

Multifunctional working centres for panel boring, routing and edge-banding.



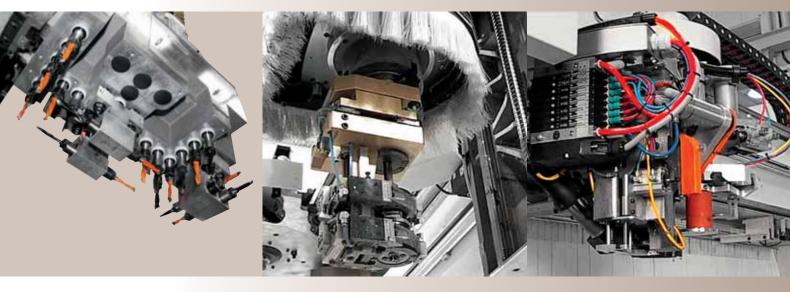




UNIVERSAL HP

MORBIDELLI MULTIFUNCTIONAL WORKING CENTRES, COMPACT AND EASY





Boring heads with 26 spindles. An effective answer to the most elementary boring requirements.

4 or 5 axes electrospindles of last generation with a power-rate of 13 kW (in S1 working cycle) to carry out all machining with the maximum precision and finishing quality. Great housing of tools thanks to 28 positions in tool-room.

High performance edgebanding unit for glue applying straightly on the panel.



PLANET S/HP

HIGH LEVEL OF FLEXIBILITY AND TECHNOLOGY

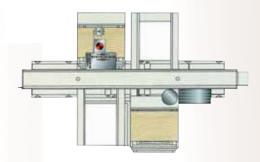




Boring units with 18 vertical and 6 horizontal spindles.

4 axis electrospindle of last generation, 11 kW (S1) power-rate, equipped with tool-room of 12 positions "On Board" and masked tool change.

High performance edgebanding unit for glue applying straightly on the panel.

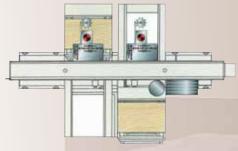


PLANET Super

Equipment:

- · Edgebanding unit fitted on the front side of the machine.
- Routing, boring and edge-finishing unit fitted on the rear side of the machine.
 Split and synchronized working tables,
- mobile in Y direction.

This solution allows manufacturing on 2 panels at the same time (edgebanding on a table and finishing/routing on the other one), with an approximately 50% increase of production rate compared to standard solutions.

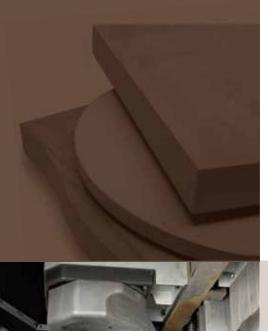


PLANET HP

Equipment:

- Edgebanding unit fitted on the front side of the machine.
- 2 independent units for routing, boring and edge-finishing fitted on the rear side of the machine.
- · Split and synchronized working tables, mobile in Y direction.

This solution allows the production to be run completely parallel by working 2 panels simultaneously, independently of the working step, with a productive increase up to 80/90% compared to standard solutions.



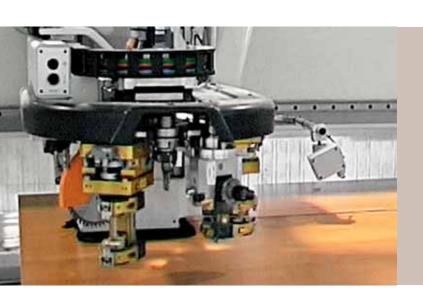
OPERATING UNIT WITH A WIDE RANGE OF FINISHING HEADS AND AGGREGATES



"High Power" electrospindle , 4 or 5 axis, with 13 kW power rate (S1), fitted on a slide independent from the boring unit and able to perform all functions of vertical or tilted routing and, by means of proper heads, edge finishing processing.



High performance in boring processing thanks to independent vertical and horizontal boring spindles.





The Tools replacement is automatic and in masked time, while edging unit is working. This is possible thanks to the tool-rooms of 18 and 10 (opt) positions which are installed directly on board machine.



Dedicated end trimming unit



Multifunctional Trimming + edgescraping multifunction unit



Multifunction trimming unit for thin edges + gluescraping



Blade unit for end-trimming and for corner cutting



Head with horizontal tools on 4 sides to perform boring with different diameters



Head for 90° internal corners cleaning (doors, kitchen top etc.)



Head for postformed panels



Head for boring on lower side



Edge trimming processing on wooden edge





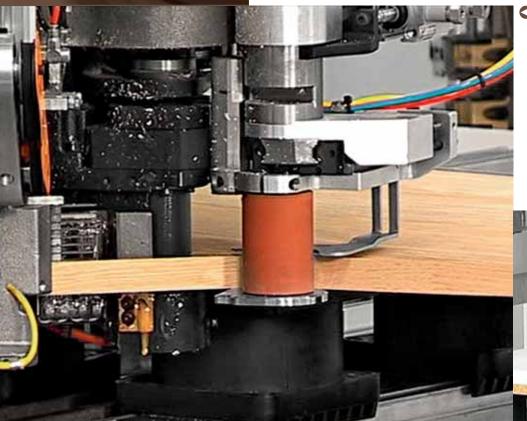






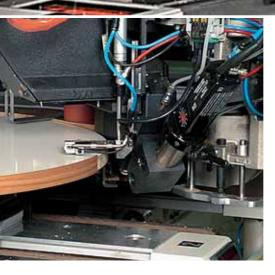


EDGING UNIT



In 360° closing process the edge-cutting precision is essential. Thanks to an innovative system for pointing out the precise joint point, the risk of overlapping or light between two edge borders is totally excluded.







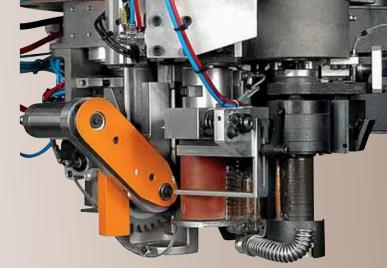


Applying the glue directly on the panel ensures higher grip of the edge and a longer resisting hold.

Lamps and edge heater device allow to maintain the correct glue temperature on the panel even during small radius processing and with moderate speed.

Thermostat for glue temperature adjustment

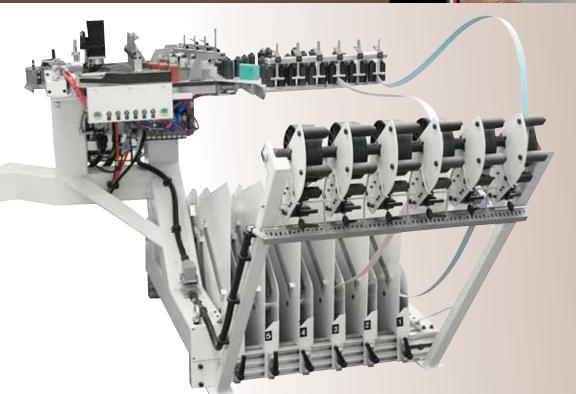




The well-tested glue feeding system has been designed to optimize glue consumption and to improve its quality. The tank is ergonomically positioned to improve filling procedures,

The tank is ergonomically positioned to improve filling procedures, it is equipped with a sensor that measures the quantity of glue contained in the glue-tank sending the refilling instruction to the numerical control. This solution allows the optimization of the glue used as only the quantity required is melted using in this way always " fresh glue" which retains its adhesive qualities much better than glue that has been melted at high temperature for a long time before use.





Manual edge loading

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Rolls magazine, integrated to the glue unit, can hold up to 6 different rolls, so that the type of coils can be quickly changed according to the manufacturing setting. The selection, feeding and control of the residual coils quantity are totally managed by numerical control.



WORKING TABLE



TV-Morbidelli working plane is made up of aluminium supports mobile in X direction, within which the vacuum system is piped. In this way the whole surface of plane is completely free and there are no risks that scraps can damage parts of the plane. This innovative type of plane represents the fastest and simplest solution for blocking and referencing the panels; in fact the vacuum cups can be easily

removed from the supports, allowing to the operator great freedom to obtain a better positioning according to the profile of the piece to be worked. The locking of the piece is assured, by the vacuum and by a mechanical locking of the vacuum cup. The reference stops are automatically managed by program and they are equipped with sensors that control the exclusion position of the same ones.



Planet S/HP work table is equipped by 2 moving tables in Y direction, independent one from each other. This solution allows pendulum working of 2 panels at the same time, alternating the edging phases with the finishing phases of the edge.









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Load aiding devices equipped with sensors pneumatically raised to help the positioning of heavy panels.

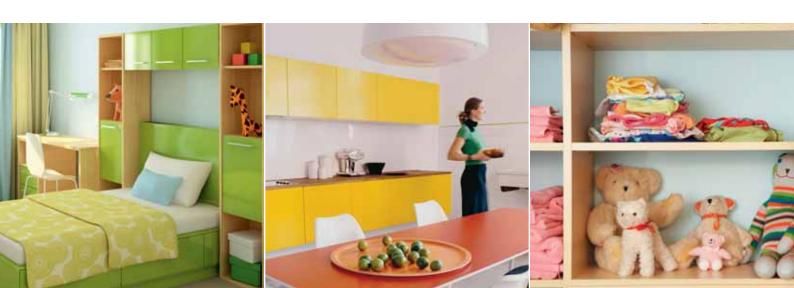


The movement of the two planes can be synchronized to obtain a single plane and work large sized single panel.



HONEY COMB PANEL MACHINING PROCESS

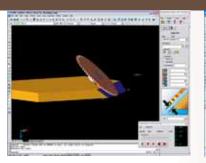


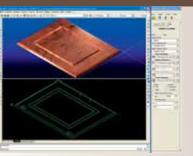


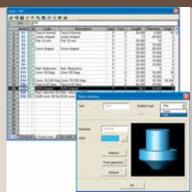
SOFTWARE

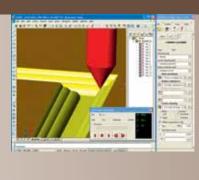
SOFTWARE

- ▶ MODERN PLATFORM ON WINDOWS BASE
- EASY AND DIRECT PROGRAMMING (GRAPHIC EDITOR)
- **○** 3D SIMULATION
- ► ADDITIONAL CUSTOMIZED MODULES
- ▶ PRODUCTION TIME CALCULATION
- ▶ CUSTOMIZED MACROS PROGRAMMING
- ▶ INTEGRATION TO PROJECTING SOFTWARE
- ▶ TELESERVICE









TELESERVICE

ERROR SIGNAL MANAGEMENT

MALFUNCTIONING LOCALIZATION MANAGEMENT

MACHINE PARAMETERS MANAGEMENT

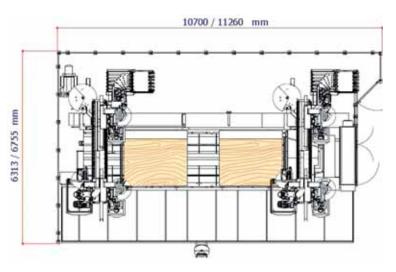
PLC DIAGNOSTIC AND UPDATE



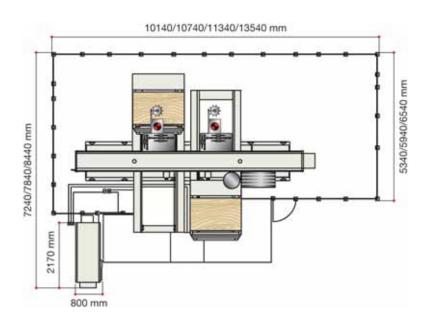


TECHNICAL FEATURES, OVERALL DIMENSIONS AND WORK AREA

	Universal hp	
X working area 4 axis motor	mm 4900 (2X1900) – 5500 (2x2200) - 6700 (2x2800	
X working area 5 axis motor	mm 4600 (2X1600) – 5200 (2x1900) - 6400 (2x2500)	
Y working area	mm 1600 – 1900	
Panel passage *	mm 250	
Edge thickness	mm 0,5 – 3	
Edge height	mm 12 – 65	
Minimum external radius on 90°angle **	mm 30	
Maximum internal radius on 90°angle **	mm 8	
Edge magazine	2 (std) 6 (opt)	
Electrospindle power 1 (main)	kW 8.5 – 13 kW (4 axis); 12kW (5 axis)	
Electrospindle 2 (Additional)	kW 6.6 kW (opt)	
Electrospindle tool attachment	HSK63F	
Tool-room	18 (std) + 10 on-board (opt)	
Boring unit motor	2.2 kW	
Boring spindle rotation	rpm 4000 – 6000	
Z1 axis stroke	mm 600	
Z2 axis stroke	mm 415	
Displacement speed in X	m/min 75	
Acceleration in X	m/s ² 5 (max)	
Displacement speed in Y	m/min 75	
Acceleration in Y	m/s ² 5 (max)	
Displacement speed in Z	m/min 25	
Acceleration in Z	m/s ² 5 (max)	
Installed Power	kW 55 – 75	
Compressed air pressure	bar 7	
Electrospindle dust extraction outlet diameter	mm 200 (4 axis) – 300 (5 axis)	
Boring head dust extraction outlet diameter	mm 150	
Intake air consumption	m ³ /h 4420 m3/h (4 axis) – 7850 m3/h(5 axis)	
Total weight	kg 7600 – 8600	



	Planet	Planet S/hp	
Working area in X	mm	4000 - 4600 - 6000 (2x3000)	
Working area in Y	mm	1530 – 1830	
Panel passage *	mm	200	
Edge thickness	mm	0,5 - 3	
Edge height	mm	12 – 65	
Minimum internal radius on 90°angle **	mm	30	
Maximum external radius on 90° angle **	mm	8	
Edge magazine		2 - 6 (opt)	
Electrospindle power 1 (main)	kW	11 – 15 (opt)	
Electrospindle tool attachment		HSK63F	
Tool-room		12 positions on board	
Boring unit motor	kW	2.2	
Boring spindle rotation	rpm	4500 – 6000	
Z axis stroke	mm	340	
Displacement speed in X	m/min	80/150 (opt)	
Acceleration in X	m/s²	10	
Displacement speed in Y	m/min	80/150 (opt)	
Acceleration in Y	m/s²	10	
Displacement speed in Z	m/min	25	
Installed power	kW	55 – 75	
Compressed air pressure	bar	7	
Electrospindle dust extraction outlet diameter	mm	160	
Boring head dust extraction outlet diameter	mm	160	
Intake air consumption	m³/h	5600/11200	
Total weight	kg	up to 14000 kg	



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PERFORMANCE. Is the commitment that is transformed in results and success of our partners that rely on SCM Group solutions. It's being recognised as suppliers of "competitive advantages that last over time".

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The technical data can vary according to the requested machine composition. In this catalogue, machines are shown with options. The company reserves the right to modify technical specifications without prior notice; the modifications do not influence the safety foreseen by the CE Norms.



