



PMI-NC150 Automatic Drilling Center

The PMI-NC150 Automatic Drilling Center is designed and built drill aluminum profiles and other non-ferrous materials. It is also available with a tapping option so it could drill and tap the holes in the extrusion. The machine has a long x-axis working length so the operator will load an extrusion onto the bed of the machine and the spindle will automatically drill the programmed holes. The x-axis movement of the spindle is servo controlled so it is precise and accurate with its movements. The standard x-axis working lengths are from 9.84 ft to 21.32ft with longer lengths available as an option.

Machine Highlights:

- **Mitsubishi NC Controls**
- **Easy-to-Use Touch Screen Control**
- **Servo controlled X-axis positioning**
- **6.7 HP (5kw) Servo Driven Drill Head**
- **Inverter Controlled Variable Spindle Speeds**

Machine Features:

Spindle Speed:

The standard spindle speed is 300 to 2000 RPM. Inverter controlled variable speed is a standard feature.

6.7 HP (5kw) Servo Driven Drilling Motor:

The machine is equipped with a 6.7 HP (5kw) servo driven motor for the drilling operation. This will extend tool life and gives the machine the power to run through heavy wall material.

NC Control and Touchscreen:

The machine is equipped with PLC control. The operator programs the machine via the easy-to-use touch screen control by entering the number of holes required as well as the distance between each hole. The hole spacing along the x-axis can be spaced evenly or unevenly so your hole pattern does not have to be the same throughout the extrusion. The control can store up to 100 different programs. The feed rate is programmed into the touchscreen control.



X-axis Positioning:

The X-axis position is servo controlled so the position of the drill head is driven by a servo motor and drive. The head positions along a gear rack. The servo motor power is 400w. The drill head's positioning speed is up to 131 FPM.

X-axis:

The bed of the machining center along the x-axis can be built to handle extrusions from 9.84 ft to 21.32 ft; however, custom lengths are available over 21.32ft. The bed of the machine is equipped with a zero point so it makes set up easy for the operator. The machine will come equipped with pneumatic clamps so the material can be secured during the drilling operation. As standard, there is 1 clamp for every 3.28ft of x-axis working length.

Y-axis:

The Y-axis is manually adjusted. It is equipped with a digital read-out to allow for quick set up. The adjustment range is 7.87" (200mm) so the working distance of Y is 7.87". The maximum width material that can be loaded is 13.78" (350mm).

Z-axis:

The stroke of the Z-axis is 6" (150mm) so the maximum travel of the drill head is 6". The maximum height material that can be loaded in the machine is 7.87" (200mm).

Precise Micro-Drip Blade Lubrication System:

The blade is lubricated via a micro-drip system. A small amount of lubricant is introduced into the air line at the point of discharge for control and economical distribution of the saw lubricant.

Safety Machine Enclosure and light barrier:

The backside of the machine and each end are enclosed. The front side of the machine is equipped with a safety light barrier that will stop the machine if the barrier is broken.

Safety Limit Switch:

The saw spindle access door is protected via a limit switch that will shut down the machine in case the door is opened while the saw is in operation. The machine will not operate with the access doors open.



Technical Specifications:

X-axis working length	9.84 to 21.32 ft
Y-axis working length (adjustment)	7.87"
Y-axis Maximum Material Width	13.78"
Z-axis Stroke (travel)	6"
Maximum Material height	7.87"
Servo Driven Drilling Spindle	6.7 HP
Servo Motor (x-axis)	400w
X-axis Positioning Speed	131 FPM
Spindle Speed (inverter controlled)	300 to 2000 RPM
Program Storage	100

Additional Standard items included with purchase of PMI-NC150:

- **Operators Manual**
- **Tool Kit**