



# **PMI CNC Machining Centers**



# PMI-CNC S-Type 4-Axis Machining Center

#### Machine Features:

- X-axis working length 137.76 to 295 Inches (3.5m to 7.5m)
- Short scale multiple processing, Long scale processing, 4-axis processing
- The traveling column features precision positioning accuracy
- The traveling column is driven through servomotor combined with a gear/rack transmission
- The Z and Y axis are driven through servomotor combined with ball screw
- Each Axis moves on precision linear guide ways to allow for fast and smooth movements
- Automatic tool changer 12 tool capacity
- The Machine is equipped with air clamps to hold material in position
- Automatic Clamp Movement
- The machine is equipped with a safety guard to ensure operator safety (Partial or Full cover available)
- Industrial PC based CNC Control is the standard equipment. It is easy to learn and operate.
- The machine is equipped with an oil misting system. The oil mist system will extend tool life and also ensures superior cutting quality.
- Spindle air blast is standard on the machine
- Equipped with an auto lubrication system for the linear guide ways and ball screws
- Chip conveyor is standard on this machine





Travel					
X-Axis Travel		137.76 Inches (3500mm) to 295 inches (7500mm)			
Y-Axis Travel		15.75 Inches (400mm) and 8.66 Inches (220mm) in 4-Axis			
Z-Axis Travel		14 Inches (350mm)			
Tabla					
<u>Table</u>					
Table Working Type		4 to 10 Vises (with automatic movement)			
Table Working Surface 7500mm)	11.81 x 137.76 Inches to 295inches (300mm x 3500mm to				
Max Holding Power (per vise)		242lbs (110kg)			
<u>Spindle</u>					
Spindle Speed		18,000 RPM			
Spindle Motor		7.5 kw (10 HP)			
Spindle taper		ISO30			
Feed Rate					
Rapid Traverse		X: 196.8 FPM (60m/min) Y: 78.72 FPM (24 m/min) Z: 78.72 FPM (24 m/min)			
3-Axis Servomotors		X-axis: 2Kw	Y-Axis: 1Kw	Z-Axis: 2Kw	(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 196.85 Inches/min (1 to 5000mm/min)

### Tool Storage

Tool storing capacity 12 Tools

Tool Holder

ISO 30

Magazine Type

Automatic Disk Type



### <u>General</u>

Machine weight

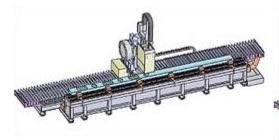
9,900lbs (4500kgs) 3.5m or 16,500lbs (7,500kgs) 7.5m

Machine dimensions 108" (10,800 x 2504 x 2742mm) 7.5m 268" x 99" x 108" (6,800 x 2504 x 2742mm) 3.5m or 426" x 99" x



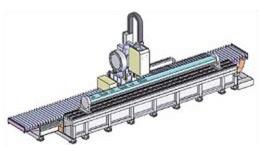


Long Scale Single Piece Processing or Short Scale Zone Processing



Long-scale Processing

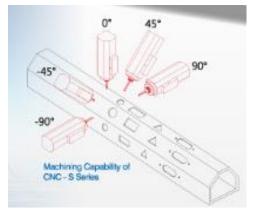
Short-scale multiple processing



For 4-axis processing (Optional)

## 4<sup>th</sup>-axis for +- 95 degree Rotary movement of the spindle head





- With the 4 axis rotary spindle, the head can be positioned 95 degrees to the left and right of the work piece. This allows the machine to drill or tap on an angle into the work piece.
- The machine can also do face milling and multi-surface machining in one setup.
- The swiveling degree of the spindle head is adjusted through the computer control.
- Minimum indexing of the angle is 5 degrees





- A tool clamp/release button is provided on the angular head
- Built-in type spindle features high accuracy, low vibration, low noise, and no backlash





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.



### **CNC Control**

The Syntec 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.





# Automatic Clamp Movement

The clamps are automatically positioned so the machine can process 3 sides of a profile in a single setup. Each vise has a safety zone that is built into the machine's control.