

dmc system t

modular centres with flexible abrasives for calibration, sanding and general finishing



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The new range of DMC System sanders allows the user to create completely customised machine configurations, which can satisfy the most specific production requirements, thanks to the wide range of technological solutions on offer and the totally modular structural design.

- **USER-FRIENDLINESS**
- **MULTI-DIRECTIONAL MACHINING**
- **ATTRACTIVE FINISH EFFECTS**





dmc system t

modular centres with flexible abrasives for calibration, sanding and general finishing



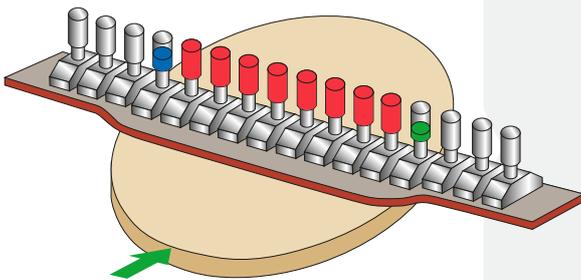
INNOVATIVE SYSTEM FOR EXTRACTING FROM SIDE UNITS

Side extraction of the disc units and the crossbelt unit on telescopic prismatic guides allowing the speeding of all activities concerning tool changing, panel cleaning and routine maintenance.



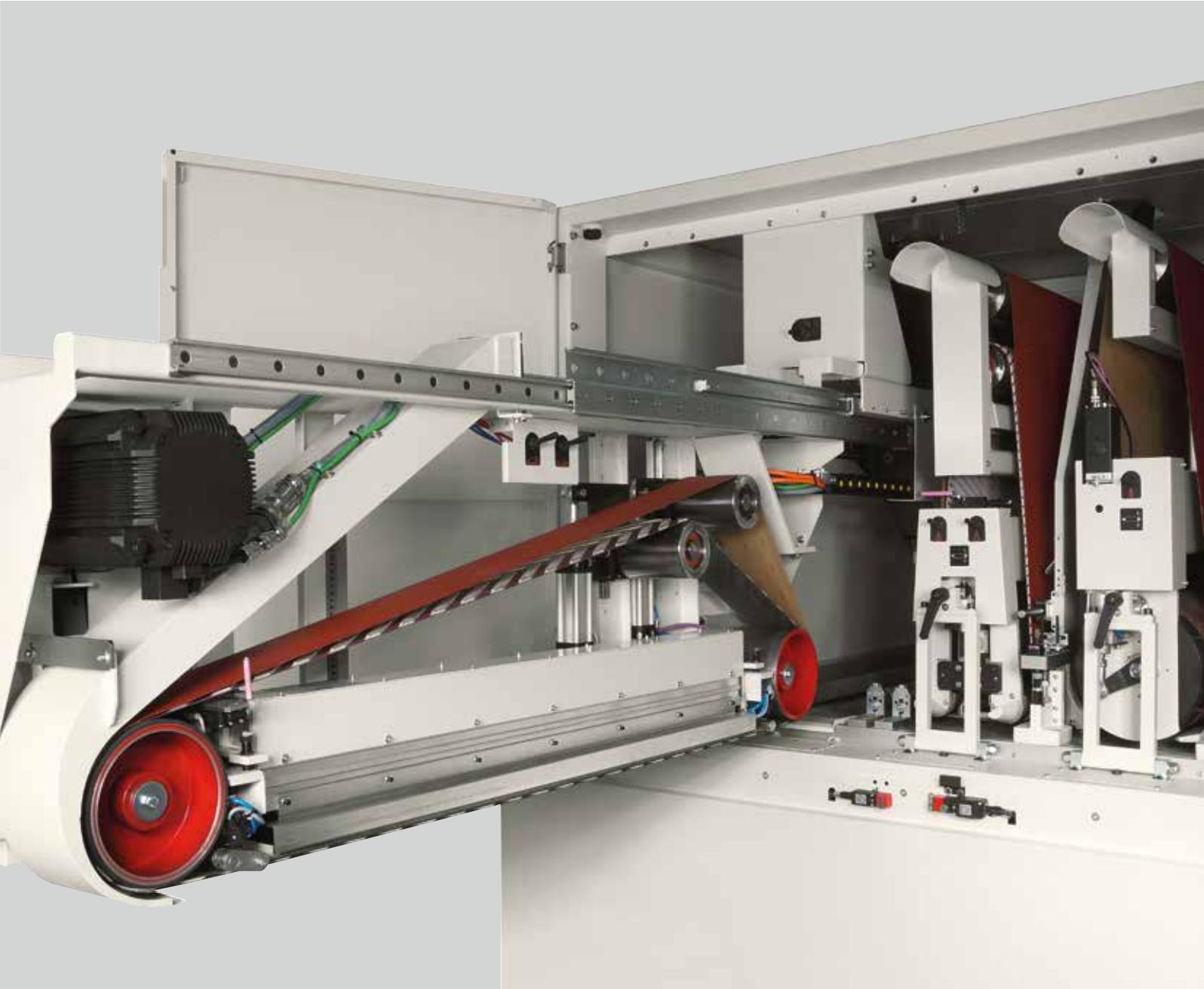
PLANETARY UNIT OPERATOR OF NEW GENERATION

The exclusive planetary unit with oil bath gears and with the pads speed independent from planetary discs speed, allows it obtain extremely uniform surface finishing thanks to multi-directionality of its action.



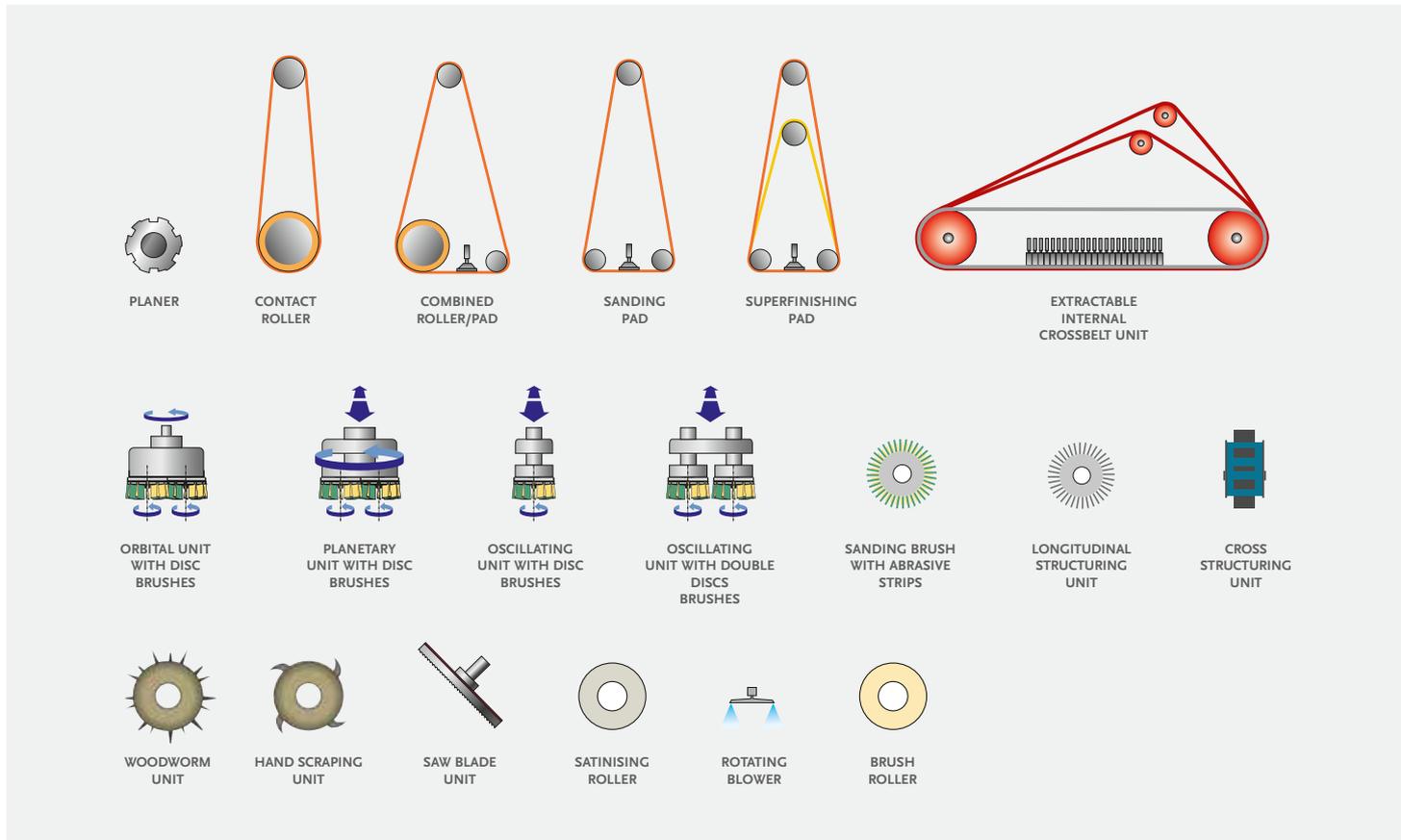
"PWM" VARIABLE PRESSURE TECHNOLOGY FOR "EPICS" ELECTRONIC SECTIONAL PADS

The innovative "PWM" system allows the changing in real time the operating pressure of the "EPICS" electronic pad, adapting it to the different panel areas. The PWM technology allows for a reduced sanding pressure to be applied to the front edge of the panel.

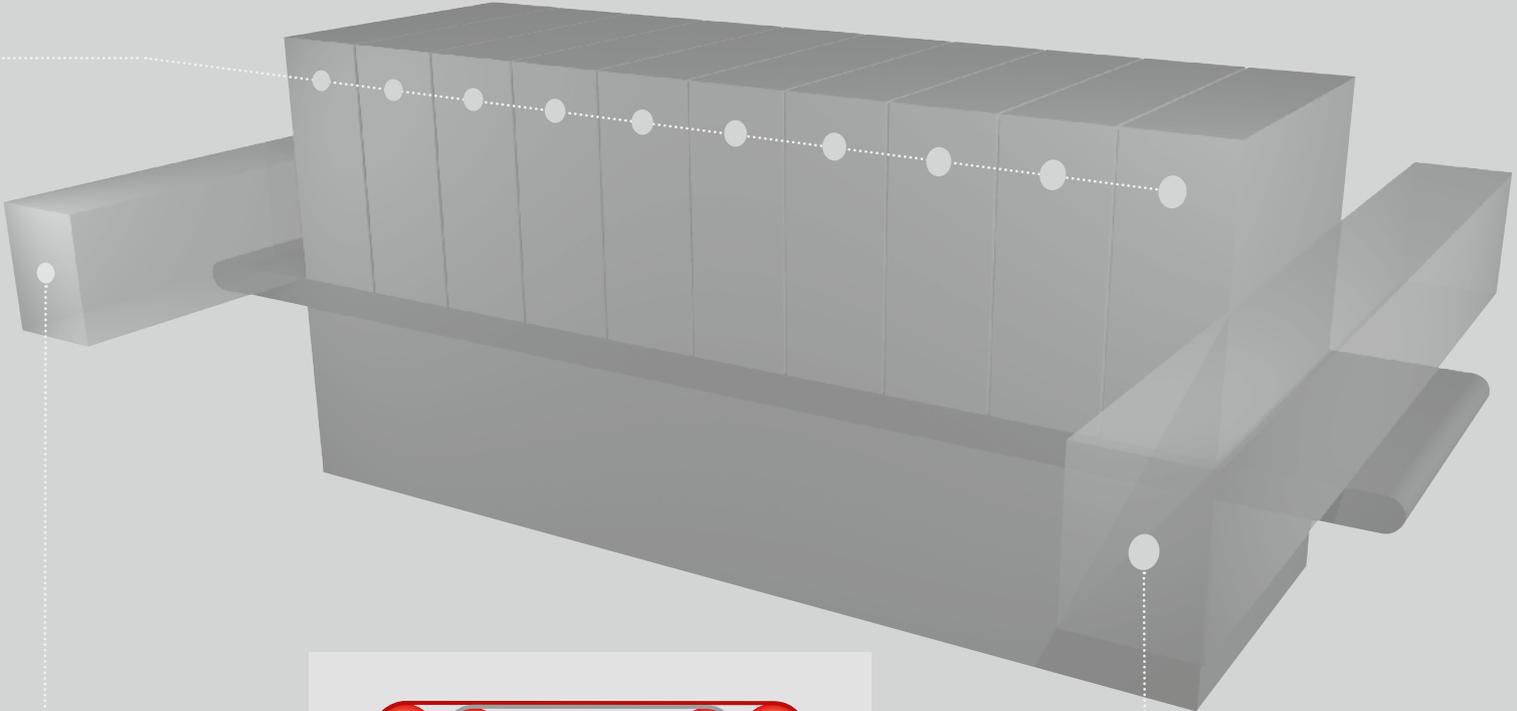


modular structures

a range of machines designed to meet the requirements of today and tomorrow



DMC System is available with supporting structures capable of housing up to 10 operating units, to which two external crossbelt units can be added. The modular structure of the machine and the newly designed operating units (each one with its own electronic and pneumatic components on-board) ensure that the machine composition can always keep abreast with the variable production requirements. In fact the single operating units can be replaced quickly and economically (or their order inside the machine can simply be changed).



EXTERNAL
CROSSBELT UNIT



dmc system t5 1350

configuration for finishing and superfinishing
of veneered and painted panel

DMC System T5 1350 is an example of a configuration for the furniture industry and contractors that require sanding machines and systems for intensive usage, able to produce excellent finishes on raw and painted panels.

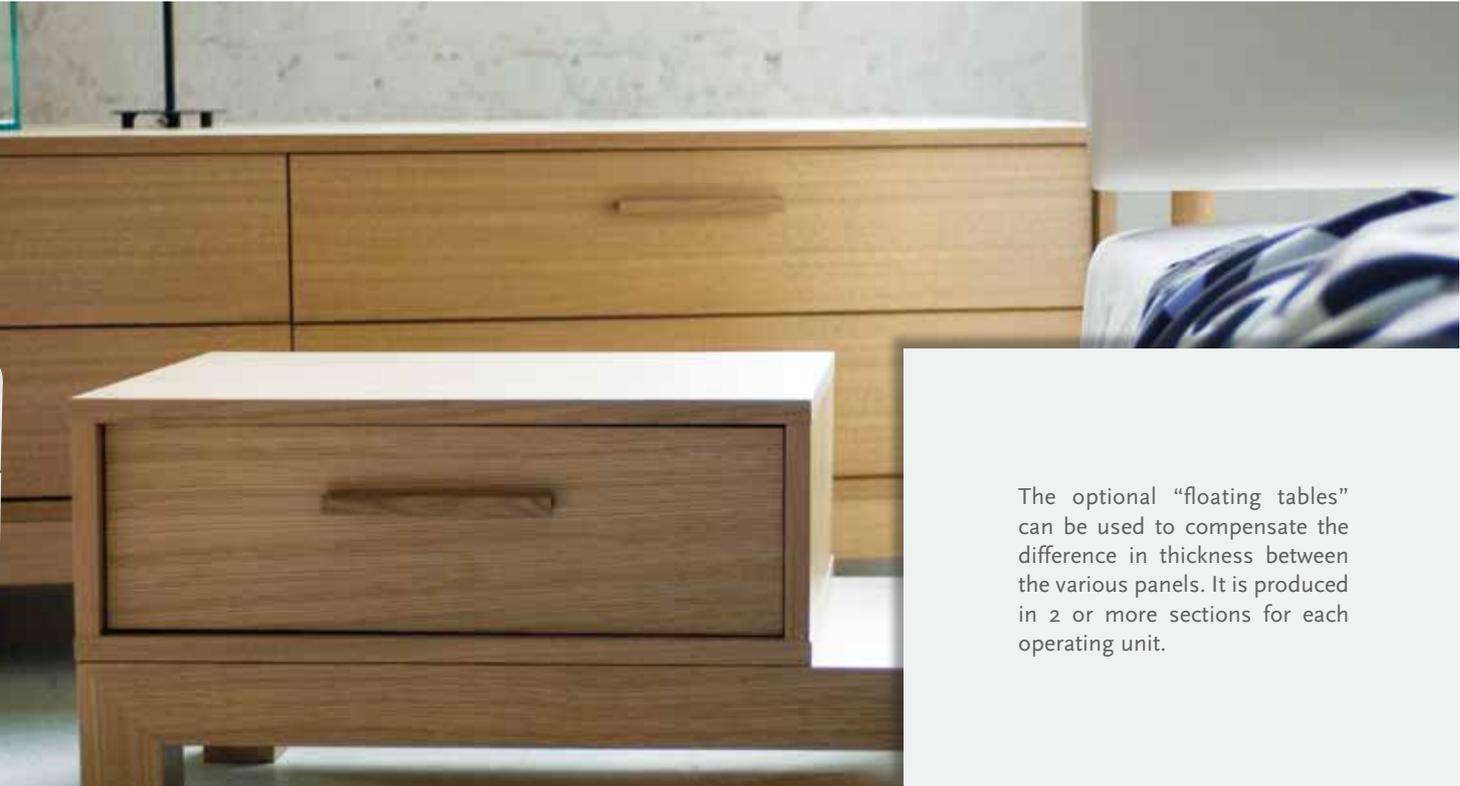




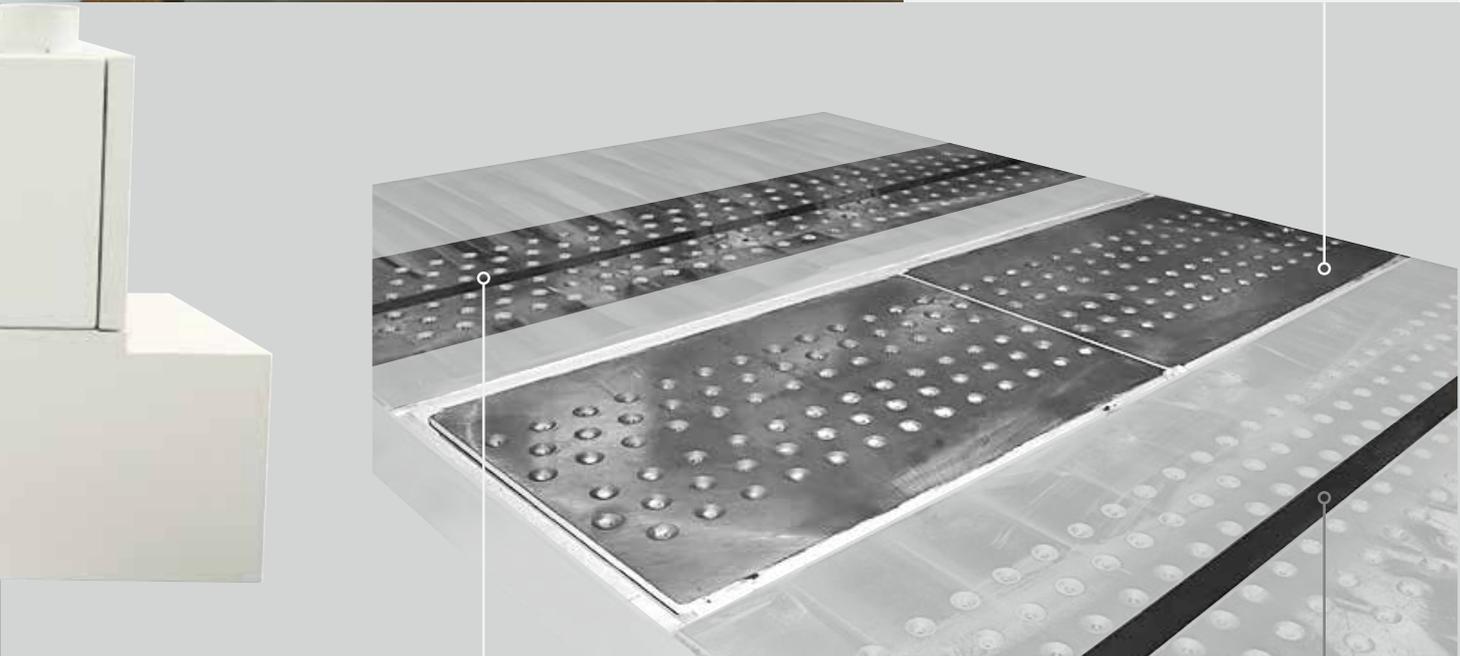
dmc system t5 1350

configuration for finishing and superfinishing
of veneered and painted panel





The optional “floating tables” can be used to compensate the difference in thickness between the various panels. It is produced in 2 or more sections for each operating unit.



The channelling inside the worktable is used to hold down small sized or particularly slippery workpieces, more effectively compared to traditional vacuum systems.

Special tempered steel inserts can be placed under every work unit to increase the worktables resistance to wear. The inserts, which are reasonably priced, can be quickly replaced by the user.

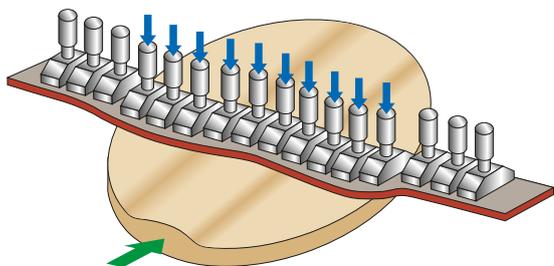
dmc system t5 1350

configuration for finishing and superfinishing of veneered and painted panels



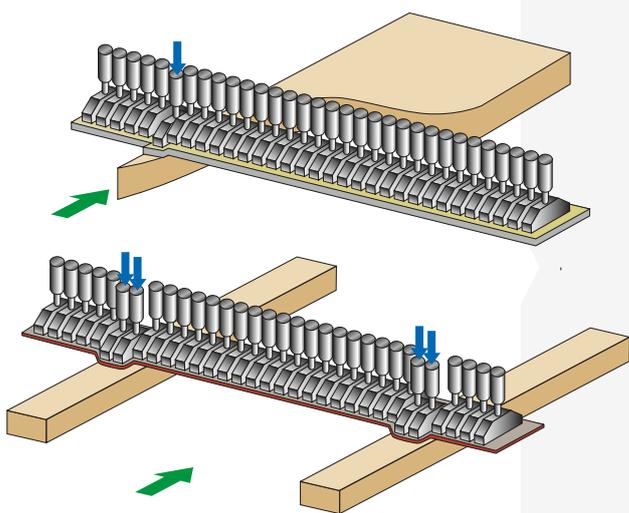
“EPICS” ELECTRONIC SECTIONAL PADS

The “EPICS” sectional pad consists of a special monolithic beam which houses the cylinders that activate the single sectors. Thanks to the wide excursion of the pistons and the double action system (adjustable pneumatic push/counter push), the “EPICS” pad guarantees maximum sensitivity and precision in any type of machining.



HIGH COPYING CAPACITY

The unique structure of the pneumatic cylinders allows the “EPICS” pad to sand panels with uneven surfaces perfectly.

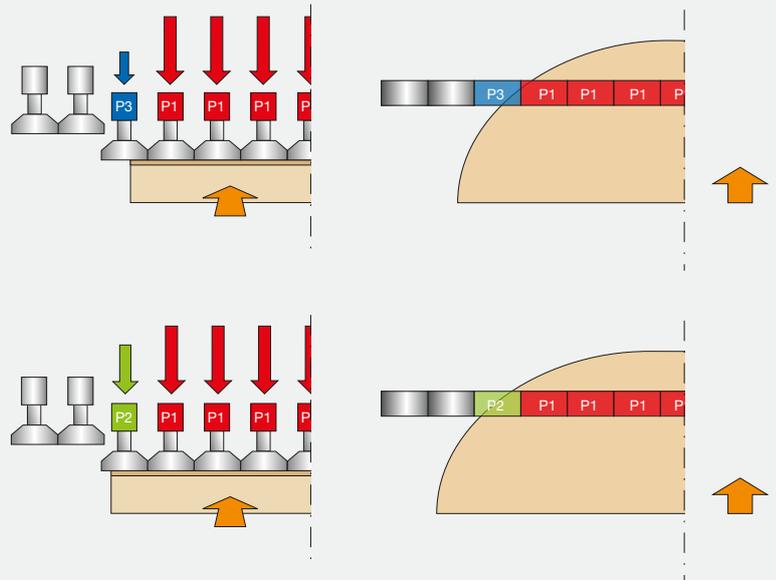


INTERVENTION RESOLUTION

The “EPICS” pad is available with two different centre-to-centre distances of the sectors: 32 mm and 16 mm. The latter is particularly indicated for machining narrow or shaped workpieces with very tight angles.

“PWM” VARIABLE PRESSURE TECHNOLOGY FOR “EPICS” ELECTRONIC SECTIONAL PADS

The innovative “PWM” system allows the changing in real time the operating pressure of the “EPICS” electronic pad, adapting it to the different panel areas. The PWM technology allows for a reduced sanding pressure to be applied to the front edge of the panel. The pressure is progressively increased to sand the central area of the panel and then decreased once again for the rear edge. A sophisticated workpieces reading device positioned at the conveyor infeed allows the system to manage different pressures on the side edges of the panel. The pressure varies according to the shape and position that the workpiece is inserted in the machine.



The “PWM” system is totally managed by the “Pro-Sand” electronic control. Thanks to the advanced operator interface developed specifically by SCM all the device parameters can be displayed, set and saved in the single work programs.



dmc system tt 1350

configuration for finishing painted panels in preparation for polishing

DMC System TT 1350 is the ideal choice for all companies looking for the highest levels of finish on “hi-gloss” panels. The two long counter-rotating transversal belts perfectly prepare the workpieces for the mechanical polishing and buffing processes.



The new DMC System crossbelt units have been designed to reach a higher quality finish and to maximise the life of the sanding belts.

- sanding belt length: 9500 mm
- “EPICS” electronic pad with “PWM” differential variable pressure technology (optional)
- large diameter pulleys, independent for sanding and chevron belt
- highly efficient cleaning and cooling systems with low compressed air consumption and particularly efficient in the removal of dust generated by the sanding belts.



dmc system t7 1350

configuration for calibrating and sanding kitchen doors and window frames



The DMC System T7 1350, which is fitted with 7 main operating units, is the most advanced solution currently available on the market to machine kitchen doors and window frames, both assembled and single parts. From the calibration straight to the superfinishing, in a single pass through the machine:

- 3 contact roller units perform the traditional single direction calibration and sanding of the door and window frames and their components
- The first planetary unit and the two counter-rotating sanding brushes gently round the sharp edges, cut the raised wood fibers and sand the bevelled edges, blending them with the flat surface of the doors or windows
- The planetary unit in last position efficiently removes the marks left by the longitudinal units on the styles

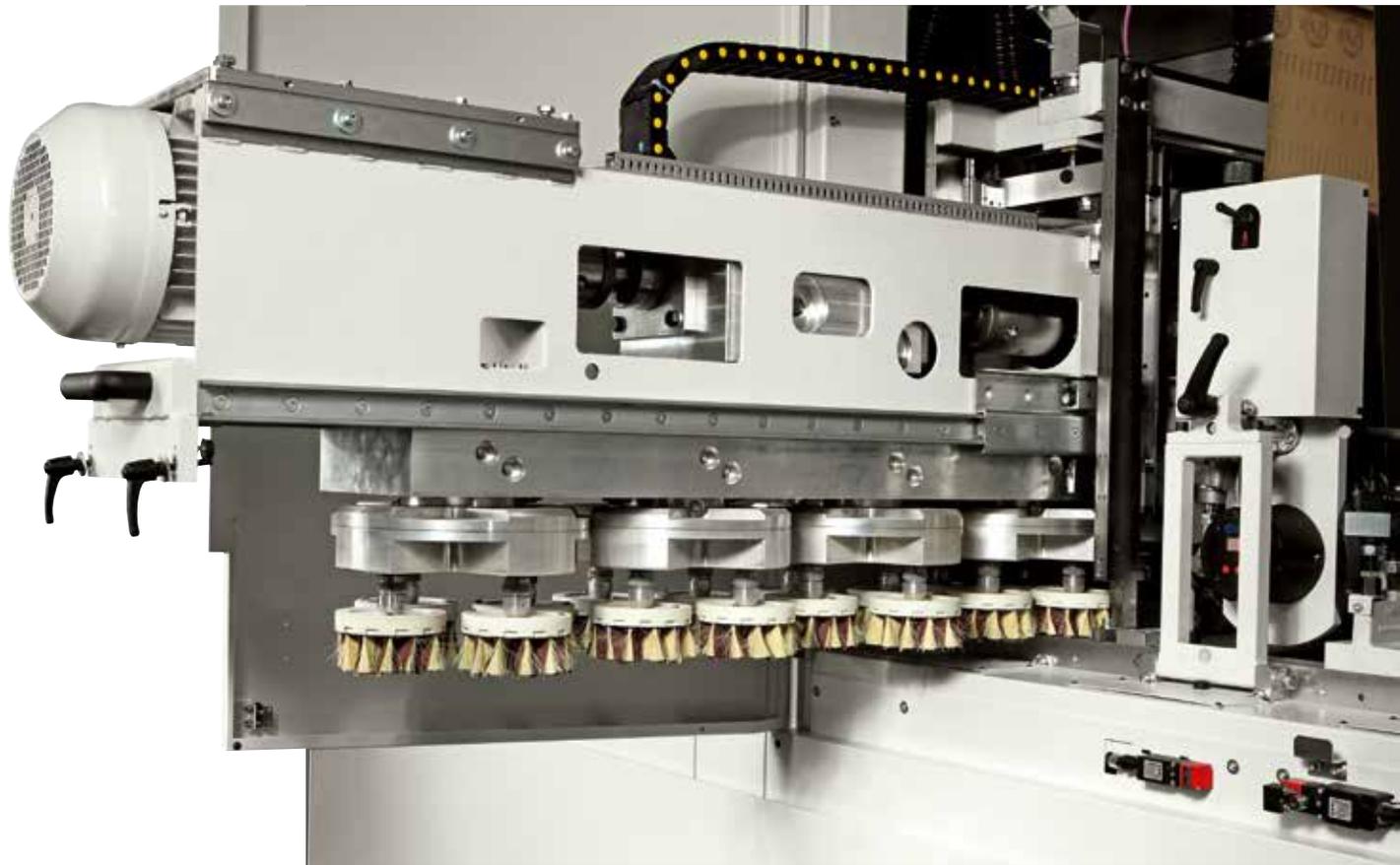
The side extraction of the unit on prism guides and the quick changing system of the brush discs, extensively tested in the SCM factories, ensure that the machine can be set up quickly and extremely safely and reliably.



The DMC System T7 1350 contact rollers are equipped with heavy pressure bar units, fitted with a monolithic structure and vertical sliding prism guides: maximum precision and reliability in machining door and window frames and in calibrating with high stock removal.

dmc system t7 1350

configuration for calibrating and sanding kitchen doors and window frames



The planetary unit will revolutionise the finishing processes of wooden products, both due to the extremely wide range of machining processes that it can be used for and also for the exceptional finish that it allows. The principle that renders the planetary head so effective is its multi directional sanding action: the 3 movements of the unit (rotation of the sanding brushes, counter-rotation of the brush holder discs and lateral movement of the head) guarantee performances which cannot be achieved with traditional sanders. The various movements of the unit are independent of each other and managed by motors controlled by inverters: this allows for the most suitable combination of rotation speeds to be selected for each application.

MAIN APPLICATIONS OF THE PLANETARY UNIT

- Removal of the marks against the grain from frames and window styles
- Improvement of the finish after the traditional sanding with the grain
- Removal of raised wood fibers from workpieces, in preparation for water based painting
- Opening the pores of the wood
- Multi-direction structuring (distressing)
- Sanding melamine papers
- Roughening structured melamine papers
- Edge rounding raw or painted panels
- Rendering stains and primer uniform ("wiping")
- Superfinishing of MDF panels in preparation for coating with Hi Gloss films
- Superfinishing of base coated panels, in preparation for the application of direct hi-gloss paints

Without planetary unit



OAK SANDED AGAINST
THE GRAIN

With planetary unit



Without planetary unit



OAK SANDED WITH
THE GRAIN AND
TREATED WITH
WATERBORNE STAIN

With planetary unit

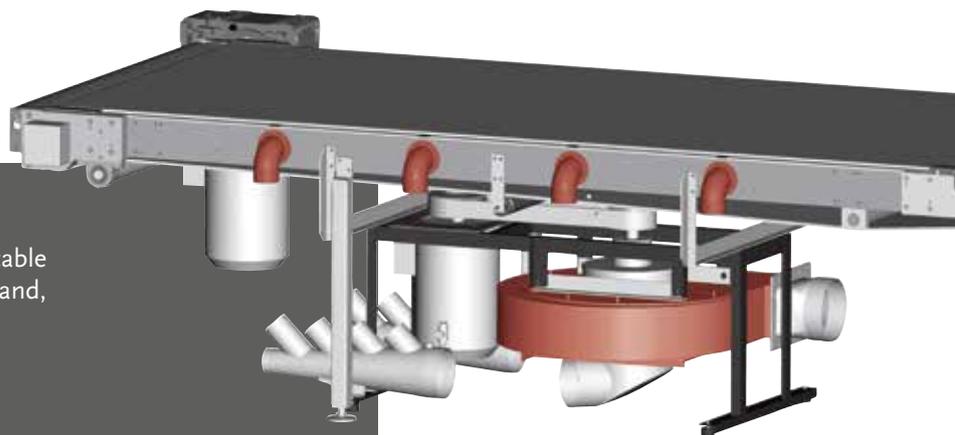


dmc system t5 1350

multi-functional configuration for continuing use



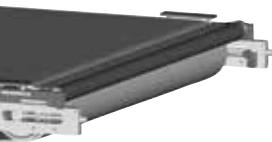
The configuration of the DMC System 1350 T5 shown here, fitted with calibration roller, large diameter sanding roller, superfinishing pad, crossbelt unit and satinising roller, fulfils all the production and finishing requirements of industrial companies and demanding contractors which need to combine productivity with flexibility.



The electro-fan positioned under the work table reduces the space occupied by the machine and, most importantly, reduces noise emissions.



The compact internal crossbelt unit can be placed in any position inside the machine, according to the specific machining requirements of the client. The innovative unit side extraction system on telescopic guides allows a single operator to replace the sanding belt very easily, and it facilitates the regular cleaning and inspection activities. The unit is fitted with the “EPICS” electronic sectional pad, power driven rotating blowers to clean the sanding belt and motor driven by inverter.



dmc system t4 1350

configuration for brushing profiled panels



The ideal configuration for creating finishes for assembled doors, window frames and profiled elements in general (strips for frames, door and window frames, trims, matchboards, skirting boards, etc.), regardless of whether they are rough or painted.



More effective abrasive action on the edges thanks to the orbital movement of the supporting structure of the unit (consisting of 19 rotating discs) which ensures that even the most inaccessible areas of the profiled panel can be reached.

The rugged brushes ensure that the sanding operation will result in the creation of surfaces of the highest quality. This is facilitated by devices which control the oscillation of the roller and regulate the inclination of the strips, allowing the abrasive action to be standardised.



dmc system t2 1350

universal compact wide belt sander

The new compact and reliable DMC System T2 1350 has been designed to fulfil the production requirements of small to medium-sized companies that don't require specific production processes but prefer a versatility of use. In fact this machine can calibrate products with the grooved steel roller and subsequently finish the panels with the sanding roller placed in the first position and the electronic pad.





dmc system t2 1350

universal compact wide belt sander

The large diameter of the sanding roller and the technology of the “EPICS” electronic sectional pad guarantee extremely high quality finishes.



The new fast locking system used to fasten the units to the base and the digital display of the operating quota render machine settings extremely fast and precise.



The wireless electronic gauge allows the machine to be positioned at the work thickness measured by the device. The communication with the machine is wireless and the working program can also be launched from the remote control.

dmc system

electronic controls

All the machine management software is proprietary, developed specifically by the SCM engineers and perfected with the feedback provided by DMC's clients. This has resulted in an extremely simple and reliable user interface, which is able to perfectly fulfil all the requirements of the most demanding operators.

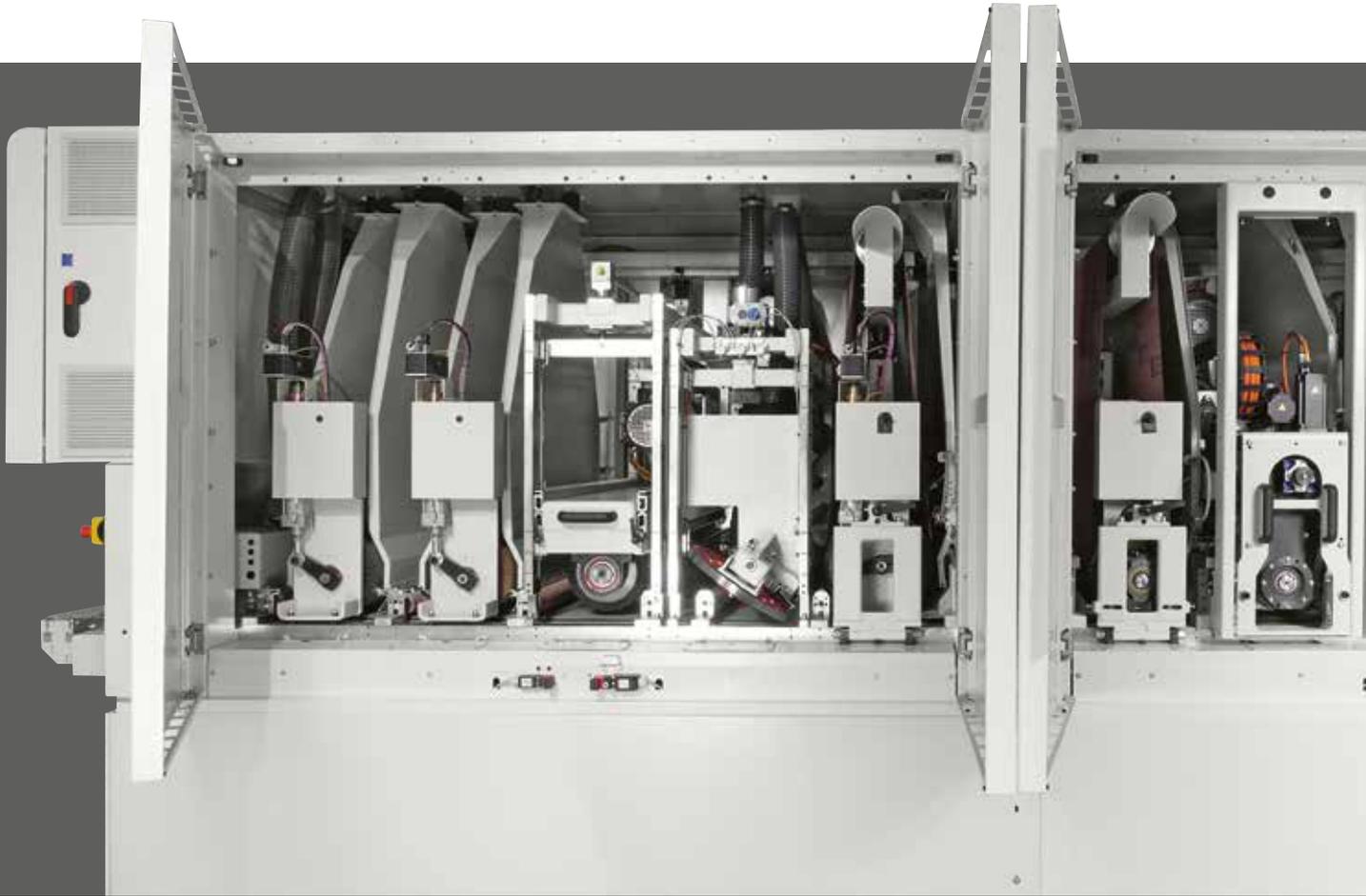


The "Pro-Sand" control, fitted as standard on all the DMC System sanders, is used to set all the operating parameters on the touch screen, and to check in real time the correct operation of the machine.



dmc system

innovative solutions for prestigious finishes

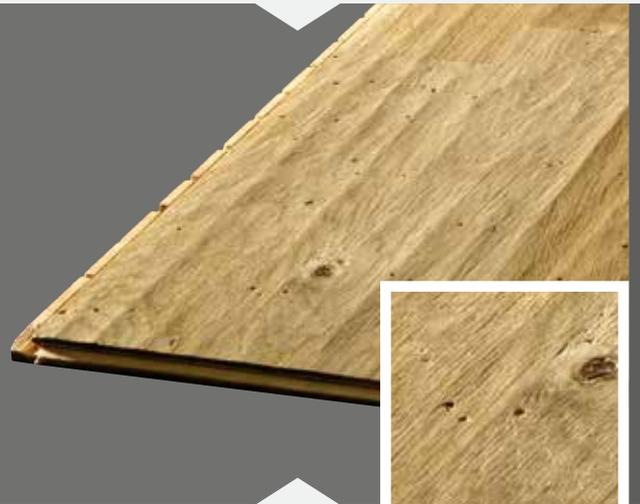




dmc system

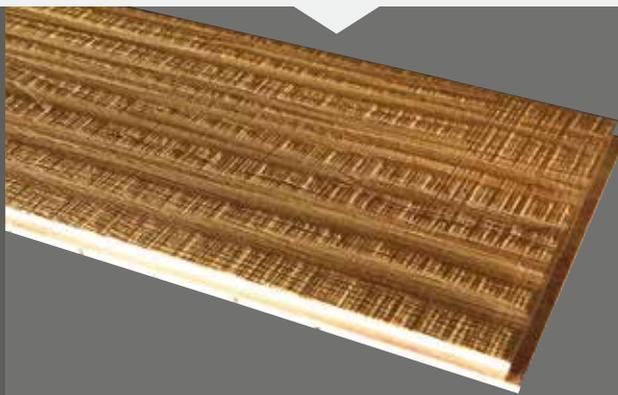
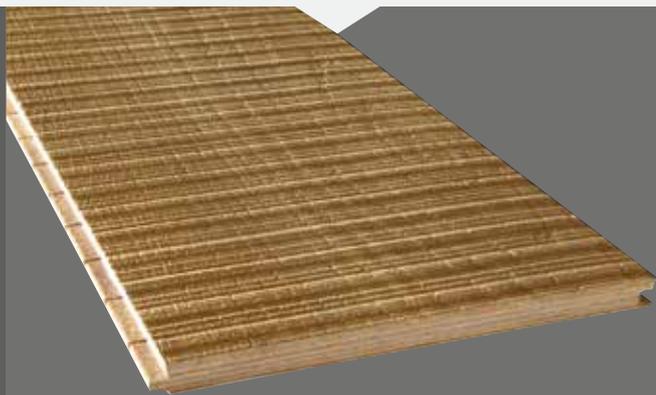
innovative solutions for prestigious finishes

The **woodworm unit** is fitted with a quick release system on linear guides that lets users easily change the type of holes by changing the layout of the woodworm nails.





The innovative “**saw blade**” unit allows users to recreate the irregular surface effect produced by using a bandsaw. The ability to regulate the depth of the blade cut, and the rotation speed of the blade, enables the user to control the depth and distribution of the cuts, making it possible to choose the kind of finish users wish to create every single time.



The **hand scraping unit**, thanks to the system of vertical and transversal tool movements, allows users to freely reproduce unlimited hand scraping effects that differ in terms of depth, trajectories and the shape of the grooves. Any effect can easily be achieved due to the translation system driven by brushless servomotors that guarantee fast and precise movements and the “Pro-Sand” control that allows for simple and intuitive programming of the machining unit.

dmc system

innovative solutions for prestigious finishes

The **wave unit** achieves a longitudinal and/or crossways undulated effect.
The design of the undulated profile can be achieved as required with the servomotor that controls the vertical variation of the roller position.





The sanding or structured effect on products with cross grain, such as for example cupboard doors or door and window frames, is achieved with the multi-directional sanding action of the **planetary units**.

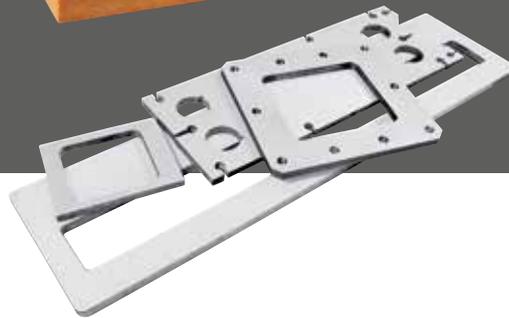
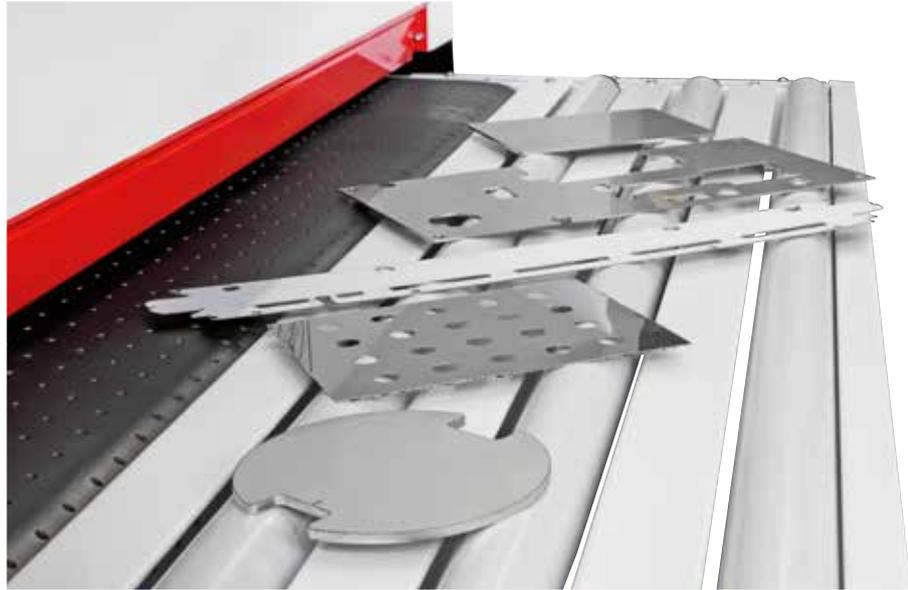


The **structuring roller** units allow to achieve finishing effects which range from a slight opening of the pores to extreme structuring. Perfect machining results are guaranteed thanks to the robust supporting structure and the power of the available motors.

dmc system

solutions for machining materials in general

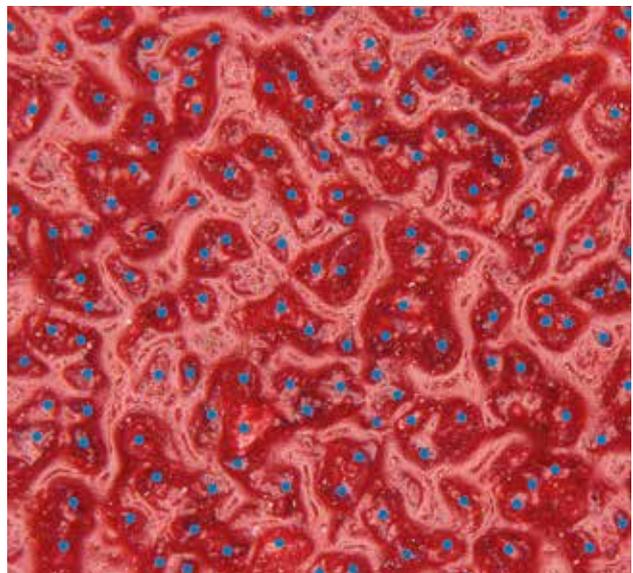
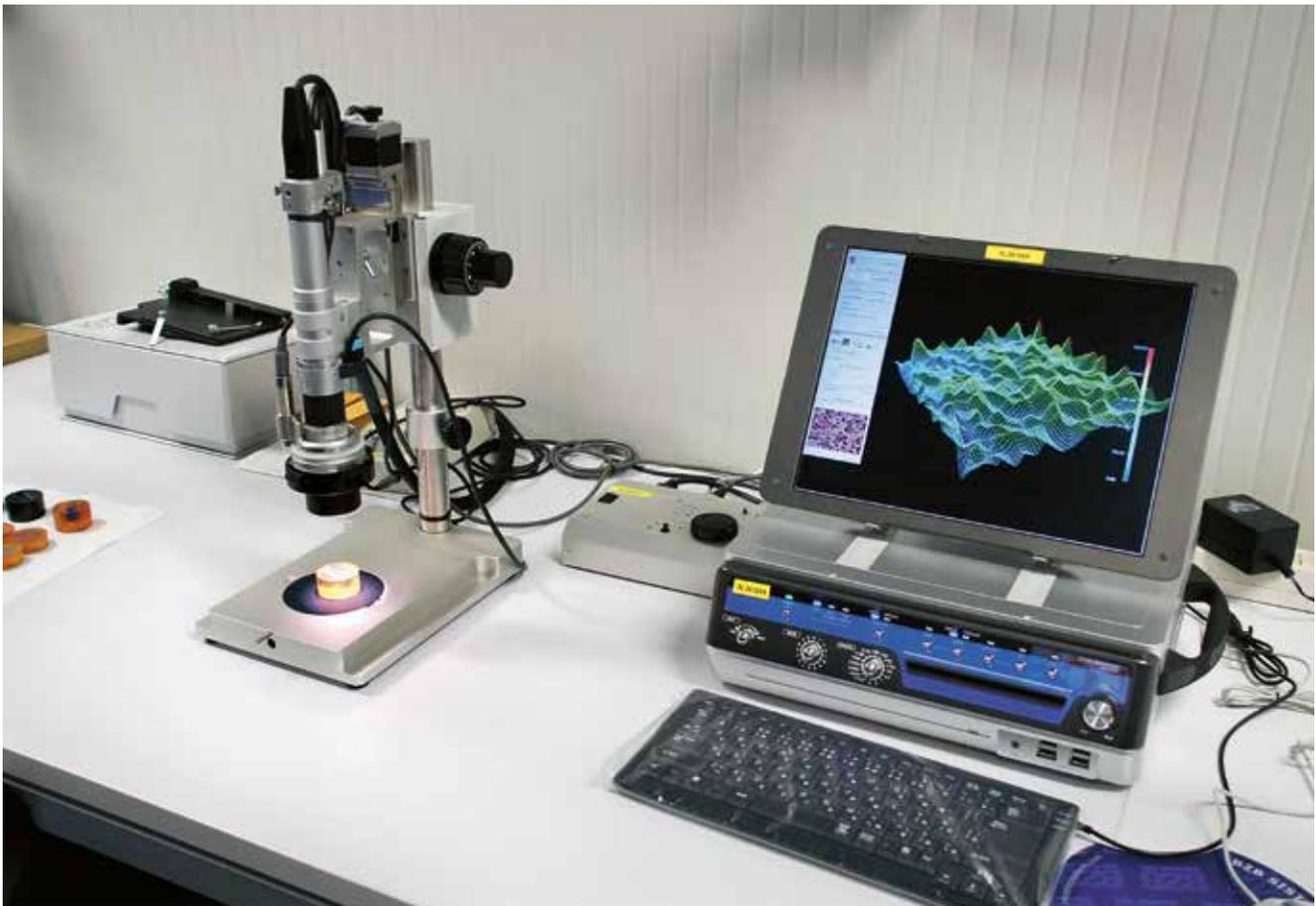
The aim of Dmc Hitech-Laboratory Lab is to conduct **research in sanding materials**, materials processed with **flexible sanding machines**, as well as finishing processes on innovative materials such as Corian, inert materials, quartz, polyurethane, rock wool, cement fibre, etc.



The operational centre is managed by highly specialised personnel and it is fitted with sophisticated instrumentation used to analyse the materials being processed and the various types of sanding materials. Thanks to the numerous machines on show, the centre is able to perform any machining test. Clients can therefore have access to immediate and detailed information on the best ways to overcome any issue related to a flexible sanding machine process, in order to achieve new finishes demanded by the market.



Investing in a SCM wide belt sander centre does not mean simply buying a machine. It means becoming a partner of one of the most important Italian industrial groups and having access the exclusive services offered by the advanced technological research centre that the company has recently setup inside its site in Thiene (Vicenza).



dmc system

a complete range of operating units

CONTACT ROLLER UNIT	Roller diameter (mm)	Max power (kW)	Belt length (mm)
	140	18,5	1900
			2620
	250	37	1900
			2620
			3250
			2620
	320	45	3250
			-
	400	45	1900
			2620
			3250
			-
2620			
3250			

SUPERFINISHING UNIT	Max power (kW)	Belt length (mm)
	15	1900
		2620
	18,5	1900
		2620
		3250
	30	1900
		2620
		3250

COMBINATION UNIT	Roller diameter (mm)	Max power (kW)	Belt length (mm)
	140	18,5	1900
			2620
			3250
			-

COMPACT INTERNAL CROSSBELT UNIT	Machine Version	Belt length (mm)	Max power (kW)
	1350	4600	15
	1650	5194	15

EXTERNAL CROSSBELT UNIT	Machine Version	Belt length (mm)	Max power (kW)
	1350	7500	18,5
		9500	18,5
	1650	9500	22

PAD UNIT	Max power (kW)	Belt length (mm)
	15	1900
		2620
	18,5	2620
		3250
		-
	30	2620
		3250
		-

PLANER UNIT	Tool diameter (mm)	Max power (kW)
	180	30
	250	45

SAW BLADE UNIT	Machine Version	Max power (kW)
	1350	2,2
	1650	2,2

CROSS STRUCTURING UNIT

Belt length (mm)
4000

Max power (kW)
11


LONGITUDINAL STRUCTURING UNIT

Tool diameter(mm)
200
250

Max power (kW)
7,5
18,5


SANDING BRUSH UNIT

Tool diameter (mm)
300
400

Max power (kW)
4


SATINISING BRUSH UNIT

Tool diameter(mm)
200
250

Max power (kW)
2,2
4


OSCILLATING UNIT WITH VERTICAL BRUSHES

Machine Version
1350
1650

Number of brushes
9 (Ø 125 mm)
11 (Ø 125 mm)

Unit Movement
oscillating
oscillating


WORKPIECES CLEANING BRUSH UNIT

Tool diameter(mm)
150
200
250

Max power (kW)
1,1
1,5
2,2


OSCILLATING UNIT WITH DOUBLE VERTICAL BRUSHES

Machine Version
1350
1650

Number of brushes
17 (Ø 125 mm)
21 (Ø 125 mm)

Unit Movement
oscillating
oscillating


ORBITAL UNIT VERTICAL BRUSHES

Machine version
1350
1650

Number of brushes
19 (Ø 125 mm)
23 (Ø 125 mm)

Unit movement
orbital
orbital

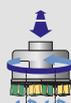

PLANETARY UNIT WITH VERTICAL BRUSHES

Machine Version
1350
1650

Number of brush holder discs
4
5

Number of brushes
16 (Ø 125 mm)
20 (Ø 125 mm)

Unit movement
planetary+oscillating
planetary+oscillating


HAND SCRAPING UNIT

Tool diameter(mm)
210

Max power (kW)
15


WOODWORM UNIT

Tool diameter(mm)
250



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



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.

TECHNOLOGIES



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.

HITECO

SPINDLES AND TECHNOLOGICAL
COMPONENTS

Les

ELECTRIC PANELS

steelmec

METALWORK

scmfonderie

CAST IRON

scm
woodworking technology

is more



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