stefanis single sided edge bander for the furniture industrial





stefanis single-sided edge bander



POWERFUL AND REACTIVE

Maximum productivity with each production mix and batch size needed, combined with one constant repeatability at the program change, allows for efficient and profitable production.

INTEGRATED PRODUCTION

Industry 4.0 ready, **stefani s** allows you to get the maximum benefits of integrated production. Supervision, set up, reporting, all at the speed of a touch.

HIGH QUALITY AS VISION

Operational groups, devices, technical details all oriented to high quality finishing, in all respects and without compromise, for unmistakably perfect panels.







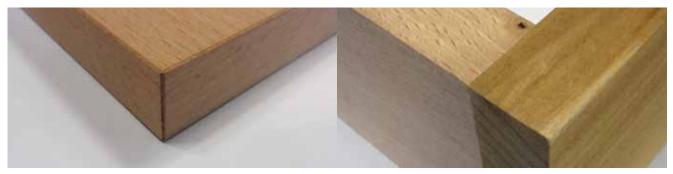
CREATIVITY WITHOUT LIMITS

It is easy and immediate to produce modern furniture with materials and finishes of the new generation with the **stefani s** which achieves state of the art production for state of the art designs trends.



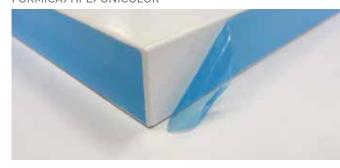
PAPER/MELAMINE

PVC/ABS PP



0.6/0.8 MM STRIPS VENEER FORMICA/HPL/UNICOLOR

MAX 25 MM SOLID WOOD



PANELS/EDGES WITH PROTECTIVE FILM



NESTING



DUST-PROOF EDGE



GLOSS EDGES/GLOSS PANELS

VERSIONS

STRAIGHT PROCESSING



PROCESSING OF PROFILED/INCLINED PANELS



Profiling units installed before the gluing station.

LEFT VERSION



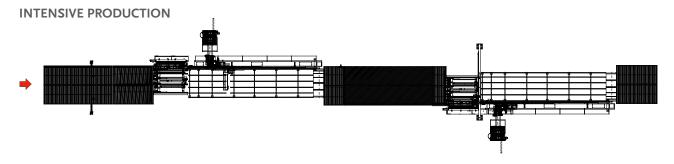
RIGHT VERSION



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STEFANI S: COMPLETE VISION

Stefani s has been designed to easily set up any possible productive solution, which considers number of operators, available space, productivity and batch type.



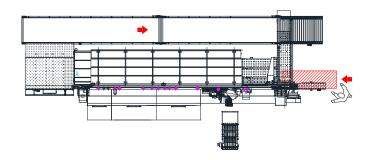
2-operator cell architecture for the complete and intensive panel processing even with continuous format change. Consisting of: loading handling equipment, infeed and sizing system, left-version edge bander, handling equipment for the panel displacement, sizing infeed system, righ-version edge bander, unloading handling equipment

Productivity: 800/1000 panels / workshift

Operators: 2

Overall dimensions: 250 m²





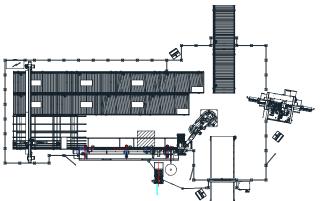
DAILY PROCESSING

Cell architecture that increases the productivity of a single operator up to 40%. Consisting of: edge bander, device for the return of the panel to the loading area.

Productivity: 500 panels/workshift

Operators: 1

Overall dimensions: 90 m²



MASS CUSTOMIZATION

Integrated cell architecture, without operator, for continuous and ready-to-delivery productions and for small batches/batches 1. Consisting of: robot for the panel loading and unloading, edge bander, rear picker, handling e quipment for the panel return, upstream integration with Nesting cell and downstream integration with unloading system.

Productivity: 600 panels/workshift

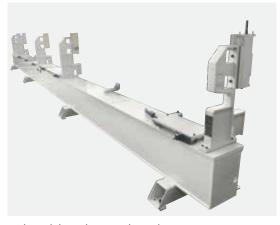
Operators: 0

Overall dimensions: 250 m²



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HEAVY DUTY STRUCTURE: HOW HIGH QUALITY RESULTS FROM DETAILS





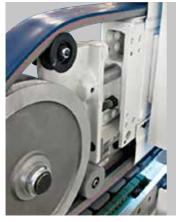
BEAM COLUMNS:

- Special SCM design for every condition stress resistance
- Heavy cast iron made in order to minimize the spread of the vibrations

- Closed/box designed steel section
- 25 mm steel plates thickness
- Precise welding of the parts







The best of the best: Full resistance with polyurethane belt (std) for maximum process performance.



Fixed working line (std)



Manually or by NC adjustable working line

SOLUTION FOR THE PANEL INTRODUCTION AND SUPPORT



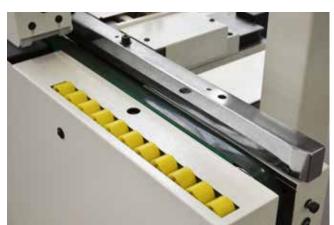
Telescopic wheel support, adjustable from 0 to 700 mm (std)



Fixed panel support, up to 2100 mm long (opt)



Counter shoulder for narrow panels, solid wood or softforming (opt)





Automatic infeed system and single-belt/multi-belts transfer for the machine integration with upstream and downstream handling equipment (opt)



Entry guide, manual (std), pneumatic or NC versions (opt)



single-sided edge bander

GREAT PRECISION IN FURNITURE ASSEMBLY

The precision in assembling the components of the furniture is also due to the proper introduction of the panel into the machine. The panel infeed systems available on **stefani s** optimize precision, productivity and investment with every panel format.



Manual infeed device It makes easier the introduction of panels already squared



Semi-automatic infeed device For the correct and more easy introduction of the panel into the machine with the operator. It allows the sizing and squaring.

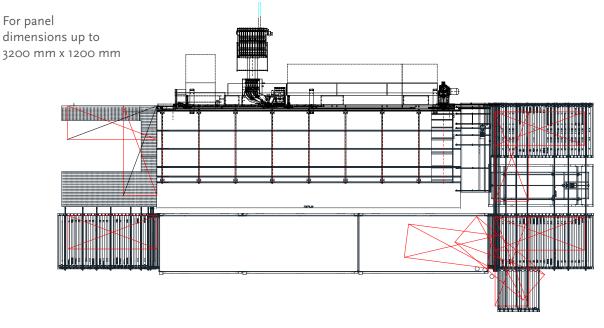


Automatic infeed device

For the correct introduction of the panel into the machine without operator. It allows the sizing and squaring processing and the in line machine connection

SOLUTIONS FOR THE RETURN OF THE PANEL TO THE OPERATOR





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WORKING UNITS FOR THE PANEL PREPARATION

LIQUIDS FOR FINISHING



Anti-adhesive device



Processing of edges with protective film/delicate

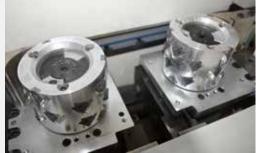


Edge finishing

PRE-MILLING UNIT



Optimized tool use by NC vertical adjustment of the tool position (opt)

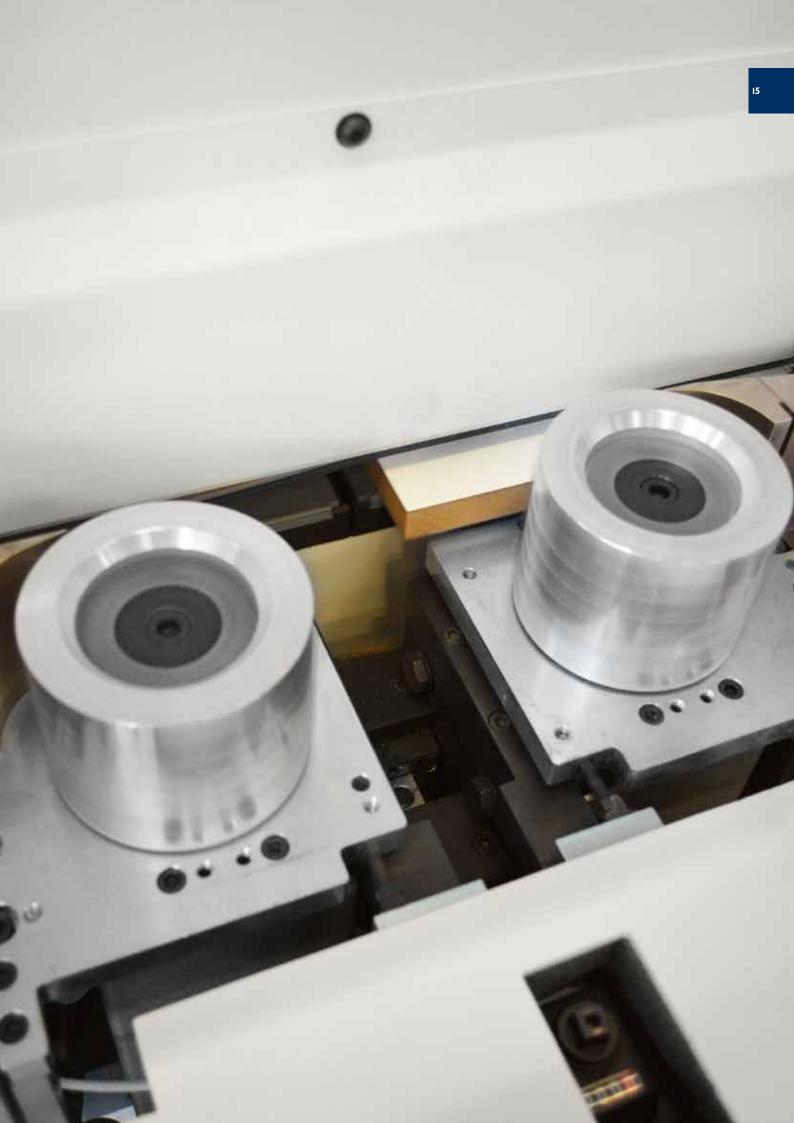


+ 20% tool life. Zero vibration with HYDRO tool connection (opt)

RT-H pre-milling unit.

Ideal for a perfect microfinish of the panel before the edge banding.

- Tool diameter: 100 mm
- Power: up to 4 kW
- Copying/no copying function managed by NC
- Vertical tool position managed by NC



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EDGE APPLICATION

For the production of furniture with high quality edgebanding, leading technology of edge application is required. **Stefani s** has a wide and complete range of solutions for the perfect application of edging, productivity required, materials to be applied, and the optimum degree of finishing required.

GLUING UNITS

For the application of the glue to the panel by means of the glue roller with speed up to 30 m/h.





Possibility of motorized system for edge feeding and cutting, with +/- 2 precision. For cost optimization of waste



NC dosage of the applied glue quantity depending on glue type or panel. Automatic glue leakage lock when the machine is stopped.

PREMELTING SYSTEMS

For the melting and continuous feeding of glue



Feeding of glue in granules Melt capacity: from 8.5 Kg/h up to 40 Kg/h



Compact premelting device for PU glue in 2 Kg cartridges, integrated in the machine. Melt capacity up to 6 Kg/h. Flexible change between different PU glue color with 2 devices in sequence.





Premelting devices for PU glue in 2 Kg cartridges. Melt capacity up to 16 Kg/h. Possibility of using a SLOT applicator.

COIL MAGAZINES

Device for the automatic and instantaneous changeover of the edge when the roll ends or to change the program.



Versions available: 1 coil, 2 coils, 6 coils, 12 coils, 24 coils.





ADVANCED TECHNOLOGIES OF THE EDGE APPLICATION

GLUE LINE OPTIMIZATION







An incredible glue line with thickness from 0.08 mm can be obtained thanks to the SlimLine technology, that allows the glue dosage directly on the edge rather than on the panel. NC management of all process parameters (length, height, thickness of glue line), with the best technical and aesthetic results of the edged panel.

The results of **SlimLine** are certified by



ZERO GLUE LINE

Finishing quality and an amazing design can be achieved with the technologies that allow the edging without the use of glue.







AirFusion allows to make invisible the junction point between edge and panel using the complete range of laser edges or pre-glued edges for application Laser / Hot Air. High-temperature air melts the appropriate layer of adhesive present in the edge, allowing its adhesion to the panel.



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THE GREATEST KNOW HOW AND THE BIGGEST SPECIALISTS IN EVOLVED SOFTFORMING APPLICATIONS





Shaping unit Ideal for the production of shaped panels

Tool diameter:

- Blade 220 mm - Tools: 125 mm Power: up to 8.5 kW Shaping unit for the preparation of the coplanar joint, top or top+bottom, and for the realization of small radii up to 12 mm.

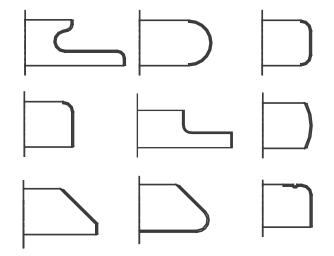
Tool diameter: 76 mm Power: up to 1.8 kW

















GLUING



Gluing unit for softforming with pressure zone up to 1.5 m long. $\,$

Ideal for any type of profiles with edge thickness up to 0.6/0.8 mm and EVA/PU glue.



Gluing unit for softforming with pressure zone up to 4.5 m long. $\,$

Ideal for any type of profiles with edge thicker than 0.8 mm and EVA/PU glue.



The edge pressure zone is set up as a function of the profile to be achieved with cooled shoes or a combination of shoes / rollers.



Up to 4 profiles can be installed in the same machine with manual or NC rotation.



Longitudinal shear unit for the engraving of the excess edge.

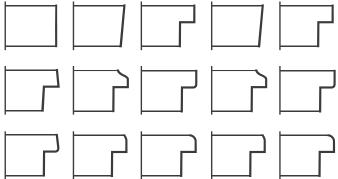


Scraping unit for the removal of the excess edge and the finishing of the profile.

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DOORS MACHINED PERFECTLY WITH THE SCM EXCLUSIVE PROCESS







Doorjambs / door leafs profiles



Gluing unit for the processing of doors with thin/soft edges.



Gluing unit for the processing of doors with edges in soft and rigid veneer.

THE GLUING ZONE CAN BE SET UP TO PROCESS SEVERAL INTERCHANGEABLE PROFILES









Door profile with leaf.



Door profile with leaf and softforming on top.



Corner finishing units for doors edgebanded on 3 or 4 sides.







Sanding units for the finishing of doors machined with veneer edge.

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WHERE THE QUALITY FURNITURE IS PRODUCED: FINISHING UNITS



END TRIMMING UNITS



Range of horizontal end trimming units for cutting of excess edge after the gluing. They optimize the productivity with speeds up to 30 m/min. Precise and constant cutting thanks to front and side copying devices. Adjustable excess cutting, even by NC.



High productivity end trimming unit sliding by means of linear or power assisted motors to minimize interaction with the panel and guarantee high quality of the edge cutting.

Available speed from 35 m/min to 55 m/min

TRIMMING UNIT



Trimming unit for the removal of the upper and lower excess of the edge.

Power up to 1.8 kW

Standard double vertical position for the rough trimming/finishing of the edge

FINE TRIMMING UNIT



Fine trimming unit for edge finishing with chamfer / radius.

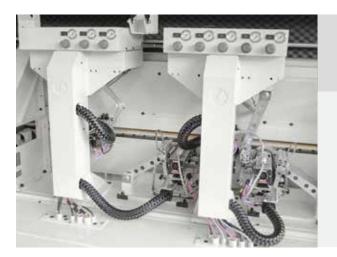
Power up to 1.8 kW.

Up to 3 radii + 1 chamfer automatically with different equipments.

TwinFeeler for a precise copying even at high speed ZeroLock for precise and quick tool connection



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CORNER ROUNDING UNIT WITH 4 MOTORS

For the complete processing of the straight/shaped panel with the rounding of the corners and the fine trimming of the sides also with wooden/veneer edge. Speed up to 25 m / min. Speed up to 35 m / min with power assisted movement of motors for an extra finishing quality. 8 mm minimum panel thickness. Equipments for NC automatic processing up to 3 radii + infinite thin edges.



CORNER ROUNDING UNIT WITH 2 POWER ASSISTED MOTORS

For the complete processing of the straight / shaped panel. Rounding of the corners and fine trimming of sides with power assisted movements that maximize the performance of automatic machining. Speed up to 35 m/min. Equipments for NC automatic processing up to 3 radii + infinite thin edges or changeover up to 8 single-process tools by NC.

AN EVOLVED PROCESS, STARTING FROM DETAILS



Processing up to 3 radii + infinite thin edges with NC instant exchange with compact and lightweight MULTIEDGE device. Monoblock tools with 4 cutters, rotation speed up to 18000 rpm.





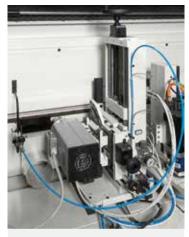
Copying devices specific for the machining of shaped panels.
J-SHAPE



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A PANEL PERFECT IN EVERY DETAIL

GROOVING UNITS



Grooving unit for slots/grooves Power up to 5.5 kW Possibility of NC horizontal and vertical axes Tool: 125 mm diameter x 70 mm



Possibility of motors with HSK release and more tools Installed on the shaft



Flexible grooving unit for slots/grooves with NC flexible exchange up to 8 tools.

Power up to 8.5 kW

Possibility of horizontal and vertical NC axes and rotation.

Tool: 125 mm diameter x 70 mm.

EDGE SCRAPING UNIT



Unit for the final smoothing of the edges previously machined with tool.



Versions up to 4 profiles with an NC-exchange.



TwinFeeler for a perfect copying even at high speed.

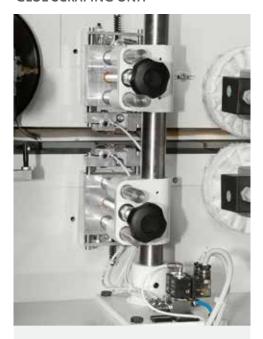


Precise and repetitive movements thanks to the parts sliding on linear recirculating ball guides



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GLUE SCRAPING UNIT

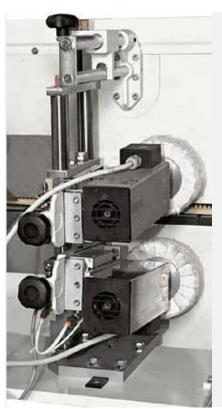


For the removal of any residual glue from the surface of the panel.



Possibility to manage standard/with film edges in the minimum distance

BRUSHING UNIT



Rotating brush device for the brightening and the final cleaning of the applied edge.

INK-JET UNIT



Inkjet printer for the marking of the panel in the upper or lateral surface.

SANDING UNITS

A full range of sanding units for finishing with wood / veneer / melamine / paper or in case of profiling, for panel in pdf in preparation for painting.





High performance sanding unit



Sanding unit for chamfers/radii.



Compact sanding unit



Sanding unit for profiled panels.



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MAESTRO PRO-EDGE

An expert operator that guides you to produce quickly. Maestro Pro-Edge allows an easy quick machine management without errors.



Immediate, powerful, custom operator interface

Maximum ease of use with the convenient 17" screen. Intuitive programming with a specific graphic design. USB and Ethernet ports for easy connection to the company network.



Program maintenance Complete and continue

Complete and continue checks for all machine functionalities to get the maximum possible efficiency



Productivity always under control

In case of machine alarms, the PC indicates the details of the alarm, guiding the operator to the solution of the problem. The knowledge of the operator gained in solving the problemscan be stored and made available in the future.



Reporting

Processing data, panels worked, edgeing used, daily, monthly and yearly. Reports allow production monitoring by statistical graphics and Excel files.



WEB BASED TELEDIAGNOSI

The special hardware structure allows teleservice through an internet connection.

This allows our trained technicians to access all machine levels from SCM headquarters resulting in the diagnosis and resolution of most problems or to update the programs according to customer requests in real time.



SIMPLE ACTS, ADVANCED TECHNOLOGY Automatic program set up by Bar Code device.

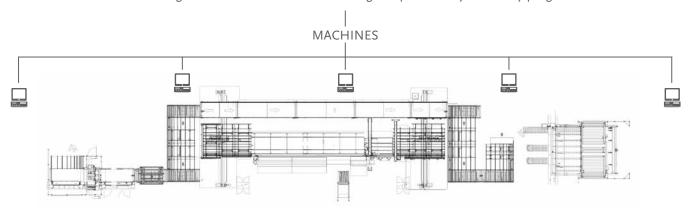
MAESTRO WATCH SUPERVISOR

Connecting all the command and control information into a production line in real time is extremely simple thanks to the new, powerful supervisor MAESTRO WATCH by SCM, perfect for controlling and managing the entire process from a single, convenient position.



Immediate start of programs to all machines of the line, preliminary check of the processing feasibility.

Zone management of the line to ensure the highest productivity with every program.









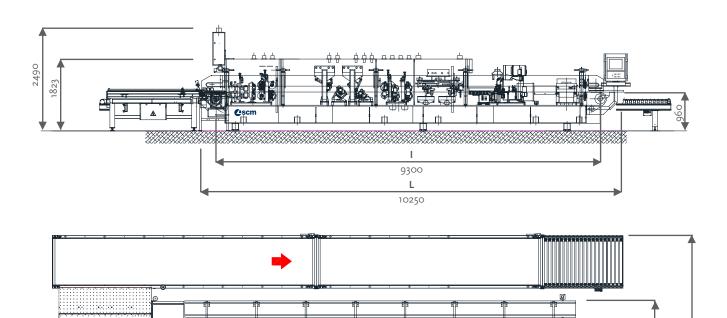


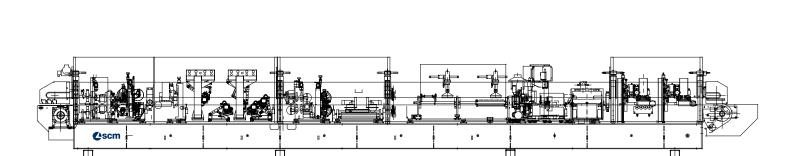
- Rapid and correct insertion of the panels in the cell, thanks to the SIDE FINDER technology that, via a display in the operating position, shows the operator which edge to insert in the cell next.
- Preliminary simulation of machining times.
- Immediate availability (even on mobile devices) of the machining information relating to each panel, regardless of where the panel is in the cycle, due to the continuous tracking provided by the supervisor system.
- Check of machining feasibility for each component.

MAESTRO WATCH is customized and optimized by SCM depending on the line that has to supervise

single-sided edge bander

TECHNICAL DATA





| STEFANI S R | 47 | 54 | 60 | 67 | 73 |
|---------------------|------|------|------|------|------|
| Total length (L) mm | 5650 | 6350 | 6950 | 7650 | 8250 |

| STEFANI S | 47 | 54 | 60 | 67 | 73 | 80 | 86 | 93 | 99 | 106 | 112 |
|---------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total length (L) mm | 5650 | 6350 | 6950 | 7650 | 8250 | 8950 | 9550 | 10250 | 10850 | 11550 | 12150 |





PROCESSABLE MATERIALS

| EDGES | | |
|-----------------|---------------------------------------------|------------------|
| TYPE OF EDGE | EXAMPLE OF APPLICATION | MAX THICKNESS |
| Paper | Raw / prepainted | 0,6 |
| Plastic in coil | ABS, PVC, PP (with/without film) | 3 mm |
| | PMMA (polished or rough to polish / smooth) | |
| Aluminum | Shine/ Satin | 3 mm |
| Precut strips | Veneer, PC, Unicolor | 1 mm |
| Solid wood | Raw / polished / drawn | 25 mm |
| | | |

| PANELS | |
|-----------------|--------------------------------------------------------------------|
| TYPE OF PANEL | EXAMPLE OF APPLICATION |
| Chipboard | |
| MDF | Only profiled/edged |
| Light panels | With frame/without frame |
| Solid wood | Profiled/smooth |
| Profiled/smooth | Aluminium/Cardboard PC/Tri Wall Polycarbonate Sheet/plasterboar |
| | |

| GLUES | |
|---------------|----|
| HOT-MELT GLUE | |
| EVA glue | Sì |
| PU glue | Sì |
| SLIM LINE | Sì |
| | |

| ZERO JOINT | |
|-----------------------|----|
| PRE-GLUED EDGES | |
| AirFusion application | Sì |
| LaserLine application | Sì |
| COEXTRUED EDGES | |
| AirFusion application | Sì |
| LaserLine application | Sì |

TECHNICAL DATA

| TECHNICAL DATA | |
|---------------------------|-------------------------|
| Speed | 25 m/min (std) (30 opz) |
| Interaxis max. I | 11200 mm |
| Panel width (min/max) | 90 mm (std) (55 opz) |
| Panel thickness (min/max) | 8/60 mm 8/80 (opt) |
| Working line (min/max) | 35/90 mm |
| | |

CONSUMPTION/POWER

Supply voltage: 400 V/50 Hz EU (customizable depending on the country) Installed power (kW): depending on the machine equipment

Compressed air pressure for connection: 6 Bar

Compressed air consumption (NL / min): depending on the machine

equipment

Suction: air speed 30 m/sec

Suction: air consumption (m3/sec): depending on the machine equipment

Suction: exhaust outlet diameter from 80mm to 140mm

CONNECTIVITY

ETHERNET (std) USB (std) Wi-Fi (opt.)



SAVENERGY: LESS CONSUMPTION = LESS COST

Save up to 10% on annual consumption of energy thanks to the package of solutions for saving energy

Maximum noise levels measured according to the operating conditions established by EN ISO 18217:2015 Acoustic pressure in process 79 dbA (measured according to EN ISO 11202:2010, uncertainty K \leq 4 dB) Acoustic power in process 95 dbA (measured according to ISO 3746-2010, uncertainty K \leq 4 dB) Should there be a correlation between above mentioned "conventional" noise emission values and average levels of personal exposure over eight hours of operators, actual readings depend on the specific operating conditions, duration of exposure, acoustic conditions of the working environment and presence of further noise sources, this means the number of machines and other adjacent processes



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.

THE STRONGEST WOOD ARE IN OUR DNA

SCM. A HERITAGE OF SKILLS IN A UNIQUE BRAND

Over 65 years of success gives SCM the centre stage in woodworking technology. This heritage results from bringing together the best know-how in machining and systems for wood-based manufacturing. SCM is present all over the world, brought to you by the widest distribution network in the industry.

65 years history

3 main production sites in Italy

300.000 square metres of production space

17.000 machines manufactured per year

90% export

20 foreign branches

350 agents and dealers

500 support technicians

500 registered patents

In SCM's DNA also strength and solidity of a great Group. The SCM Group is a world leader, manufacturing industrial

SCM GROUP, A HIGHLY SKILLED TEAM EXPERT IN INDUSTRIAL

INDUSTRIAL MACHINERY

Stand-alone machines, integrated systems and services dedicated to processing a wide range of materials.





WOODWORKING TECHNOLOGIES

TECHNOLOGIES FOR PROCESSING COMPOSITE MATERIALS, ALUMINIUM, PLASTIC, GLASS, STONE, METAL



equipment and components for machining the widest range of materials.

MACHINES AND COMPONENTS

INDUSTRIAL COMPONENTS

Technological components for the Group's machines and systems, for those of third-parties and the machinery industry.



SPINDLES AND TECHNOLOGICAL COMPONENTS



ELECTRIC PANELS

4steelmec

METALWORK

Oscomfonderie

CAST IRON







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