



PMI CNC Machining Centers

PMI-CNC H-Type 3-Axis Machining Center



Machine Features:

- X-axis working length 137.76 to 295 Inches (3.5m to 7.5m)
- Short scale multiple processing and Long scale processing
- The traveling column features precision positioning accuracy
- The X-Axis, Y-Axis, and Z-Axis are driven through servomotor combined with ball screw
- The X-Axis has large diameter ball screw that is firmly supported to eliminate deflection
- Each Axis moves on precision linear guide ways to allow for fast and smooth movements
- Automatic tool changer - 24 tool capacity
- The machine comes standard with a large worktable that is precision machined with T-Slots for easy fixture setup
- The machine is equipped with a full safety guard to ensure operator safety
- Industrial PC based CNC Control is the standard equipment.
- The machine is equipped with an oil mist lubrication system as well as a flood coolant system
- Spindle air blast is standard on the machine
- Equipped with an auto lubrication system for the linear guide ways and ball screws
- The machine comes standard with a chip conveyor
- All three ballscrews are direct coupled with drive motors that feature no backlash, high transmission efficiency, and high precision.



Travel

X-Axis Travel 137.76 Inches (3500mm) to 295 Inches (7500mm)

Y-Axis Travel 20 Inches (510mm)

Z-Axis Travel 20 Inches (510mm)

Table

Table Working Type Precision Machined T-Slots

Table Working Surface 17.72 x 137.76 Inches to 295 Inches (450mm x 3500mm to 7500mm)

T-Slots 3 x 35 x 202.5

Max Load 400kg/1m (881lbs/1ft)

Spindle

Spindle Speed 12,000 RPM

Spindle Motor 11kw (15 HP)

Tool Holder BT 40





Feed Rate

Rapid Traverse

X: 65.6 FPM (20m/min)
Y: 78.72 FPM (24M/Min)
Z: 78.72 FPM (24 M/Min)

3-Axis Servomotors

X-axis: 5Kw Y-Axis: 3.5Kw Z-Axis: 3.5Kw (Mitsubishi)

Positioning Accuracy

+/-

X-Axis: 0.002" (0.05mm)
Y-Axis: 0.0008" (0.02mm)
Z-Axis: 0.0008" (0.02mm)

Cutting Feed Rate

0.0394 to 393.7 inches/min (1 to 10,000mm/min)

Tool Storage

Tool storing capacity

24 Tools

Tool Holder

BT 40

Magazine Type

Arm Type

Max tool length

11.81 Inches (300mm)

Max tool diameter

4 Inches (100mm)

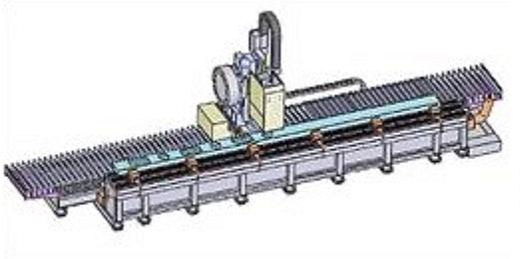




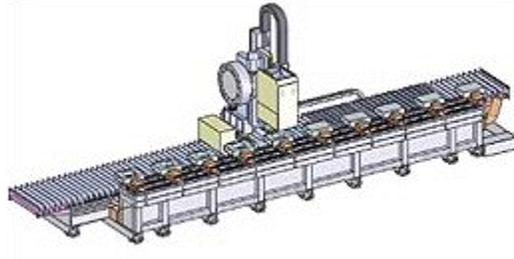
General

Machine weight	36,000 LBS (at 4.5m working length)
Machine dimensions	378.42" x 103.7" x 111" (at 4.5m working length)

Long Scale Single Piece Processing or Short Scale Zone Processing



Long-scale Processing



Short-scale multiple processing



Oil Mist Cooling System and Flood Coolant System

The machine is equipped with an oil mist cooling system which provides a cool cutting tool and work piece. The Oil Mist system will extend the service life of the tool and ensure a superior cut quality. It is also equipped with a



flood coolant system for machining faster on



heavy steel sections of material

CNC Control

The Mitsubishi Industrial PC Based Control is easy to learn and operator friendly.

Automatic Lubrication System

All Linear guide ways and ball screws are automatically lubricated to ensure long service life and smooth movement on all axes.

Traveling Column

The large traveling column is manufactured from high quality cast iron. With the machine's configuration, the work piece weight will not affect the transmission system so the machine is able to provide consistent and precise machining accuracy. The column positions on two 45mm linear guideways on the X-axis and Y-axis. On the X-axis, there are 8 linear bearings and on the Y-axis, there are 6. This provides stability and rigidity to ensure accurate movements.



X-Axis Ball Screw

The X-axis is positioned by a 80mm extra large ball screw that is supported by two rigid blocks to eliminate deflection. This provides precision movements of the large column head.



Drag Style Chip Conveyor

The entire length of the machine is covered by a drag style chip conveyor. The end of the conveyor is equipped with a goose neck to discharge chips into a bin.



Spindle Cooling System

The machine includes spindle cooling system to ensure the spindle stays at the optimal temperature even when machining heavy steel sections or hard-to-machine metals.

