





**LaborMidi** is the working center designed to machine aluminum panels of medium/large dimensions.





# **Customized structure and configuration**

Its "open" configuration with mobile bridge allows a wide access from the 4 sides of the machine, but its design also allows to be used in totally automated production systems which require automatic loading/unloading by robotized devices.

The machine is available in the 3 and 5 axes version and can be equipped with a wide range of accessories according to customer needs.

**LaborMidi** is an effective solution for panel machining with a very good quality/price ratio, extremely easy to install and introduce in the production process.

	Axis / Assi	Speed / Velocità
x	3.000 - 4.000	
	6.000 - 8.000	80 m/1'
	12.000 mm	
Y	1.500 - 2.000 mm	80 m/1'
Ζ	250 - 600 mm	40 m/1'
A	+/- 120°	40 m/1'
С	+/- 365°	30 m/1'

Electrospindle / Elet	tromandrino
3 Axis working head	22 kW
Testa di lavoro a 3 assi	24.000 rpm
Numerical control / Con	ntrollo Numerico
Siemens	840 D
Tools Magazine / Mag	azzino Utensili
Rotating ATC	10-12-16 pos.
Magazzino rotante	







#### Working head & spindle

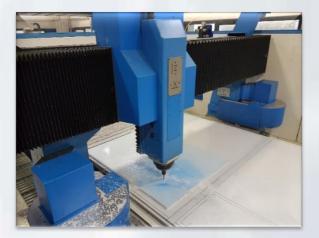
The vertical working head is mounted directly in the RAM to ensure the best performance in terms of rigidity and precision machining.

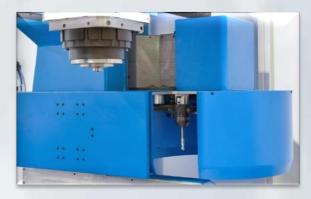
The electro-spindle is equipped with 4 high precision ceramic/steel (front) ans steel (back) ball bearings: the bearing area is protected form dust and dirt infiltration by pressurization and the lubrication of bearings is by grease of permanent type.

The electro-spindle by 15 or 22 kW (S1) and 24.000 Rpm speed is equipped with automatic tool-changer HSK A63.

The locking / unlocking of the tool is made by an oil-dynamic system with integrated cylinder.

The spindle is equipped with an encoder for the control of the torque to perform "rigid tapping".



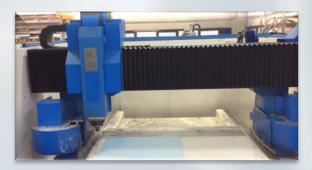


### **Tool magazines**

The working head is supported by two "rotary" type tool magazines at 10 positions each, positioned at the two opposite sides of the mobile bridge.

The rotation of magazine is handled by CNC axis, to allow a fast and accurate tool change.

The tool magazine is also protected by a pneumatically operated cover, to prevent dust and chips from entering the tool holder.





### **Machine protection**

The «close cell» machine enclosure is provided with manual opening doors on two machine sides, allowing easy access and loading of the piece on the working table.

The machine perimetral protection, made according CE regulations, has been studied to perform all milling operations with the use of liquid coolant.





#### **Working table**

The fixed working table is made by an aluminum suction surface divided in 4 vacuum areas, controlled by NC through independent electrovalves, and mounted on top of electro-sealed steel crossed bars structure.

The vacuum distribution is ensured by metallic inserts with threaded holes provided in the working table, which can also be used for clamping of jigs.







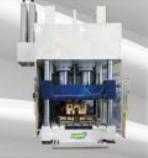














# COMPRESSION PRESSES

- PRESSES
- RECONDITIONING



HOUSEHOLD APPLIANCES II THERMOFORMING MACHINES II PUNCHING PRESSES II PUNCHING MOLDS

# INDUSTRIAL

SHEET SINGLE STATION

- COIL UNWINDER
- AUTOMATIC LOADER

THERMOFORMING MOLDS

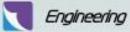


= 5 AXIS CNC MILLING & TRIMMING

- 81

- WATERJET CUTTING
- LASER
- ROBOT CUTTING & MILLING





WORKING AREAS

SPRAYING UNITS

**TURNKEY PLANTS** 





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