

dmc eurosystem

modular centres with flexible abrasives for calibrating and sanding



The modular system for calibrating and sanding

DMC Eurosystem is the sturdy and modular sander designed to provide the market with diversified calibrating and sanding machinery based on advanced technological solutions and modular components which allow a great number of possible configurations, from the most versatile and flexible to those that best fit a single specific application.





BENEFITS

- **STURDY** monolithic structure
- **POWERFUL** motors with high efficiency power transmission
- **CUSTOM CONFIGURATIONS** to meet any specific needs of sanding applications
- **HIGHLY TECHNOLOGICAL** to keep ahead of the games

Technological solutions for impeccable surface finishes



DIGITAL READ-OUT:

the device detects the working height of the roller and makes the **reading** of the value **immediate and precise**.



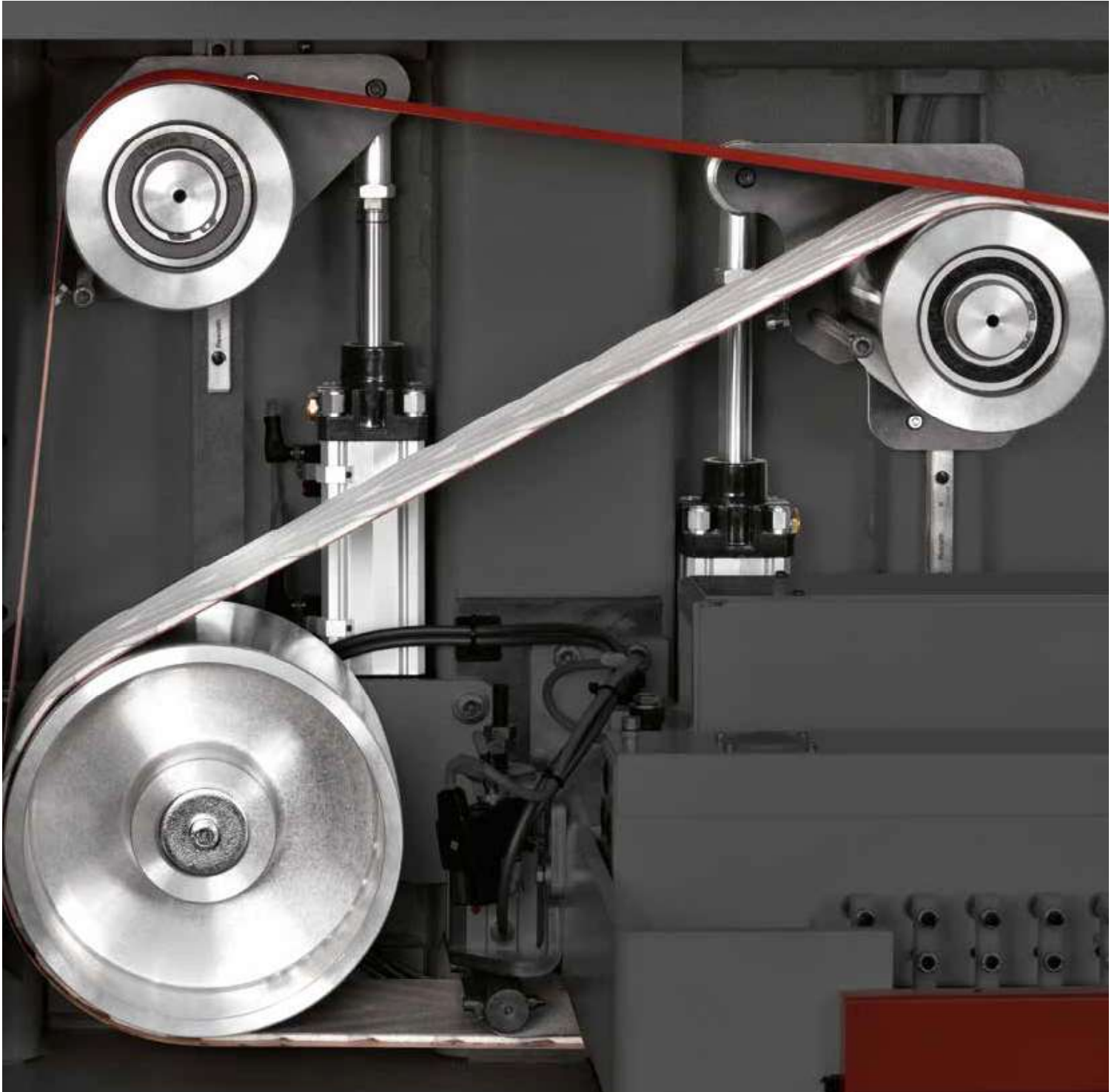
HIGH PERFORMANCE TRANSMISSION SYSTEM:

the “POLI-V” belt ensures an extremely powerful, **efficient and silent transmission**; in addition, the automatic belt tensioning system guarantees that the **tension remains constant over time**.



HIGH-EFFICIENCY DUST SUCTION HOODS:

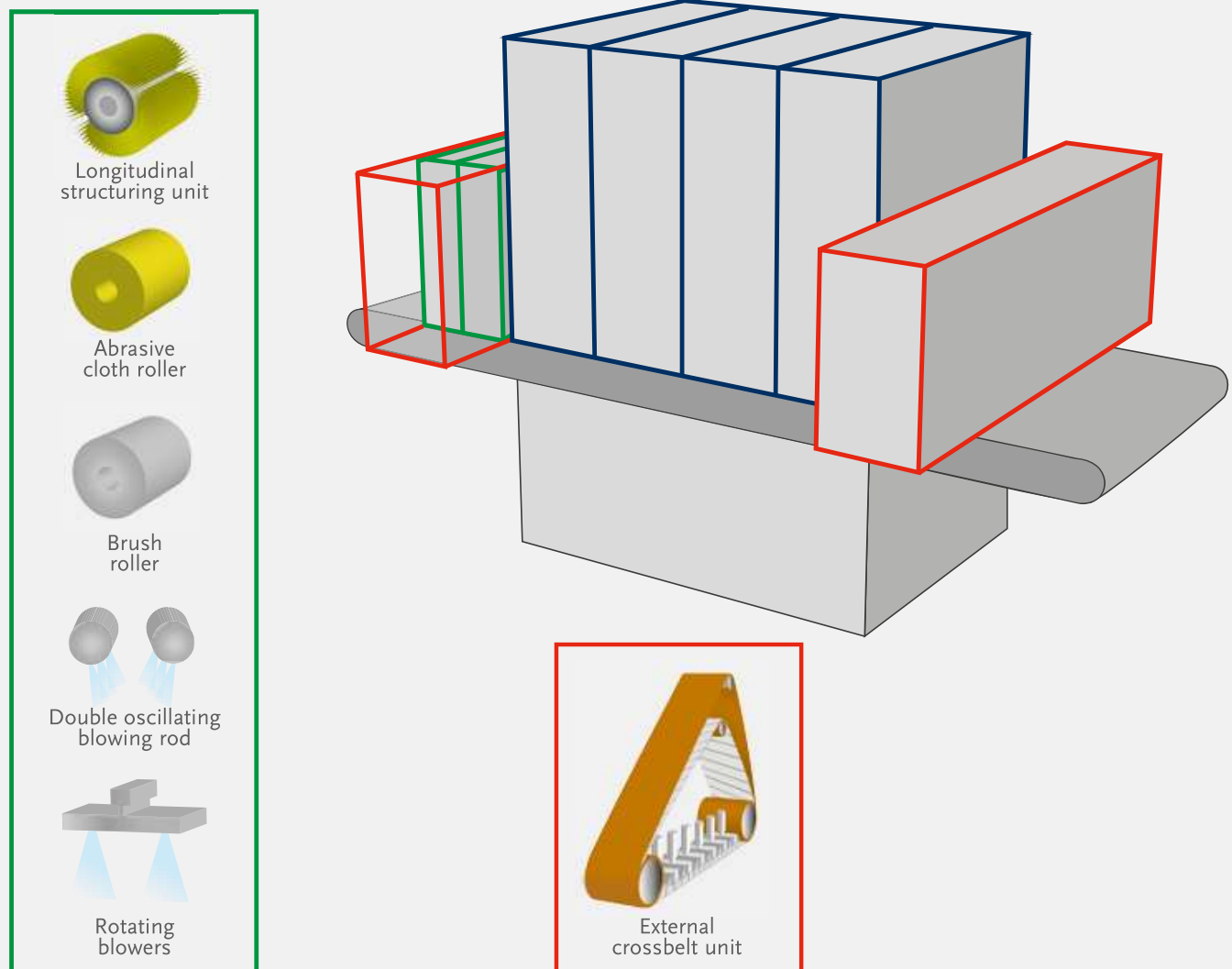
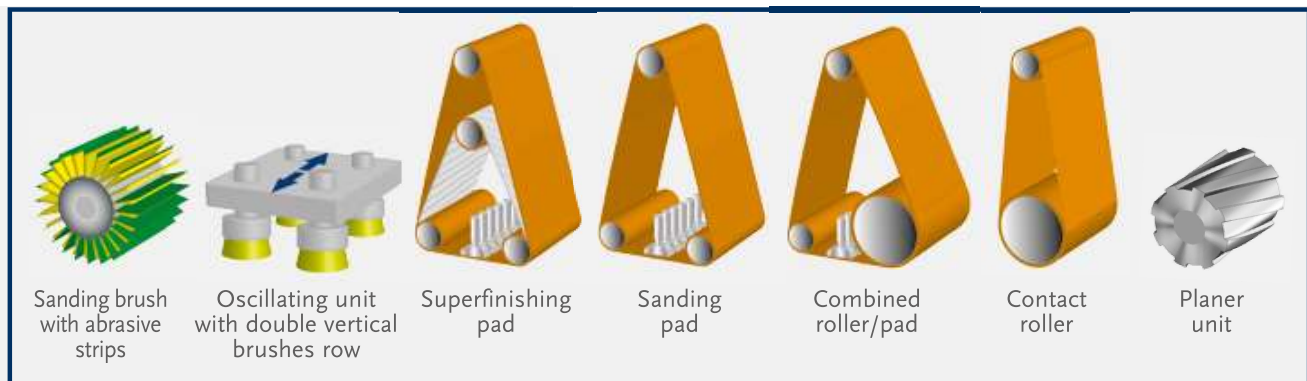
expressly studied and designed by SCM engineers, allowing to **control the dispersion of the dust** even in the heaviest working conditions, thanks to their particular shape and position, very close to the working area.



The modular system DMC Eurosystem

Machine compositions always aligned to the changing needs of production

Advanced technical solutions and modular component design mean that it is possible to build a very large number of different configurations, from the most versatile and flexible machine to the most specialized one for unique applications.



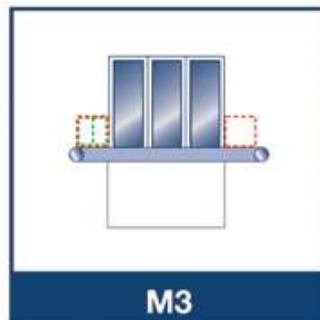
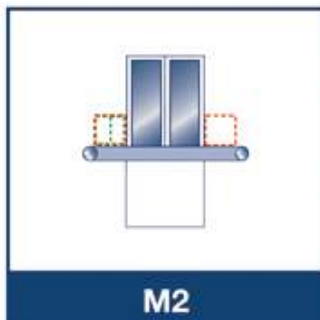
Possible machine configurations

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RK Machine configuration



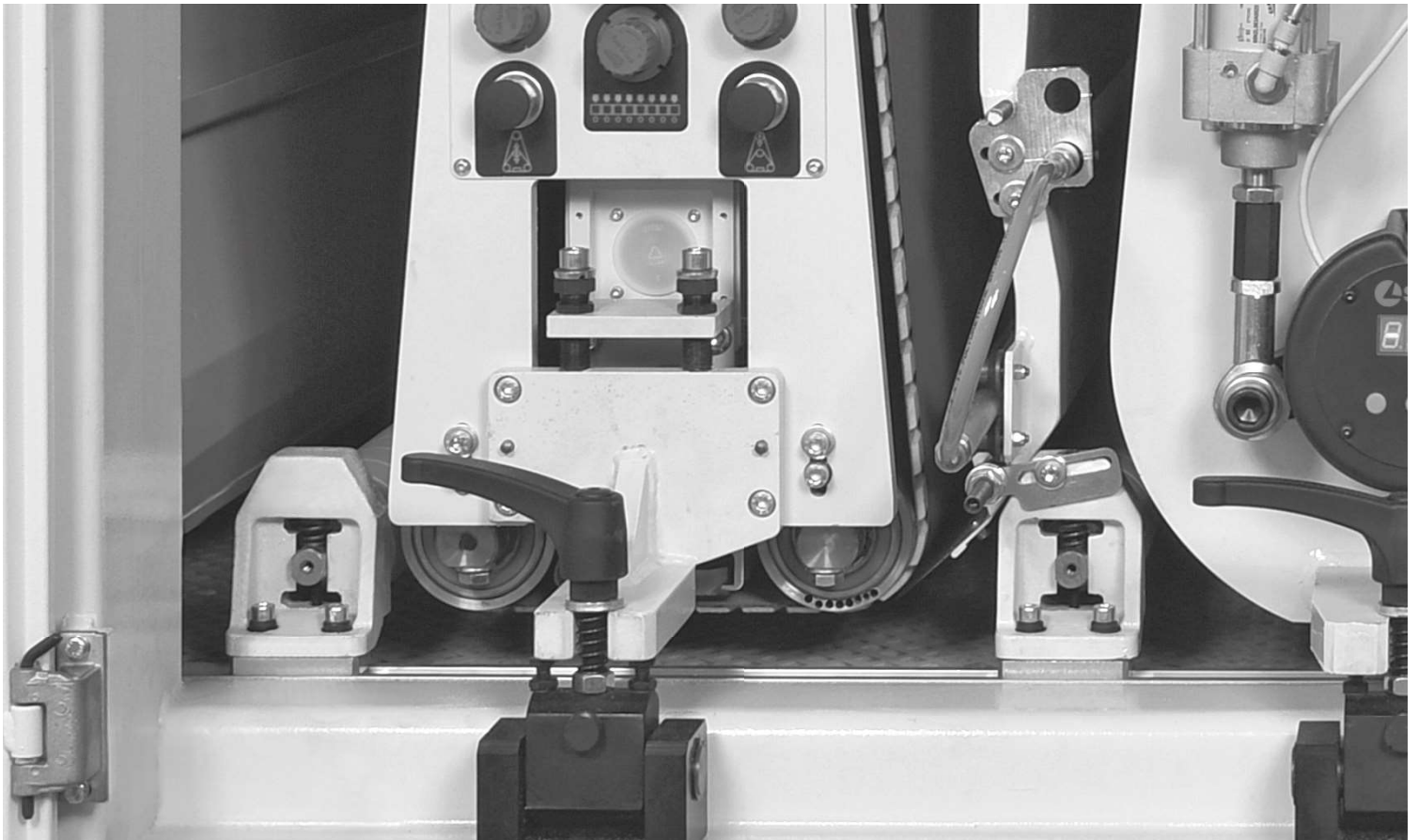
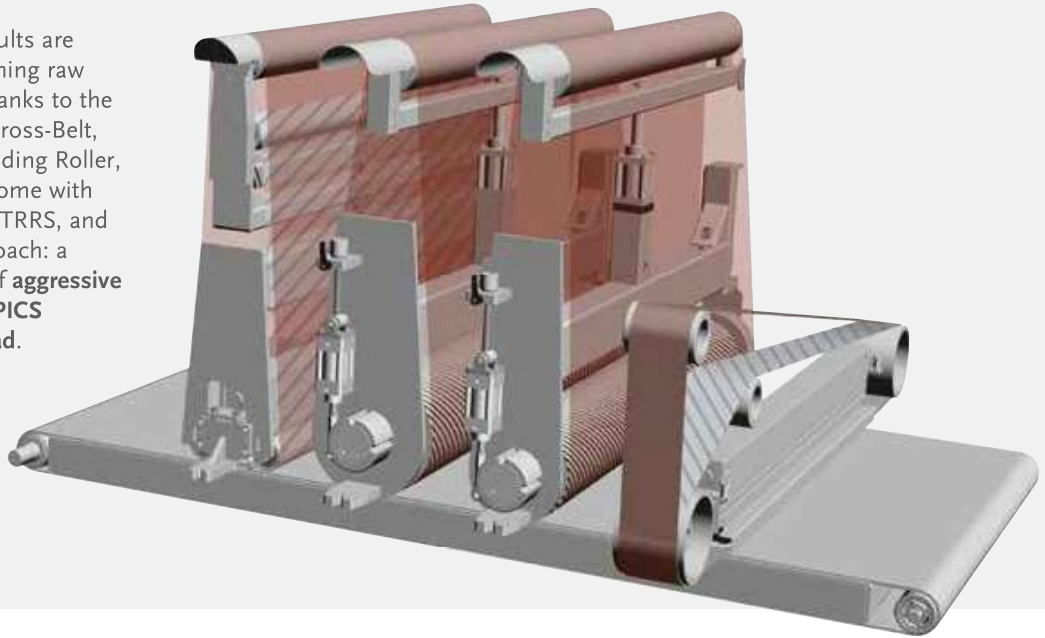
RRS Machine configuration



DMC Eurosystem TRRS

Configuration for calibrating, sanding and superfinishing of raw and painted panels

Excellent finishing results are obtained when machining raw and painted panels thanks to the wide range of units (Cross-Belt, Calibrating Roller, Sanding Roller, Super-Finisher) that come with the DMC Eurosystem TRRS, and to its prescribed approach: a **perfect combination of aggressive roller with sensitive EPICS electronic sectional pad**.





DMC Eurosystem TRRS

Configuration for calibrating, sanding and superfinishing of raw and painted panels

The **Crossbelt and Superfinishing units** are particularly suitable for the superfinishing of solid wood components, MDF panels that have been laminated, veneered or painted (opaque and polished).

Those units are the **ideal choice** for all companies that require **the highest finishing levels** on “high gloss” painted panels.



T - CROSSBELT UNIT

The unit can be installed both infeeding and outfeeding the longitudinal units. Thanks to its positioning, outside the machine structure, all the activities concerning abrasive belt replacement and routine maintenance operations are simple and fast.

S – SUPERFINISHING UNIT

Originally designed for finishing applications in large woodworking companies, the superfinishing unit is fitted with the “EPICS” electronic sectional pad, ensuring an extremely uniform action of the abrasive grains on the workpiece surface, and the chevron belt improving cooling of the contact area.

Longer belts (2620 mm length) improve the cooling of the abrasive grains and reduce the adherence of processing dust. An extended belt length lasts longer, requires fewer replacements and consequently less downtimes.



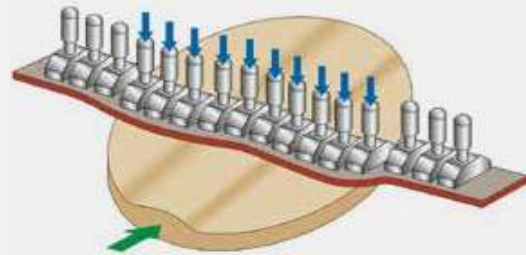
DMC Eurosystem TRRS

Configuration for calibrating, sanding and superfinishing of raw and painted panels

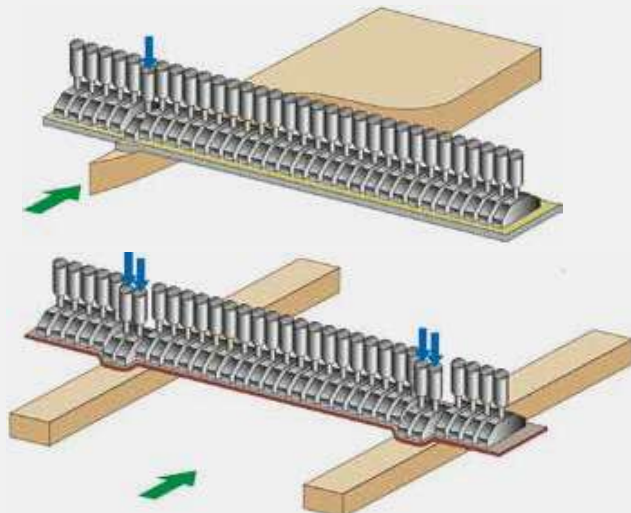


The “EPICS” sectional pad consists of a special monolithic beam which houses the cylinders that activate the independent sectors. Thanks to the wide excursion of the pistons and the double action system (adjustable pneumatic push/counter push), the “EPICS” pad guarantees **maximum sensitivity and precision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

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



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 treating narrow or shaped workpieces with very tight angles**.

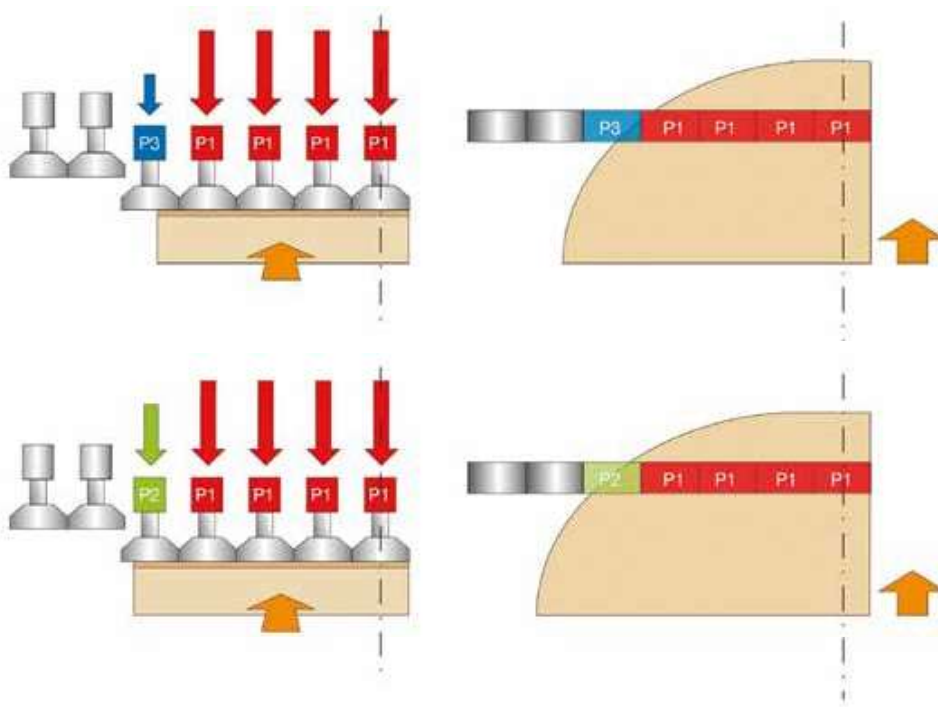


THE INNOVATIVE “PWM” SYSTEM ALLOWS CHANGING IN REAL TIME THE OPERATING PRESSURE OF THE “EPICS” ELECTRONIC PAD, ADAPTING IT TO THE DIFFERENT PANEL AREAS INCH BY INCH.

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 where the workpiece has been inserted into the machine.



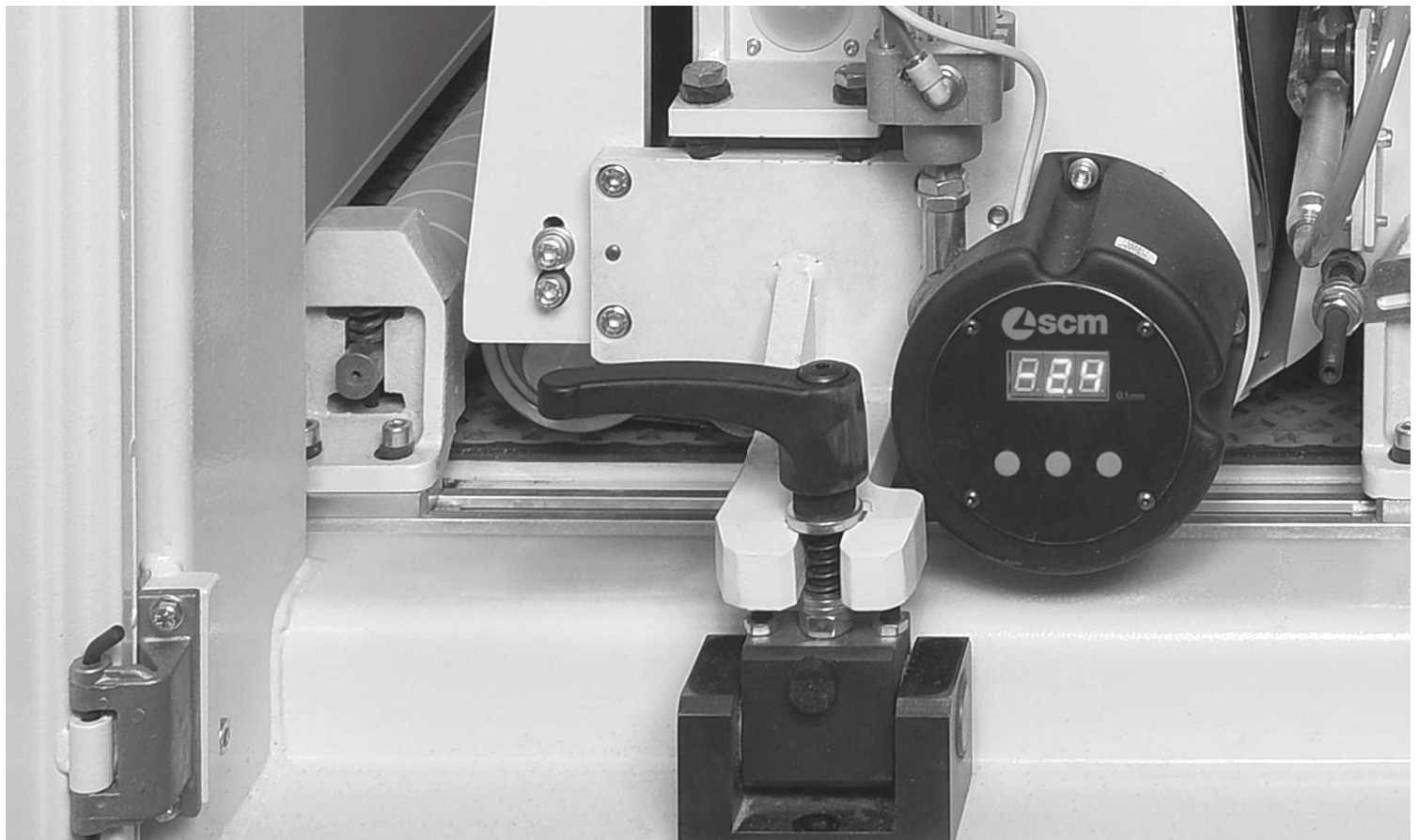
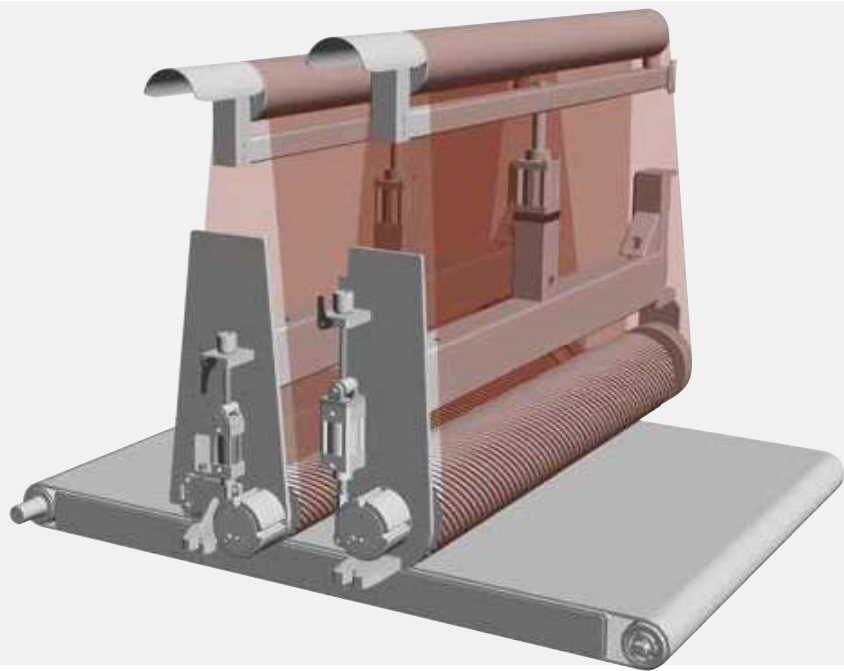
The “PWM” system is totally managed by the “MAESTRO PRO-SAND” electronic control. Thanks to the advanced operator interface developed specifically by SCM, all the device parameters can be displayed, set and saved in each work program.

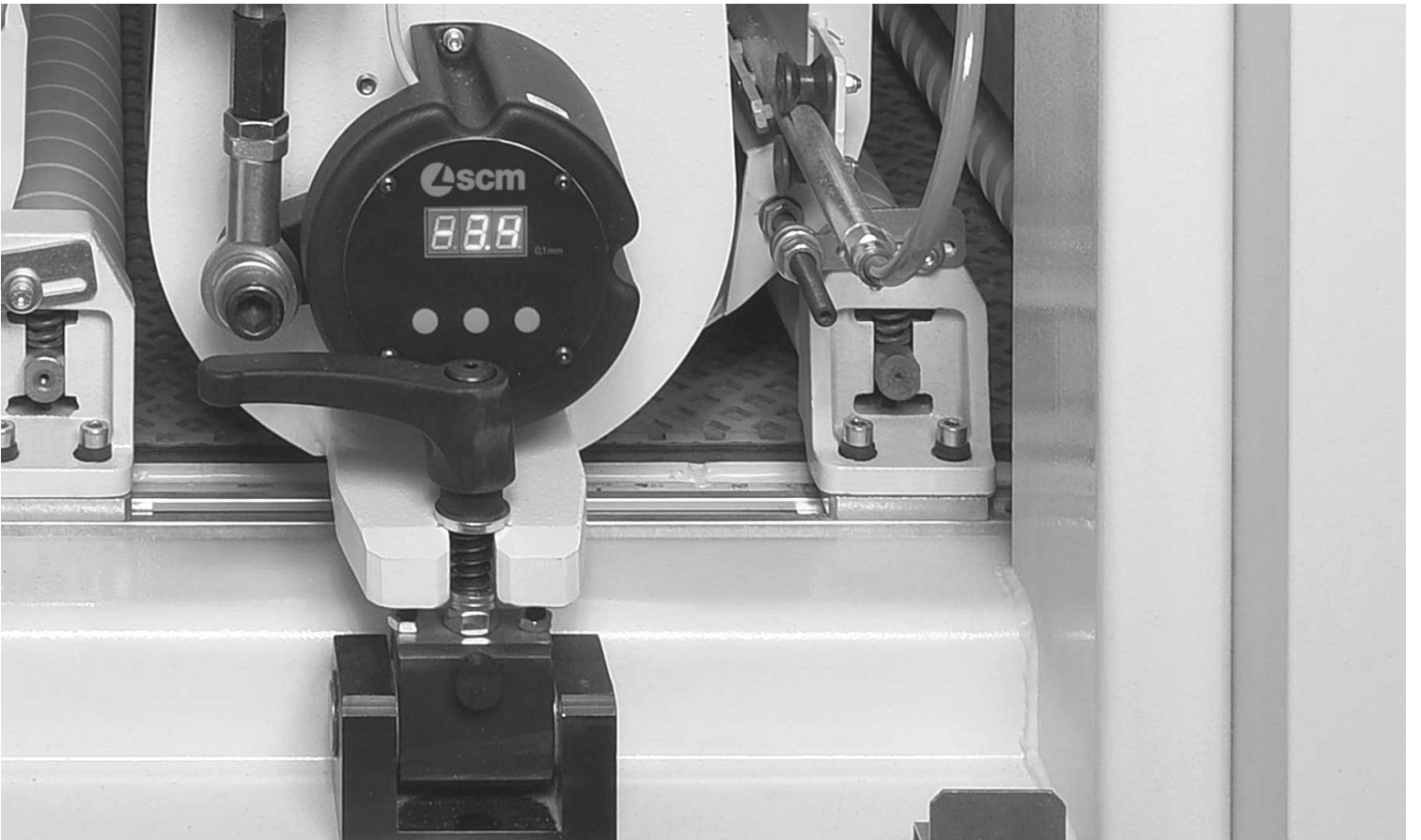
DMC Eurosystem RK

Configuration for any calibrating and sanding operation

A multifunction configuration allowing to obtain, with a limited investment, **maximum versatility in order to meet calibration requirements, solid wood, veneered and painted panels sanding.**

In fact, it is possible to calibrate pieces with the grooved steel roller in the first position and to complete the process with the sanding roller and the electronic pad of the combined unit.





DMC Eurosystem RK

Configuration for any calibrating and sanding operation

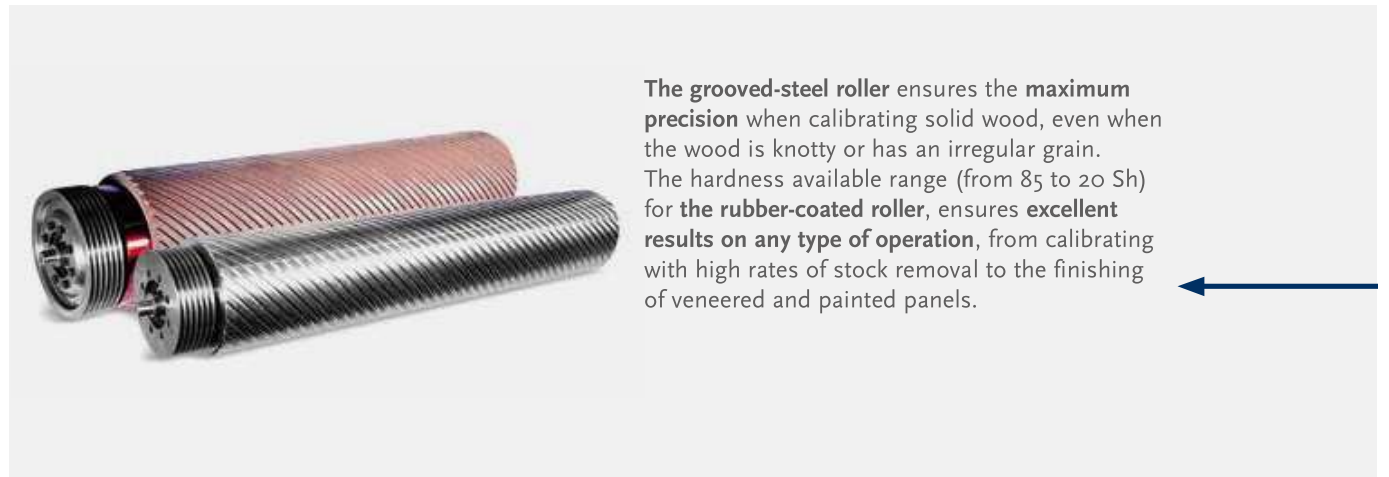
R - CALIBRATING/SANDING ROLLER UNIT

The calibrating-sanding rollers are available in grooved-steel or rubber-coated versions with 250 and 320 mm diameter.



K - COMBINED ROLLER-PAD UNIT

This is the perfect choice for woodworking companies who want a very versatile machine configuration, without making any compromise on machining quality. The "K" unit can be fitted with all the technical features available for the roller or pad units.

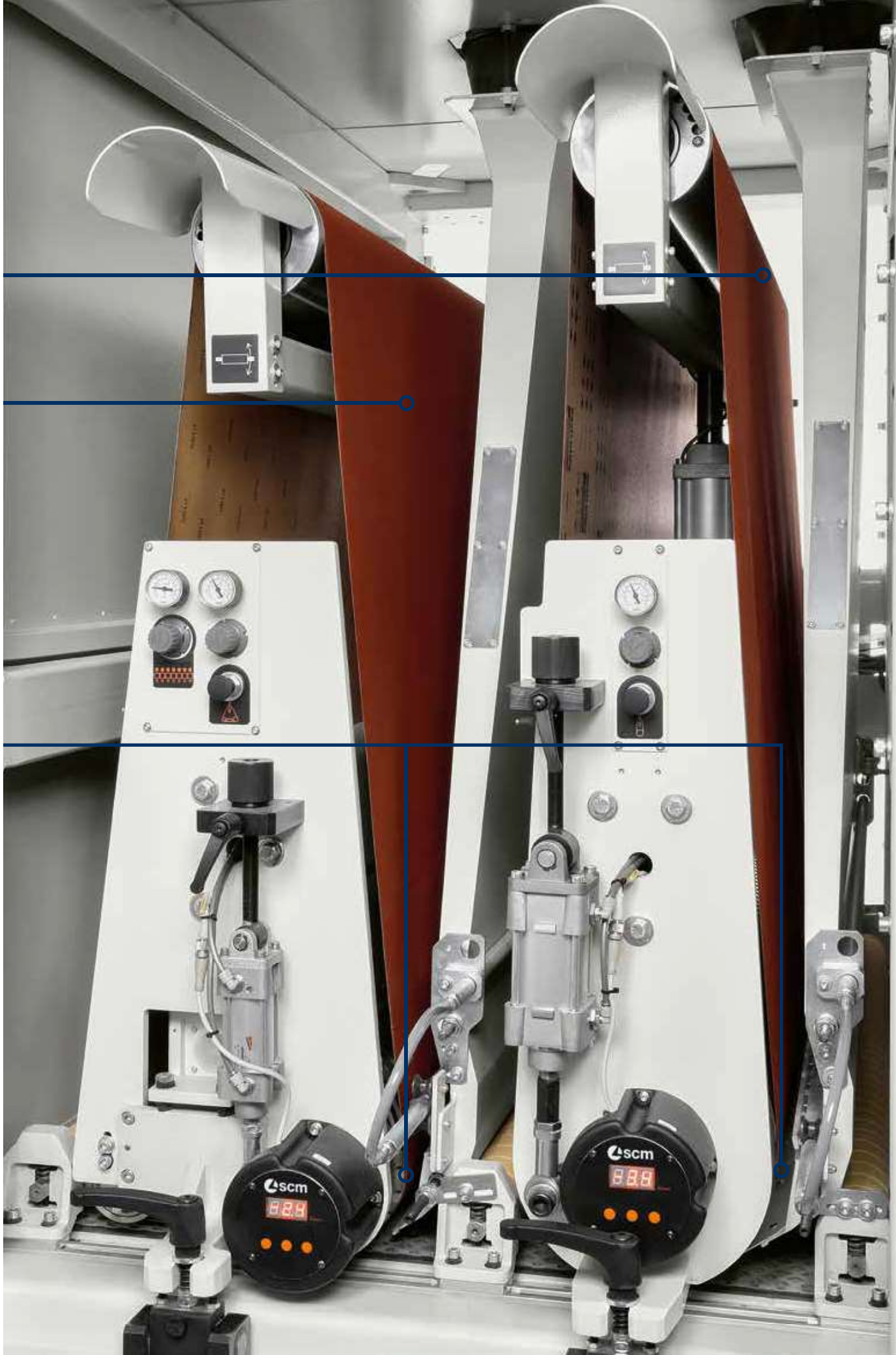


The **grooved-steel roller** ensures the **maximum precision** when calibrating solid wood, even when the wood is knotty or has an irregular grain. The hardness available range (from 85 to 20 Sh) for the **rubber-coated roller**, ensures **excellent results on any type of operation**, from calibrating with high rates of stock removal to the finishing of veneered and painted panels.



The calibrating/sanding rollers are equipped with an **automatic belt tensioning system** which allows to **keep constant at the correct tension the belt** and ensures the **maximum efficiency of the power transmission**.

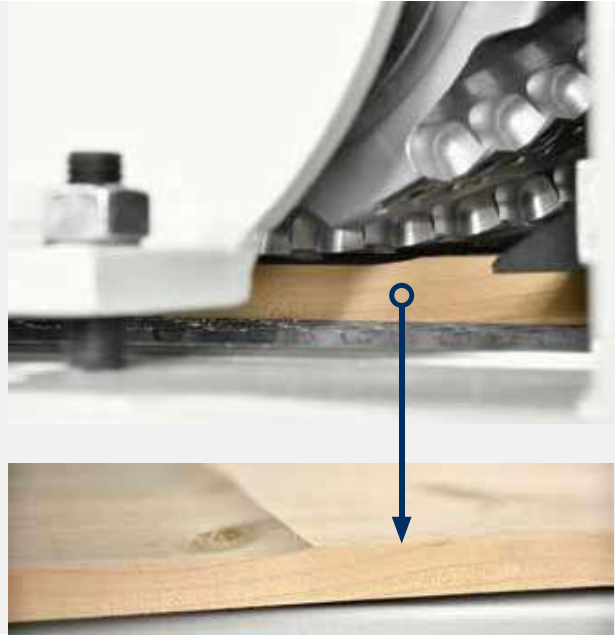
The device is essential during the calibrating operations to transfer all the available power during processing.



Other devices

C - PLANER UNIT

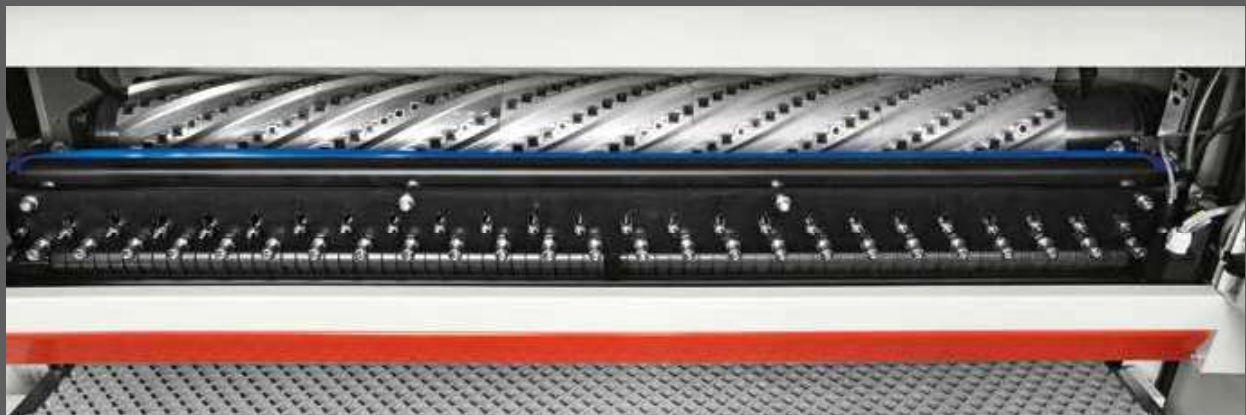
In first position, the machine can be equipped with the **"CHP" planer unit** which enables **high stock removal rates (up to 3 mm)** on **solid wood** with relatively low power motors (25 to 30 HP). After planing, **panels only require light finishing**, that can be achieved with 150 grain using a single operating unit, or 180 grain using two operating units.



The heavy **sectional presser**, fitted with an anti-kickback safety device, ensures **efficient, safe workpiece feed** and also makes it possible **to process parts of different thickness at the same time**.



The **frontal access to the planer unit** facilitates the cleaning and inspection activities.



B - BRUSHING UNITS

The brushing units are also available with roller oscillating device. Two brushing units can be fitted together, also in combination with (timed) double-rod blowing cleaning devices or rotary blowers.



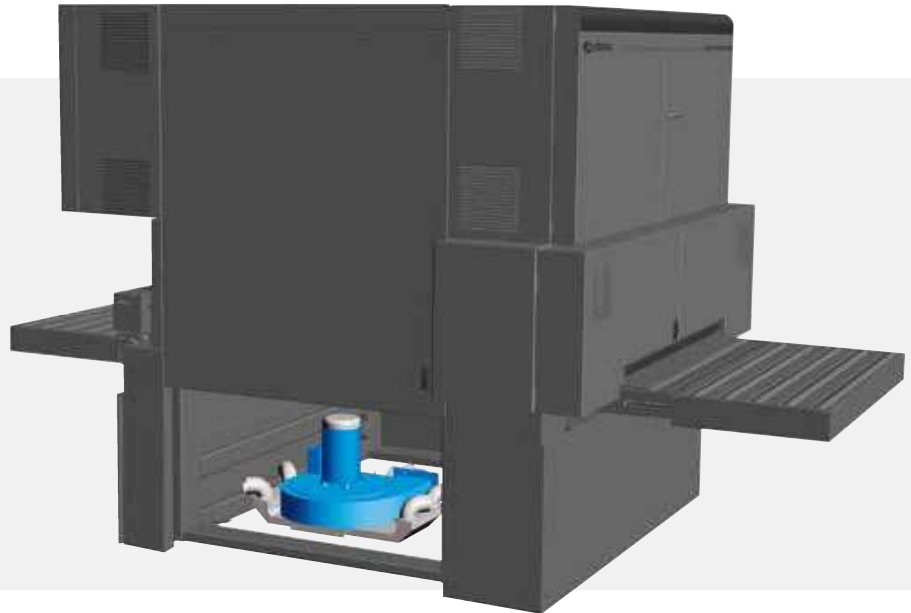
It is available a complete range of cleaning and buffing rollers with 150 or 200 mm diameter.

The structuring unit, available with motors up to 10 HP (also with motors driven by inverter), brings out the natural texture of wood. The device is particularly recommended to enhance the production of country-style or antique-look furniture.



Other devices

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



The **quick release system** that secures the units to the base and the digital read-out of the working height allow users to **change sanding belts really simply and quickly**.

Timed oscillating blower for the abrasive belts cleaning. Efficient abrasive belt cleaning **increases belt life and improves finishing quality**, especially on painted panels.

The device is automatically activated when the piece is present inside the machine to be worked, in order to save the compressed air consumption.





The centering system of the abrasive belt is managed by a very **reliable and precise “background suppression” photocell** ensuring the correct positioning of the abrasive belt.



Automatic feed belt centering system: an electro-pneumatic system keeps the feed belt in the best conditions of use at all times **without any operator’s intervention.**



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.

The automatic table positioning detects the work piece thickness and allows **precise machining at all times and without the risk of operator’s error.**

The decimal setting of this system also allows setting the work depth independently of the material thickness.



Electronic controls

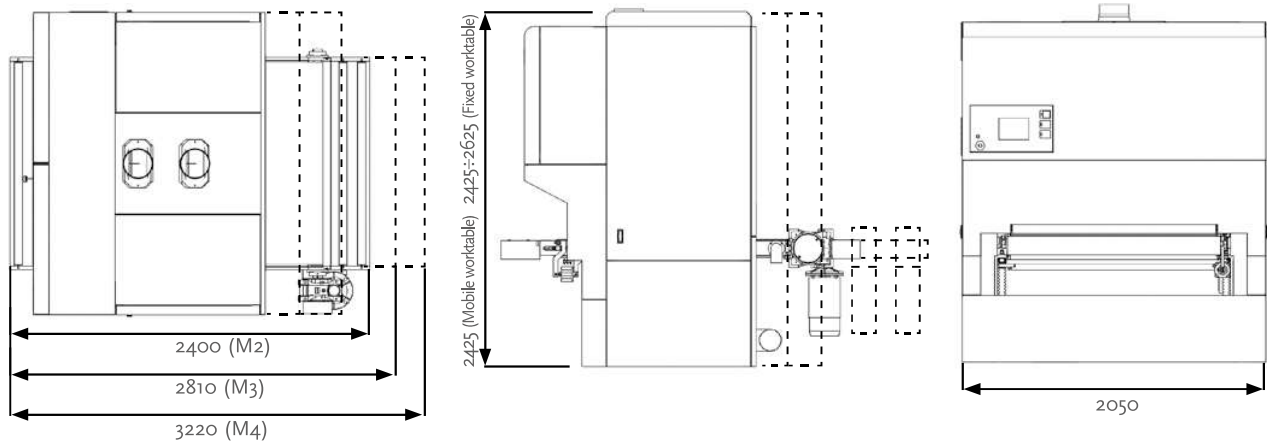


All the **machine management software** is proprietary, developed specifically by the SCM engineers and perfected with the feedback provided by DMC's clients. This has resulted in an **extremely simple and reliable user interface**, which is able to perfectly fulfil all the requirements of the most demanding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



The **"PRO-SAND"** control is used to **set all the operating parameters** on the touch screen, and **to check in real time the correct operation** of the machine.

Overall dimensions



* Dimensions refers to a machine configuration without the crossbelt unit

DCM EUROSYSTEM

Technical features

Working width	mm	1.350
Min/max standard working thickness (mobile worktable)	mm	3-170
Min/max standard working thickness (fixed worktable)	mm	3-200
Longitudinal abrasive belt dimension	mm	1.370 x 2.620
Abrasive crossbelt dimension	mm	150 x 5.000
Mat feed speed	m/min	3-18



LOWER CONSUMPTION = LOWER COSTS

SavEnergy allows the **use of power only when it is required**, making things operate only when they are really necessary. It means the machine automatically enters "stand-by" mode when there are no panels to be machined. Annual savings of up to 10% (opz.).