clean the machine, the chip removal back wash system will do the cleaning for you.





Table change time

When every second counts, a fast table change is very important. We the M-One APC fast table change is what we do. Our table change time from the moment of lift off with complete 180 degree turn only takes less than 7 seconds.

M - One APC Series

Machine Specifications:

		M-On e6	M-On e8	M-On e10
TABLE				
Work Table Size	m m	600 x 400	850 x 500	1000 x 500
Work range	m m	600 x 400	850 x 500	1000 x 500
Number of Pallets	piece	2	2	2
T-Slot of tables	m m	100*14*3	100*18*5	100*18*5
Table Change Time	Sec.	5	5	5
Max Weight on Table	kgs	200 x 2	300 x 2	300 x 2
TRAVEL				
X Axis	m m	600	850	1000
Y Axis	m m	400	500	500
Z Axis	m m	500	600	600
Spindle Nose to Table(min to max)	m m	110-610	150-750	150-750
SPINDLE				
Spindle Taper		ISO40	ISO40	ISO 40
Spindle Max Speed	r.p.m.	(ISO40)10,000rpm,(ISO50)6,000rpm		
Drive Type		Belt Driven		
Spindle motor	kw	5.5	7.5	11
ATC				
Tool Quantity		24Tools	24Tools	24Tools
Tool change type		Arm Type	Arm Type	Arm Type
Max. tool diameter&length	m m	ф80/300	ф80/300	ф80/300
Max. tool weight	kgs	7	7	7
Handle Type		ISO40 (BT,CAT,DIN, HSK,SK)		
Tool change time		T-T:1.8	T-T:1.8	T-T:1.8
MOTOR				
Servo motor X/Y/Z axis-FANUC	kw	1.8/1.8/1.8BS	2.5/2.5/2.5	2.5/2.5/2.5
Servo motor X/Y/Z axis-MITSUBISHI	kw	2.0/2.0/3.0BS	2.0/2.0/3.5BS	2.0/2.0/3.5BS
3-Axis cutting feed rate	mm/min	12000	12000	12000
3-Axis rapid feed rate	M/min	36/36/36	24/24/24(36)	24/24/24(36)
OTHER				
Machine Size	L*W*H(M)	2270 x 3400 x 2300 mm	2810 x 5570 x 3300 mm	3660 x 5160 x 3300 mm
Machine Weight	kgs	4000	6500	7500

STANDARD ACCESSORIES

Arm Type Automatic Tool Changer BT-40 (24-tools)

Fully Enclosed Guard Swiveling Control Box

Low Energy Work Light LED 3 Color Warning Light

Volumetric Type Automactic Lubricator Coolant and Chip Flushing System

Auto Power Off

Rigid tapping Tool Box

Leveling Screws & Blocks

Operation Manual

Mechanical Oil Coolant Separator

Air Gun

Screw Type Chip Conveyor Chip Wash System

OPTIONAL ACCESSORIES

Arm Type Automatic Tool Changer BT40 (32-Tools)

Chain Type Automatic Tool Changer BT40 (32/40-Tools)

Arm Type Automatic Tool Changer BT50 (24-Tools)

Chain Type Automatic Tool Changer BT50 (32-Tools)

Coolant Through Spindle (CTS)

Transformer

Chain Chip Conveyor

Linear Scale

CNC Rotary Table

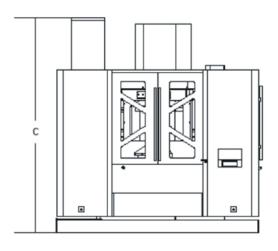
Automatic Tool Probe

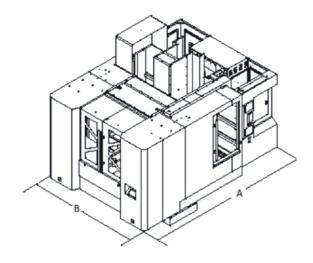
Automatic Tool Setter

Maple 2-Step Gear Box-BT40 (6000,8000,10000 rpm)

Maple 2-Step Gear Box-BT50 (6000,8000 rpm)

Machine layout





M-One APC Series Machine Dimensions					
Series	M-One6 APC	M-One8 APC	M-One10 APC		
Dimension A	3200 mm	3700 mm	3700 mm		
Dimension B	2070 mm	2270 mm	2656 mm		
Dimension C	2720 mm	2870 mm	2870 mm		

Machine APC work table size and diagram

