

4-AXIS CNC PROFILE CUTTING & MACHINING CENTER



MACHINE DESCRIPTION

Gantry-axis CNC Profile Cutting & Machining Center equipped with a 0°-180° independently programmable high-speed spindle, 45°-90°-135° automatically tilting saw blade with 600 mm diameter, automatic tool changer magazine, 12 profile clamping devices, pneumatic reference pins, and 3D programming software.

Body: All-machined metal profile structure. Thermally treated and vibration-free.

Spindle: 7.5 kW, 0-24,000 rpm adjustable ISO 30 with ceramic bearings, air-cooled. Tilting at any angle between 0°-180°.

Automatic Tool Changing Magazine: Placed on the machine bridge, moving along with the machine body with 10 positions for standard tools. Tool changing time is minimized by carrying the tool changer magazine on the bridge. The 300 mm notching blade is also integrated within.

Cutting unit: 3.0 kW, 2,800 rpm AC motor drives the 600 mm saw blade without vibration during stable radial movement. The machine can cut 1 piece clamped by 2 pneumatic clamps at a time.

Axis Information:

X-Axis: Real gantry with 2 servo motors on both sides of the bridge. Brushless servo motors with gears moving on helical rack and pinion and linear guides. V/max: 80 m/min.

Y-Axis: Brushless servo motors with gears moving on helical rack and pinion and linear guides. V/max: 60 m/min.

Z-Axis: Servo motor with braking system moving on ball screw. V/max: 25 m/min.

Profile Machining Length : 7,300 mm.

Profile Machining & Cutting Length with Both Sides 90° : 7,100 mm.

Profile Machining & Cutting Length with Both Sides 45° : 6,700 mm.

550 mm x 200 mm profile cutting dimension at 90°

550 mm x 150 mm profile cutting dimension at 45°

550 mm x 350 mm profile processing from the top and back.

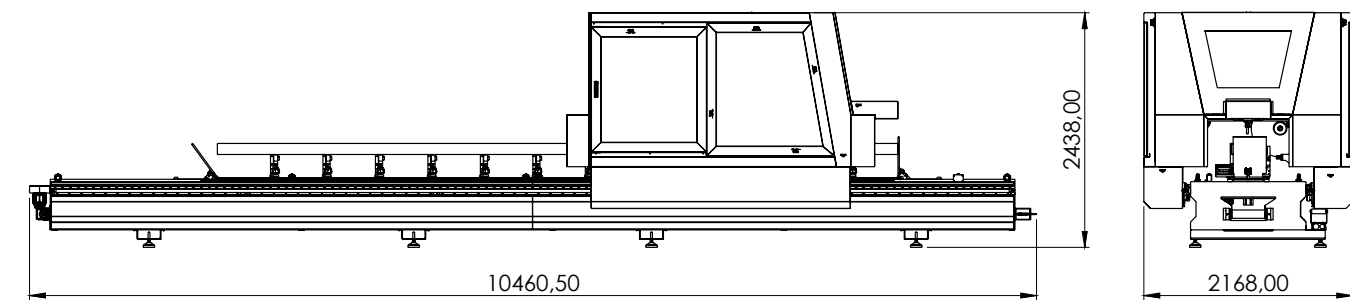
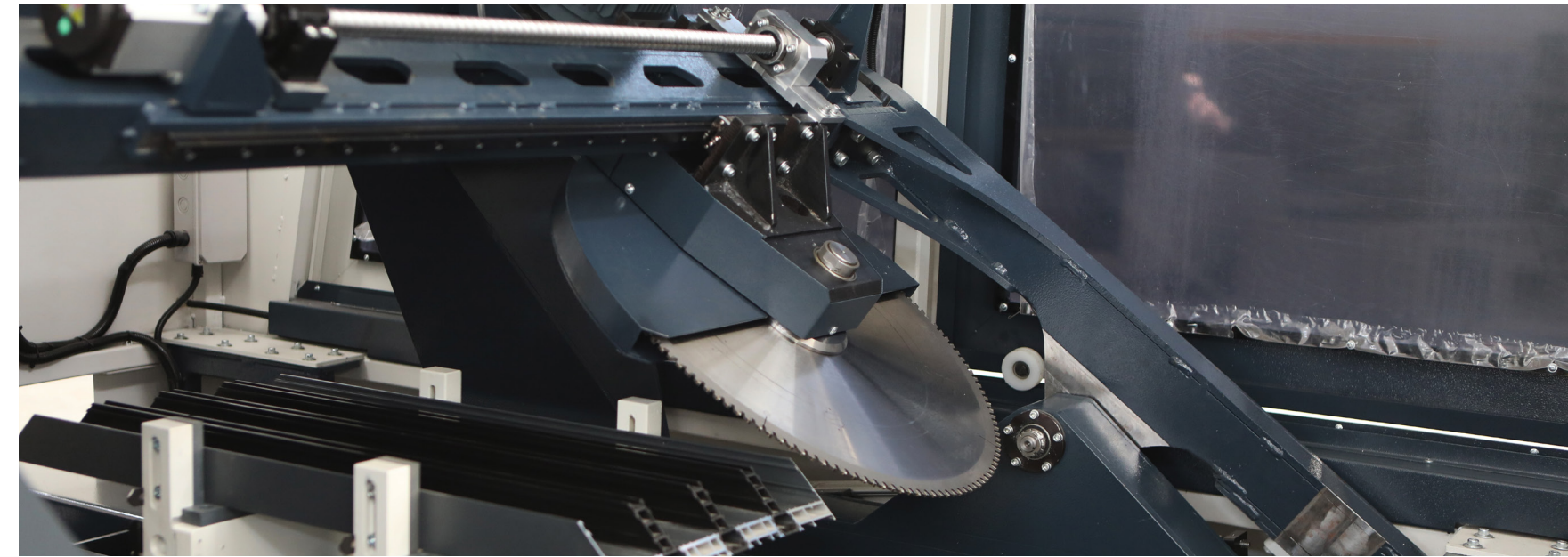
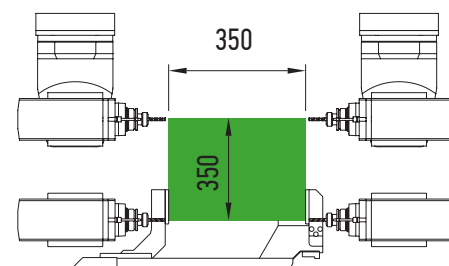
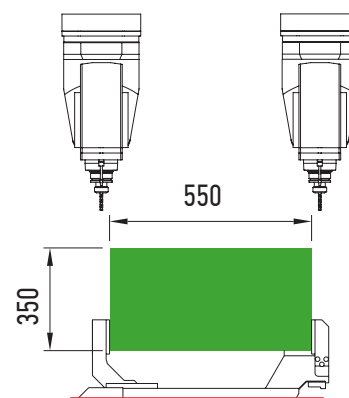
350 mm x 350 mm profile processing in 4-axis.

Maximum Tool Length : 300 mm.

Maximum Disc Cutter Diameter : 350 mm.

Total Installed Power : 19 kW / 80A / 400V / 50-60 Hz.

Air Pressure and Air Consumption : 6-8 Bar / 100 L/min.



STANDARD EQUIPMENT

Double station working capacity thanks to the pneumatic reference points placed at both sides of the machine. Manually positioned 12 pieces of profile clamps. The width of the clamps is adjustable and they are also suitable for fixture connection.

45°-90°-135° automatic tilting radial moving saw blade with 600 mm diameter connected on a separate portal behind the bridge. The cutting portal moves together with the bridge.

7.5 kW 24,000 rpm ISO 30 high-speed spindle has an automatic tool changer magazine with 10 positions mounted on the machine body.

NC-controlled dust extraction conveyor.

Pulse spray mist coolant system.

Automatic positioning of the clamps moved by the bridge.

3D CAD/CAM software.

21.5" TFT-LCD screen.

Laser safety barriers.

