

INO MACHINERY XA SERIES - CNC PANEL MACHINING CENTRE:



Description:

CNC router technology equipped with an aluminium profile based polyethylene vacuum table and high speed spindle especially designed for aluminium panels processing.

The bridge system is moving on helical rack mill and linear guideways with servo reducers and brushless servo motors, supported with backlash system on PC control makes the machine run smooth and extremely precise.

All kinds of cutting, sizing, grooving and 3D modelling can be made with high speed spindle that can run up to 24.000 rpm on 7.5 kW S1 power, without losing any torque values.

The vacuum table has 2.000 vacuum holes and the vacuum table is divided into 8 chambers. Each vacuum zone is controlled by electrical valves to separate each chamber to process small parts perfectly.

The SVT (Smart Vacuum Table) is a genius way to process the aluminium composite panels, because it decides which chamber to vacuum on the panel according to the size of the panel. The operator does not need to turn on/off any buttons or manual valves. Also the pop up reference pins are controlled according to the size of the panel and the speed of the operator automatically. The operator does not need to move the pins manually.

NO OTHER COMPETITOR ON THE WORLD HAS THIS OPTION.



Features:**Processing Length: 4000 mm.****Processing Width: 1.600 mm.****Working Height: 300 mm.****Body:**

Cast Iron and metal profile structure. Pre-made metal body stress relief process. Thermally treated.

Main Milling Engine:

7.5 kW 1000 - 24.000 rpm / min. With automatic tool changer spindle – 6 positions.

Axis technical information:Gantry Type X axis is working on crackmil and pignon with brushless servo motors and guided by linear guides from the both endings of the bridge with **70 mt./min speed**. Servo motors are in communication to give the best accuracy.

2 Pieces servo motors working GANTRY: 1.6 kW – 4 Nm – 6.000 rpm. – with 1/10 geared 120 mm body.

Y axis is working on crackmil and pignon with brushless servo motors and guided by linear guides with **65 mt./min speed**.

1.6 kW – 4 Nm – 4.000 rpm. – with 1/10 geared 120 mm body.

Z axis works with a screw mill and brushless brake type servo motor with a speed of **25 mt./min**.

1.6 kW – 4 Nm – 4.000 rpm. – with 20 mm diameter 20 pitch screw mill and 1/1 reduction.



Electronic Equipment

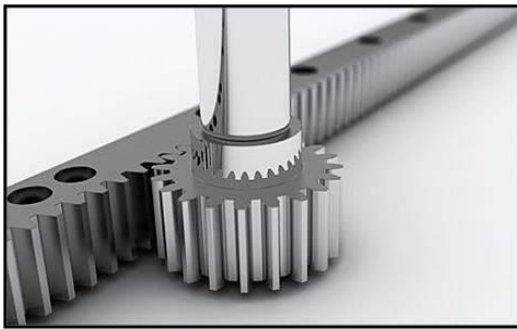
- Geared Servo Motors
- Cooling fan on the electric cabinet
- Reduction technology with the backlash system that guarantees the precision until 0,01 mm / 1m. (GEARBOX)
- Servo Drivers

Rack and Pinion

Ground helical rack - higher precision is achieved thanks to angled gears.

Grounded Helical Pinion

Ball Screw Z-Axis



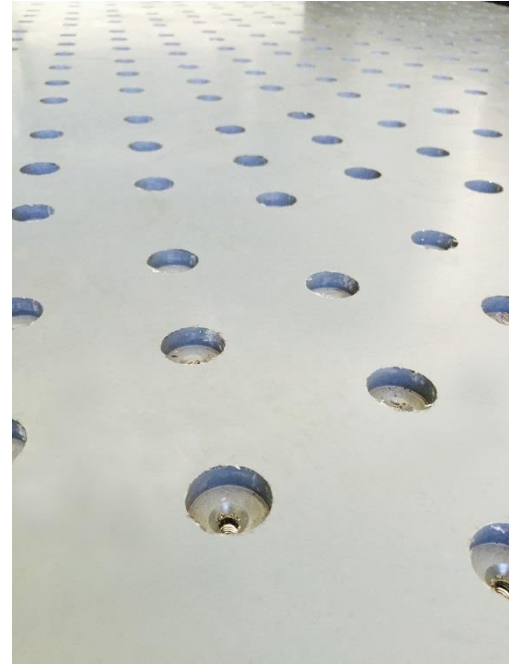
Electronic equipment: ESA AUTOMOTION www.esautomotion.it

- Servo motors and reducers
- Movable CNC controller terminal.
- Electric system and the cabinet with the cooling system
- Servo drivers
- CNC controller – 12 Axis with canopen.
- Industrial PC 19" TouchPanel – Windows10 operating software.
- AC Inverter for adjusting the speed of the spindles.
- Tool measurement probe



The Vacuum Table:

- 8 Vacuum chambers automatically controlled by the CNC Controller.
- SVT – Smart Vacuum Table. Decides automatically which chambers to vacuum according to the size of the panel.
- Automatically controlled reference pins. They move according to the size of the panel and the speed of the operator automatically. No need to pop up and down the pins manually.
- Aluminium profile based cast polyethilane vacuum table that does not need MDF for protection.
- 1500 vacuum holes
- Special design for processing small parts



Routing heads:

High speed spindle with ceramic bearings.

Air cooling system.

Spindle: 7,5 kW 24.000 rpm

Power Supply: 12 Ampers.

ISO SK 30 Type Tool Holedrs - Optional

5-6-8-10-12-14-20 mm Collet Set - Optional

Cutter set - Optional

Disc cutter: 350 mm.



7,5 kW Oil type Vacuum Pump:

Specially designed for aluminium composite panels' best vacuuming conditions.

Dust Extraction Unit:

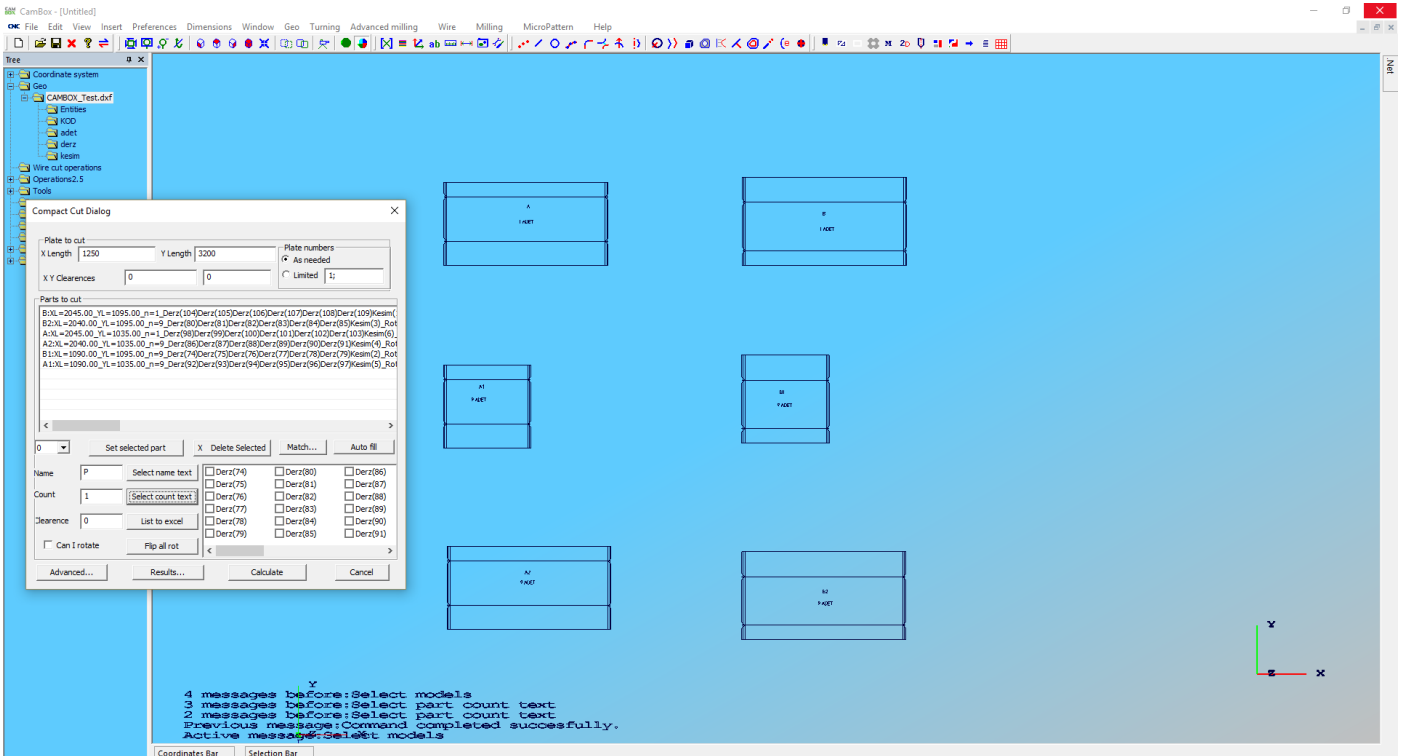
Special design for aluminium and polyethylene swarf extraction at the same time.

All pipes and tubes will be provided according to the machine size

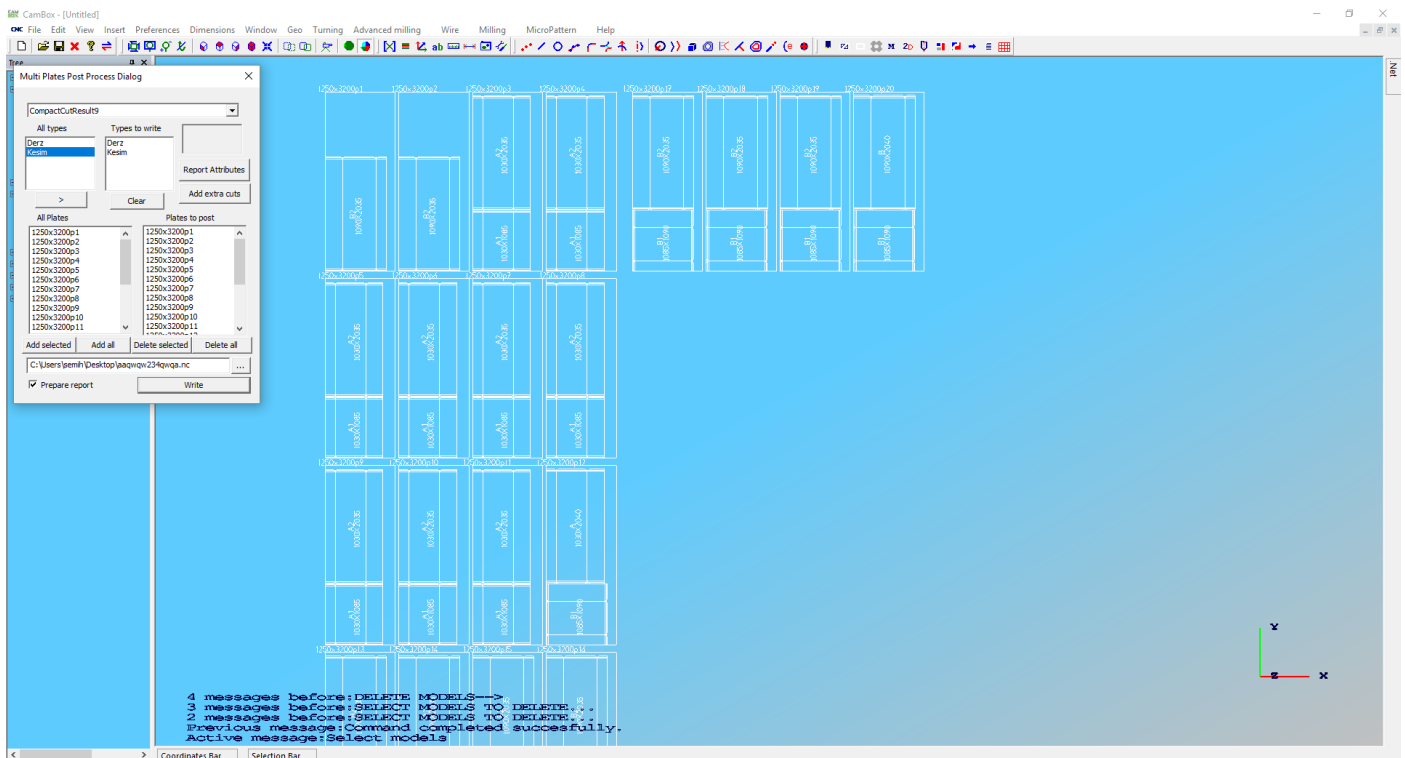


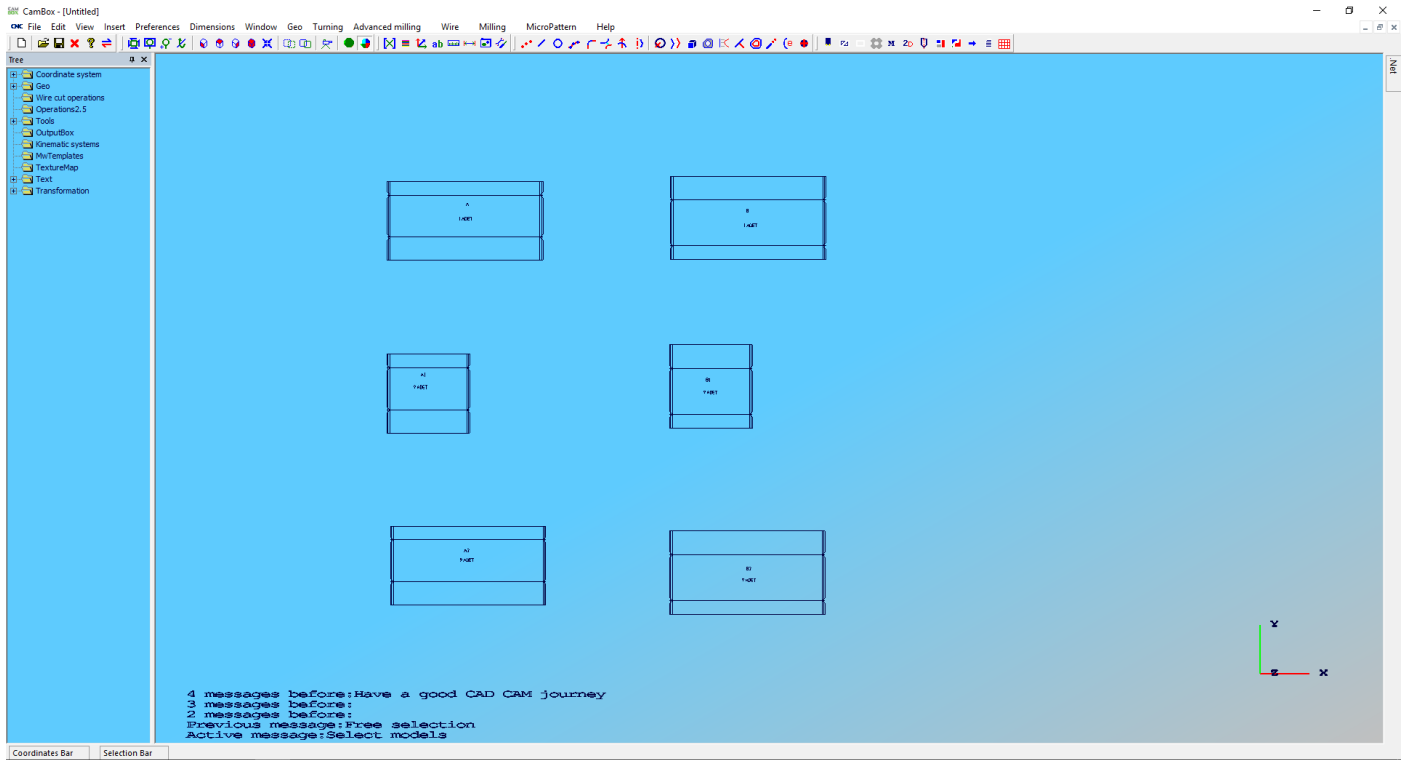
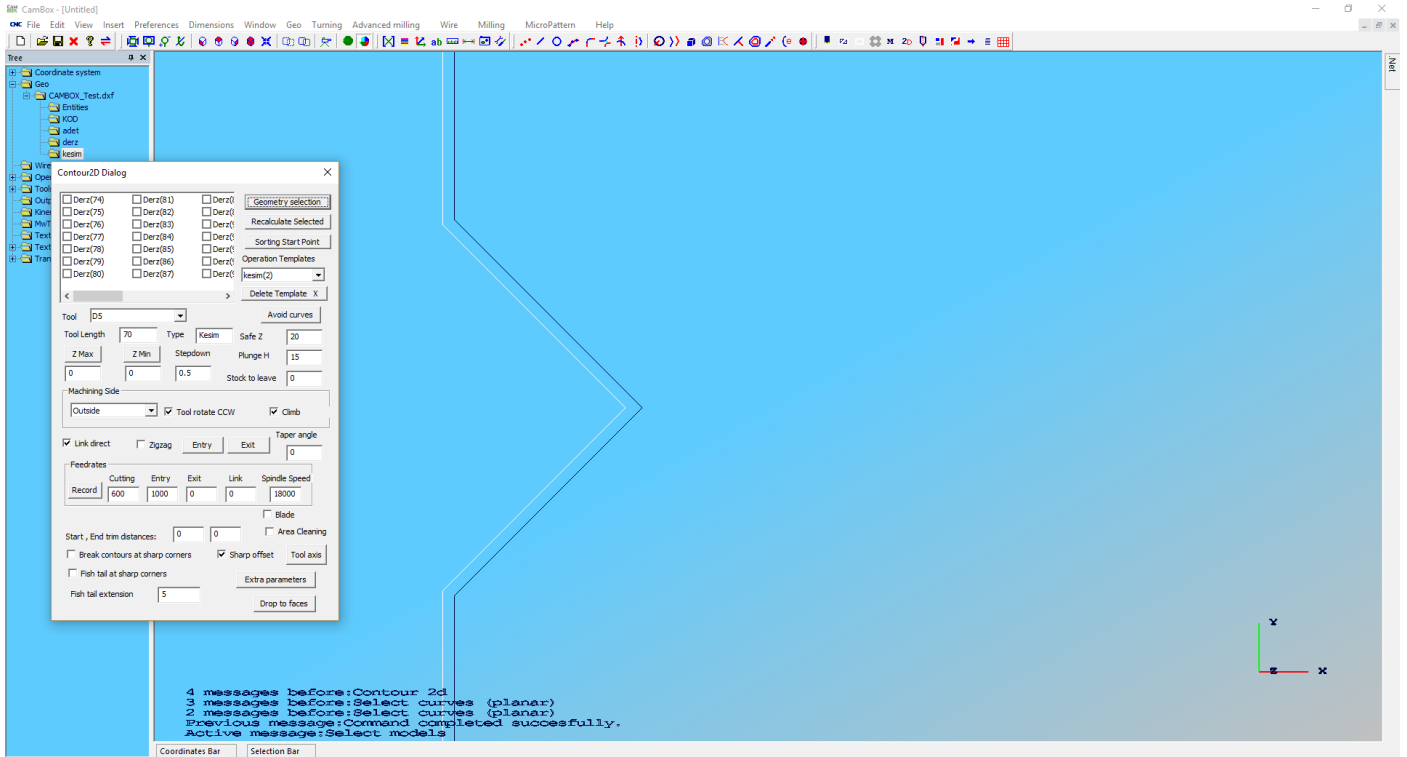
Software Equipment

- CAD-CAM software
- G-code production over AUTOCAD files
- G-code production from any kind of drawing
- Optimisation of all projects at once
- Optimisation panel by panel
- Auto detection of all holes and grooves
- Ability to determine the tool path according to the user's choice
- 2 user licences
- 2 days education on site
- 2 years support over the internet or by phone



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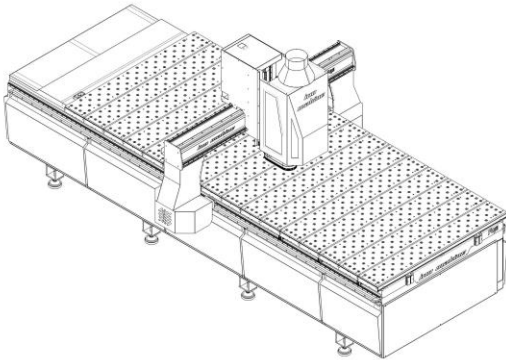
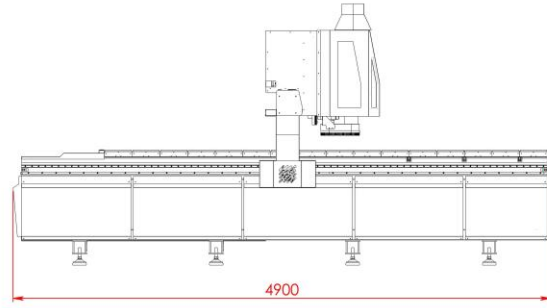
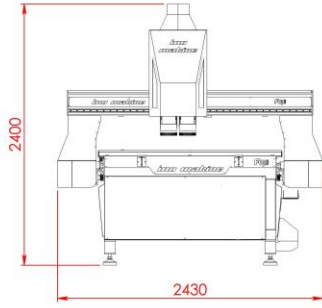


Technical Parameters:

Total installed power: 30 kW / 50A / 400V / 50-60 Hz.

Air pressure and air consumption: 6-8 Bar. - 120 L/min.

Packing dimensions: 5.200 X 2.200 X 2.250 mm.



2500 kg