

LOADING MOTORIZED BELT 2.500 mm

Technical Details:

- Motorized surface in PVC
- Support with brush plate.
- Belt Length: L = 6.000 mm

When delivered these products are cabled and NC operated.

CNC MACHINE PROXIMA MODEL

PROXIMA is a line CNC machine to drill, rout and insert fittings and dowel pins in the vertical, horizontal and special elements of the furniture.

Thanks to its facing working units, Proxima can work on the six sides of the panel.

The machine gives a high degree of modularity and configuration that make it adaptable to customers specific needs.

Proxima can be customised on the specific needs of the furniture manufacturer with different working groups: independent spindles, electro-spindles with multi-position tool change, insertion groups for different fittings and also the optional extra for the glue and dowel pin insertion in the horizontal elements of the cabinet.



TECHNICAL DESCRIPTION OF THE CNC LINE MACHINE - PROXIMA MODEL.

The machine is composed of a vertical basement in steel structure. The piece to be worked is moved by a clamp system: the first clamp loads the panel and is identified by X0 axis: it introduces the panel into the machine; the second clamp, identified by the XA axis, is the main clamp, it moves through brushless motors or magnetic linear motors and runs on a ground

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T.O.P. srl
Sede Operativa: Via A. Volta, 32
22071 CADORAGO (CO) - ITALIA
Sede Legale: Via Urago, 13 C
22038 TAVERNERIO (CO) - ITALIA
Capitale sociale Euro 80.000 i.v.

Tel.: +39.031.4473341
Fax: +39.031.4473019
E-mail: topsrl@t-o-p.it
Web: www.t-o-p.it
REA n. CO-287292
C.F. e Partita IVA: 02946240138

frame of idle rollers. The clamp has the only task of moving the piece, whose weight is supported by the ground frame. A third, optional clamp, which allows greater productivity and greater flexibility in the case of particularly small pieces, is identified by the XB axis. If Proxima is configured with 3 clamps, it is possible to have up to 3 pieces in the machine at the same time.

The vertical and horizontal roller vice adapt to the height and thickness of the piece automatically, receiving the information from the numerical control work list. The A axis is positioned on the thickness of the piece and is moved through a brushless motor; it is formed by an idle roller system that allows the piece to run along the whole machine in both directions. The R axes, which are fundamental for the precision of the drilling depth, follow the mobile work groups to give the workpiece a support on the back. The V axes, also moved through brushless motors, adapt to the height of the piece and are activated directly by the numerical control program in the case of complex routings, where greater precision is required.

The Y brushless axes are those through which the working groups are positioned and thanks to which the interpolation of the drilling and milling heads takes place; they are mounted on guidances with recirculating ball-bearings, moved through an endless screw system. The depth is controlled instead by the Z axis, these in fact allow the advancement of the work groups on the thickness of the panel, thus determining the depth of the holes or the routing. Depending on the selected configuration, you can work five or all six faces of the panel.

The machine is completely controlled by CNC and with the operator interface TPA Albatros on PC. The machine enables the automatic loading and the unloading of the panels.

MACHINE CONTROLLED BY NR. 12 INDEPENDENT AXIS:

Axis X0 Brushless, the movement is controlled through Brushless, positioning, drilling (length of the panel). Max positioning speed 90 mt/min.

Axis XA1 Brushless, the movement is controlled through Brushless, positioning, drilling (length of the panel). Max positioning speed 120 mt/min.

Axis XA2 Brushless, the movement is controlled through Brushless, positioning, drilling (length of the panel). Max positioning speed 120 mt/min.

Axis XB1 Brushless, the movement is controlled through Brushless, positioning, drilling (length of the panel). Max positioning speed 120 mt/min.

Axis XB2 Brushless, the movement is controlled through Brushless, positioning, drilling (length of the panel). Max positioning speed 120 mt/min.

Axis Y3 Brushless, the movement is controlled through Brushless, positioning, drilling (height of the panel). Max positioning speed 60 mt/min.

Axis Z3 Brushless, the movement is controlled through Brushless, positioning, drilling (hole or milling depth). Max positioning speed 30 mt/min.

Axis Y1 Brushless, the movement is controlled through Brushless, positioning, drilling (height of the panel). Max positioning speed 60 mt/min.

Axis Z1 Brushless, the movement is controlled through Brushless, positioning, drilling (hole or milling depth). Max positioning speed 30 mt/min.

Axis Y4 Brushless, the movement is controlled through Brushless, positioning, drilling (height of the panel). Max positioning speed 60 mt/min.

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Axis Z4 Brushless, the movement is controlled through Brushless, positioning, drilling (hole or milling depth). Max positioning speed 30 mt/min.

Axis A1 the movement is controlled through Encoder, positioning, thickness (panel setting). Max positioning speed 30 mt/min.

Axis V1 the movement is controlled through Encoder, positioning, height (panel setting). Max positioning speed 60 mt/min.

Axis V2 the movement is controlled through Encoder, positioning, height (panel setting). Max positioning speed 60 mt/min.

Axis R1 Brushless, the movement is controlled through Brushless, positioning in X mobile working head support. Max positioning speed 90 mt/min.

Axis R2 Brushless, the movement is controlled through Brushless, positioning in X mobile working head support. Max positioning speed 90 mt/min.

WORKABLE SIZE

Minimum length: 200 mm (panel length)

Maximum length: 3000 mm (panel length)

(Panels that can be loaded and unloaded from the machine. The work strokes are related to the chosen configuration.

The proportion between the length (support base) and height should not normally be indicatively less than $\frac{1}{2}$, also in relation to the thickness and specific weight of the panel)

Minimum height: 50 mm (panel height)

Maximum height: 1.450 mm (panel height)

Minimum thickness: 8 mm (Panel thickness)

Maximum thickness: 60 mm (Panel thickness)

PARTNERS



TOP TOP TOP TOP TSP

SYSTEMS HIGHTECH ISERICA FRANCE

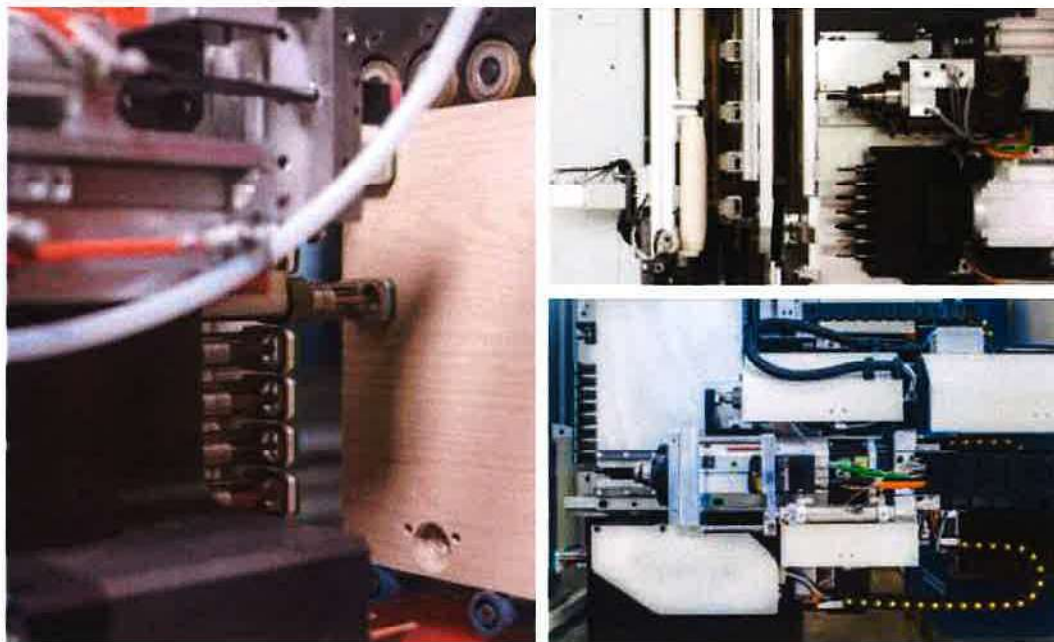


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WORK HEAD



GROUP 3

INDEPENDENT SPINDLES: 11 Vertical independent spindles + 7 horizontal independent spindles + 2 off-set horizontal spindles with copy system + 1 off-set vertical boring spindle with copy system

Max rotation speed: 10.000 rpm programmable

ELECTRO-SPINDLES: Nr. 1 Electro-spindle 8 KW with:
Air cooling

Max rotation speed: 18.000 rpm programmable

Upon request: electro-spindle 11 kW, Liquid cooling

Max rotation speed: 20.000 rpm programmable

TOOL CHANGE: 8 position tool change group

Nr. 8 HSK cones included

Upon request: 4, 6, 10, 12 tool change

ORIENTABLE INDEPENDENT BLADE UNIT: nr. 1 independent pneumatic blade unit

Orientable 0/90°

Power: 1,5 KW

Max rotation speed: 7.000 rpm programmable

GROUP 4

INDEPENDENT SPINDLES: 11 Vertical independent spindles + 7 horizontal independent spindles + 2 off-set horizontal spindles with copy system + 1 off-set vertical boring spindle with copy system

Max rotation speed: 10.000 rpm programmable

PARTNERS



TOP SYSTEMS

TOP TECH

TOP IBERICA

TOP FRANCE

TSP

MAAFLEXRAY

MAAFLEXRAY

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SAP Business One

GLUE AND DOWEL PIN INSERT GROUP

Aggregate for the insertion of glue and dowel
Dowel Size: 8 x 30 mm (Other types on request)
Maximum plug overhang: 15 mm



VIBRATING BOWL FOR AUTOMATIC PIN SUPPLY

Vibrating bowl for automatic supply of the dowels towards the insertion group.

GROUP 1

INDEPENDENT SPINDLES: 7 Vertical independent spindles
Max rotation speed: 10.000 rpm programmable

ELECTRO-SPINDLES: Nr. 1 Electro-spindle 8 KW with:
Air cooling
Max rotation speed: 18.000 rpm programmable
Upon request: electro-spindle 11 kW, Liquid cooling
Max rotation speed: 20.000 rpm programmable

TOOL CHANGE: 4 position tool change group
Nr. 4 HSK cones included
Upon request: 6, 8, 10, 12 tool change

PROXIMA – TECHNICAL DATA

NUMERICAL CONTROL

Numeric control ready for the control of 16 axis.
Supervisor Touch Screen PC
Monitor 19" TFT
Operative System: Windows 10
Software Albatros: This software enables the automatic work. Moreover the software is equipped with the parametric CAD for the piece program.
The work list enables to import of list – ASCII format

INFORMATION AND TECHNICAL DETAILS

Voltage 400 V 3P+N
Control Voltage 24 V
Air Pressure 6 Bar



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THICKNESS MEASURE DEVICE

- N. 1 Mechanical and pneumatic material for panel thickness measurement system
- N. 1 Lan drive encoder and relative magnetic band
- N. 1 Electric material kit

HEIGHT MEASURE DEVICE

- N. 1 Mechanical and pneumatic material for height measurement system
- N. 1 Lan drive encoder and relative magnetic band
- N. 1 Laser for height relief
- N. 1 Electric material kit

SOFTWARE PACKAGES INCLUDED

Operator Interface: Albatros Ver.3.0

Diagnostic Hardware/Software in real time, with real time messaging

TpaEdi32 Cad 3D Professional

Parametric programming, with possibility of variable management of the work list

Import and management of the work lists with format ASCII

Interpolation Software (Linear, circular, helical)

Software for the panel 3D display, before and after the process and real time

Bare code management – manual and automatic hardware and software

Office licence Tpaedi32 professional

OPTIONAL SOFTWARE DESCRIPTION (EXTRA)

File converter (DXF, SAT, CNC90)

Software for the pre-analysis of the work programs

Software to calculate the times and costs of the work programs

Production report

Software for the 3D display of the panel, pre-working, real time or post-working, with display of the processes and of the insertions.

Possibilities to customize the system (after analysis)

PARTNERS



TOP SYSTEMS

TOP HIGH TECH

TOP ISERICA

TOP FRANCE

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TWO POSITION MOTORIZED BELT

Technical Details:

- Motorized surface in PVC
- Support with brush plate.
- Belt Length: L = 3.000 mm
- Lateral run: L = 2.000 mm

When delivered these products are cabled and NC operated.

MOTORIZED BELT 6.000 mm

Technical Details:

- Motorized surface in PVC
- Support with brush plate.
- Belt Length: L = 6.000 mm

When delivered these products are cabled and NC operated.

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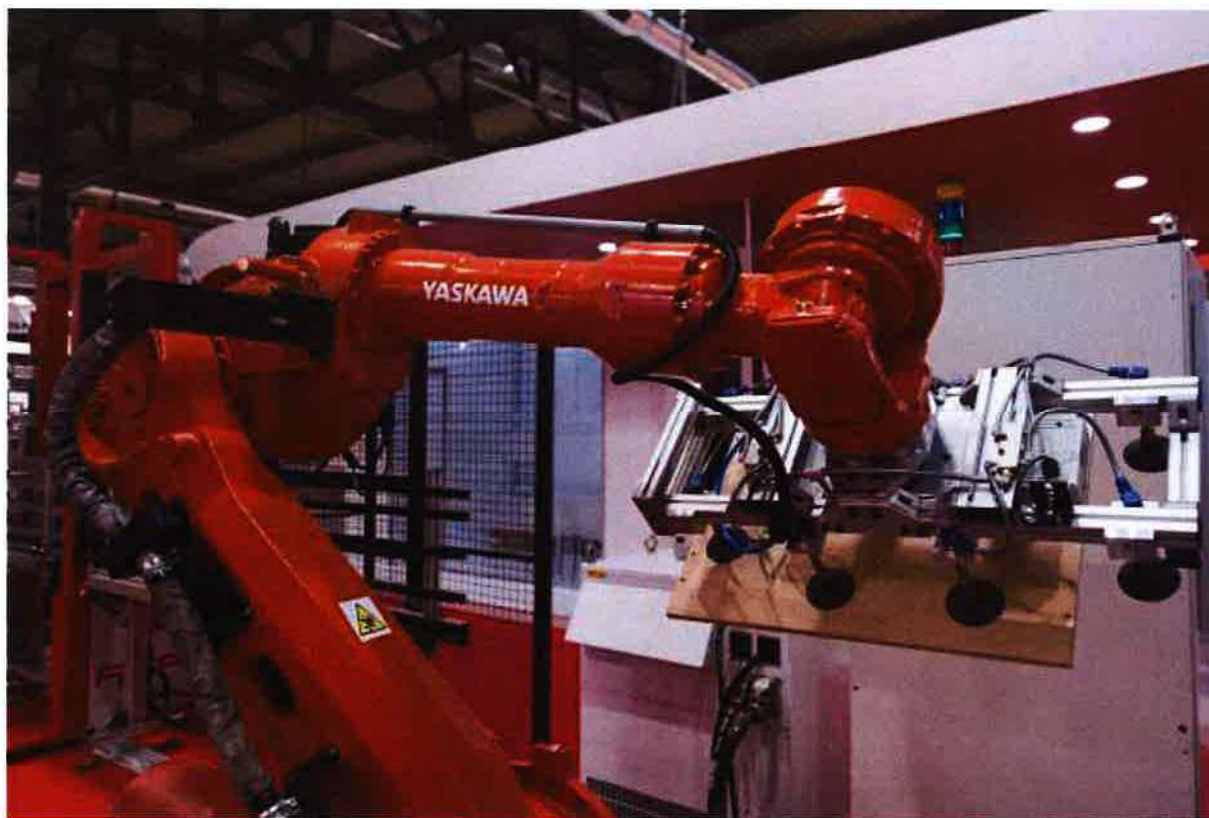
IN COOPERATION WITH



ROBOT MOTOMAN ES200N

- Nr. 1 Robot Motoman 200, payload 200 Kg, max working range 3.200. mm
- Nr. 1 Control NX100
- Nr. 1 Programming computer with Touch-Screen keyboard, LCD colour screen 6,5", 3-position security "active man", with the cable 8 m, with security module EMC standard
- Nr. 1 kit - Connecting wires robot-control I. 6 mt
- Nr. 1 Collision Detection Software
- Nr. 1 PLC Programming Software
- Nr. 1 Multitasking Software
- Nr. 1 Load Self-determination Software
- Nr. 1 Serial port RS-323C
- Nr. 1 Compact Flash port
- Nr. 1 Ethernet port
- Nr. 1 Drive I/O with flat cable connectors with:
- Nr. 24 Digital Input
- Nr. 24 Digital Output
- Nr. 1 Kit - BN315 connectors on the robot arm
- Nr. 1 Maintenance manual and programming manual

COMPLETE WITH PROTECTION AND MUTING



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