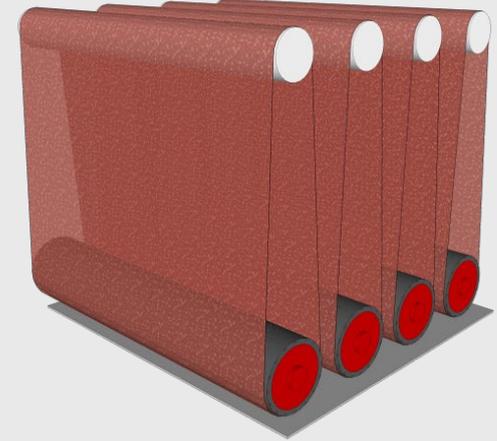
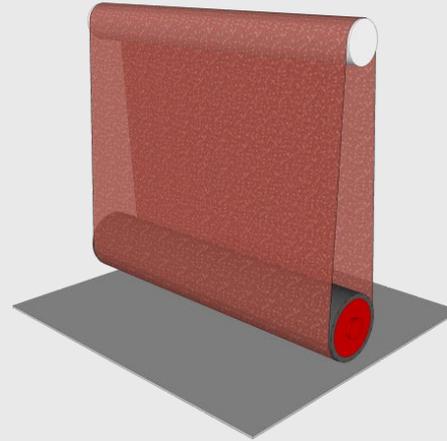
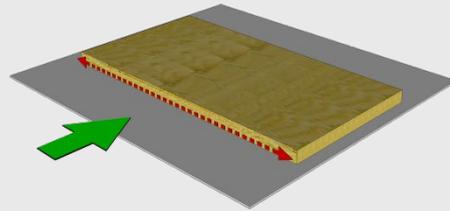


SERIE
S6



SERIE
S7





Working width

Sanding belt length

Maximum n° of w. units

S6
SERIE



1350
mm

2620
mm

4

S7
SERIE



1350 / 1650
mm

2620 / 3250
mm

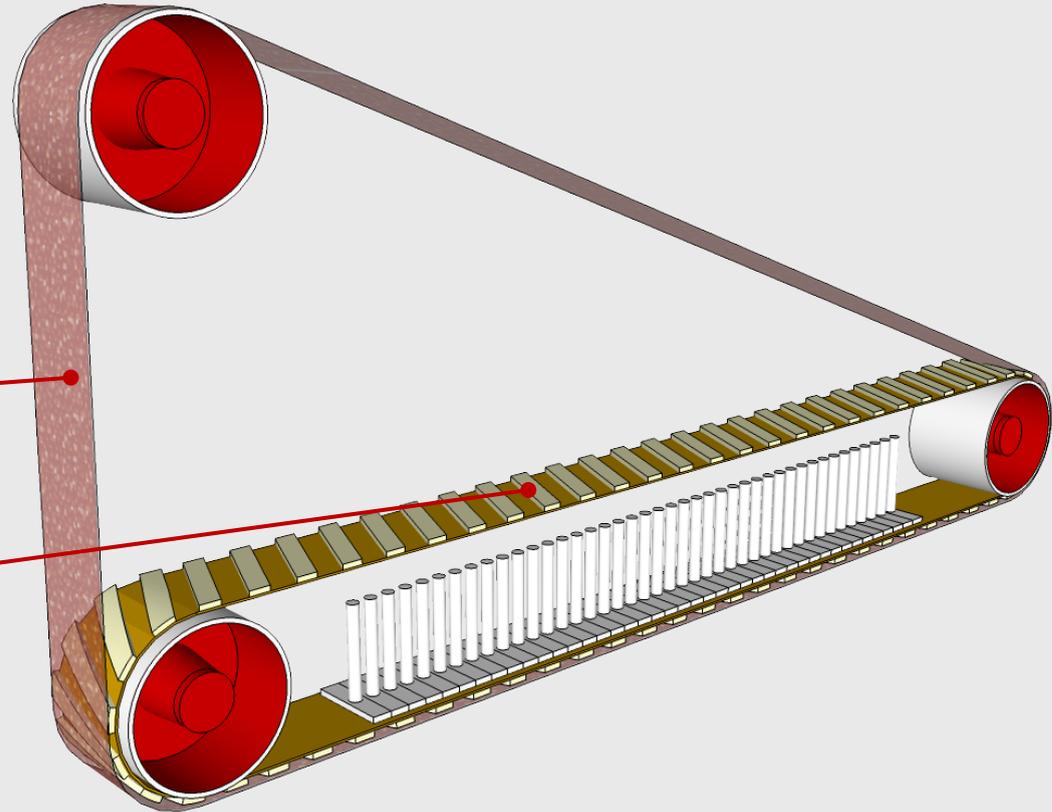
8



INTERNAL CROSS PAD unit

Sanding belt
length 5450 x 150 mm

Lamellar belt
length 4500 x 150 mm

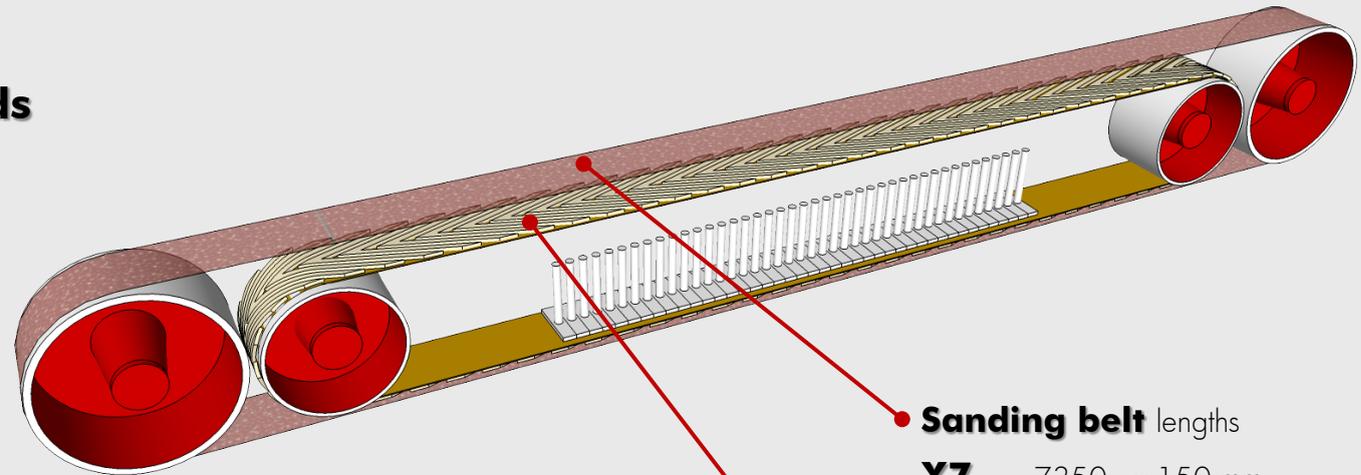


Lower space utilization, however with shorter abrasive belt length: the "small" difference (5%) between the cutting speed of the abrasive and the lamellar belts and the consequent slipping between them, allows a better finishing .
The different length of the abrasive and lamellar belts are varying the contact position of the felt lamellas on the abrasive belt at each turn.

External Cross Belt unit
standard equipped with
electronic controlled sectioned pads

Available only
for

S7
SERIE
machines



● **Sanding belt** lengths

X7 7350 x 150 mm

X9 9500 x 150 mm

X10 10080 x 150 mm

● **Lamellar belt**

Length from 5510 to 8200 mm
In relation to width of machine.

The Lamellar belt (chevron belt) is running at **different speed** than the abrasive belt, to improve the surface finish.

When not sanding the lamellar belt and the pad insert do not touch the back of the abrasive belt, thus avoiding wear and heat.



"4 Pulleys" Special WIDE CROSS BELT unit (XL)

Standard Cross Belt "X10"

Sanding belt dimensions 10.080 x 150 mm

Total abrasive surface **1,51 m²**

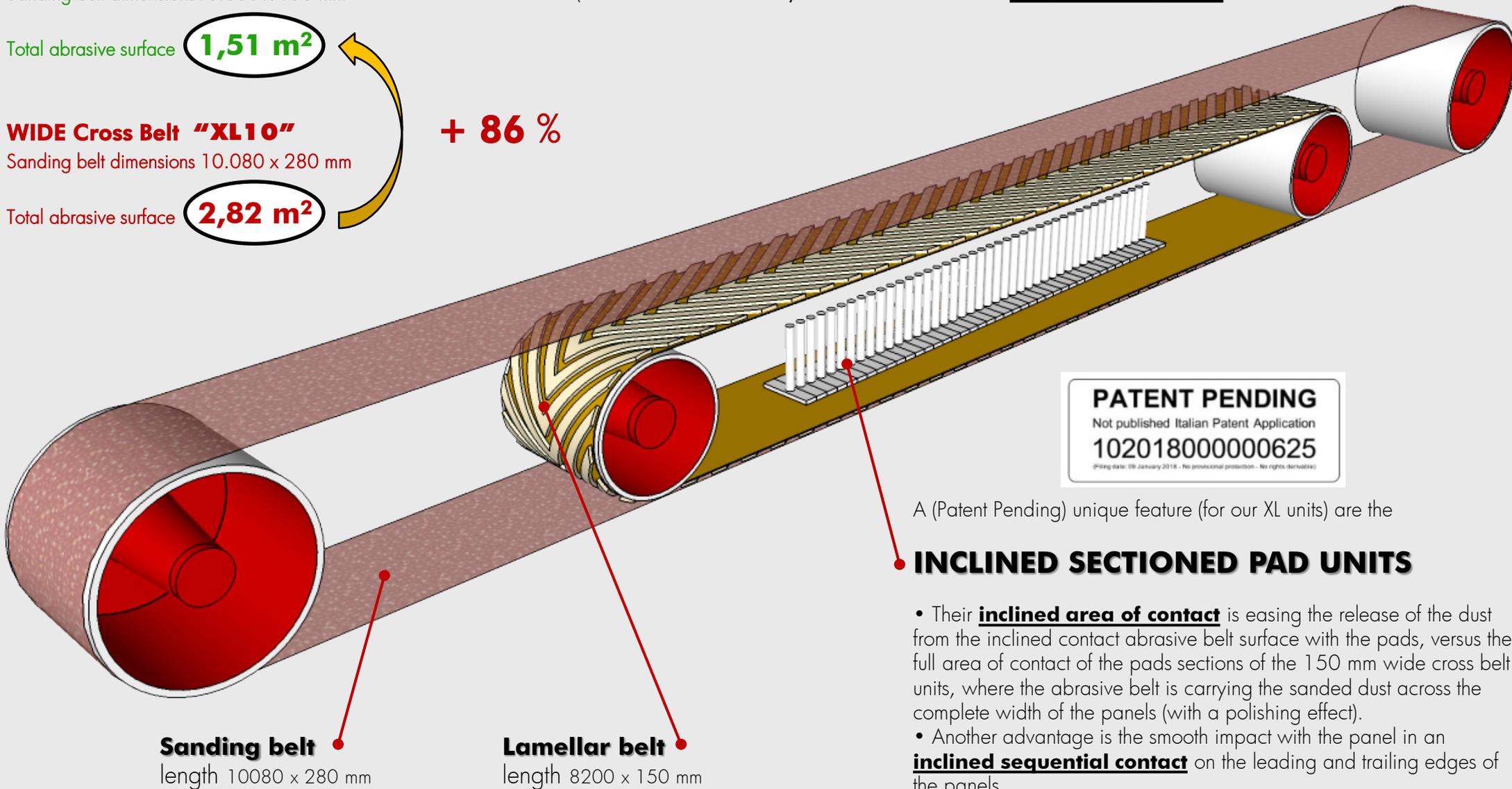
WIDE Cross Belt "XL10"

Sanding belt dimensions 10.080 x 280 mm

Total abrasive surface **2,82 m²**

+ 86 %

The 280 mm wide abrasive belt secure a **+86% of abrasive surface** (than the 150 mm belts) **therefore a much longer lasting time.**



A (Patent Pending) unique feature (for our XL units) are the

INCLINED SECTIONED PAD UNITS

- Their **inclined area of contact** is easing the release of the dust from the inclined contact abrasive belt surface with the pads, versus the full area of contact of the pads sections of the 150 mm wide cross belt units, where the abrasive belt is carrying the sanded dust across the complete width of the panels (with a polishing effect).
- Another advantage is the smooth impact with the panel in an **inclined sequential contact** on the leading and trailing edges of the panels.



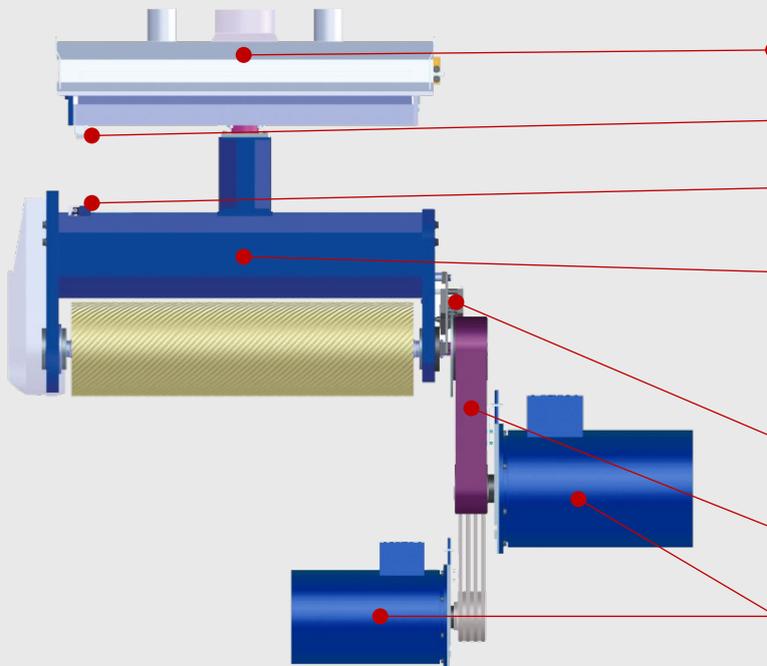
Tension rollers

The diameter of the tension roller is related to the rotation speed, equipped with large diameter bearings for a longer life time.

Contact cylinders

Specifically designed helicoidal grooves on the surface of the cylinders for cooling and downloading the air pressed between the cylinder and the abrasive belt.

Steel surface	For calibrating
Rubber covered (hardness 90÷80 [sh])	For calibrating & improve finish

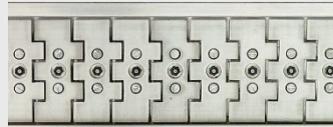
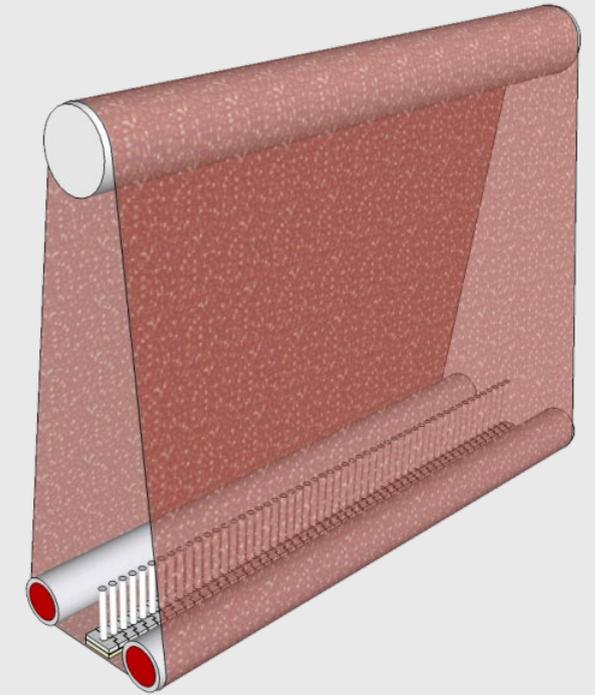


- Top dust hood to collect dust from the sanding belt cleaning blowers (to prevent depositing and clogging the abrasive belts).
- Sanding belt tracking system operating with a mix of electronic - pneumatic functions and with a timed jet blower to clean the photocells.
- Safety limit switches at the sides of the sanding belt to stop motors in case of contact (also to prevent abrasive belt breakage).
- Heavy-duty rigid beam supporting the working units and the belt tensioning rollers, eventually adjustable to reset parallelism with the feed table.
- Working units (cylinder-pads) - totally re-adjustable (right-left sides) to the feed table level of planarity.
- Pneumatic disk brakes, equipped with non ferrous brake-pads (to avoid sparks).
- Poli V belt system with double pneumatic tensioning system for high power motors, or V belts for standard power transmission, mechanical or pneumatic tensioning systems.
- Motors with power up to 30 kW are positioned inside the machine frame, Motors with power exceeding 30 kW are positioned outside the frame.



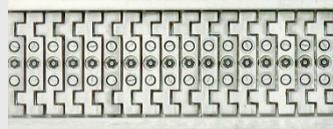
Longitudinal sanding unit for fine surface finishing.

- The sanding belt is pressed to the panel surface by a number of contact elements in relation to the pitch chosen (mm 32-16).
- The contact to the back side of the abrasive belt is obtained by a complex of : (1) steel blade of different thickness/flexibility, (2) heat-insulating felt and (3) graphite cloth all pressed down to the surface of the work-pieces at a certain pressure.
- The wide surface of contact of the pad assures a flat look to the panel surface.
- The segmented pad can compensate thickness and planarity variations of the panels surface without varying the sanding pressure always constant at all levels of stroke.
- The surface finish is not effected at variation of thickness within +/- 0,5 to 1mm. (in relation to the different abrasive belt grits in use).



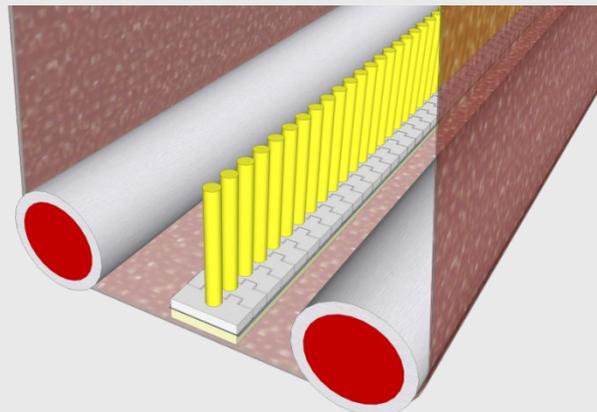
**CA32 /
VA32**

pitch of sections 32 mm
n°42 sections (1350 mm working width)
n°52 sections (1650 mm working width)

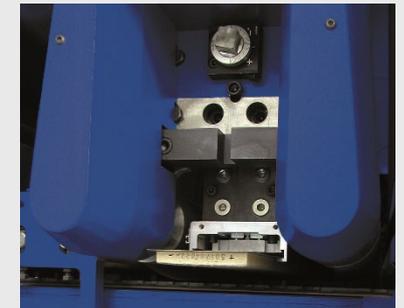


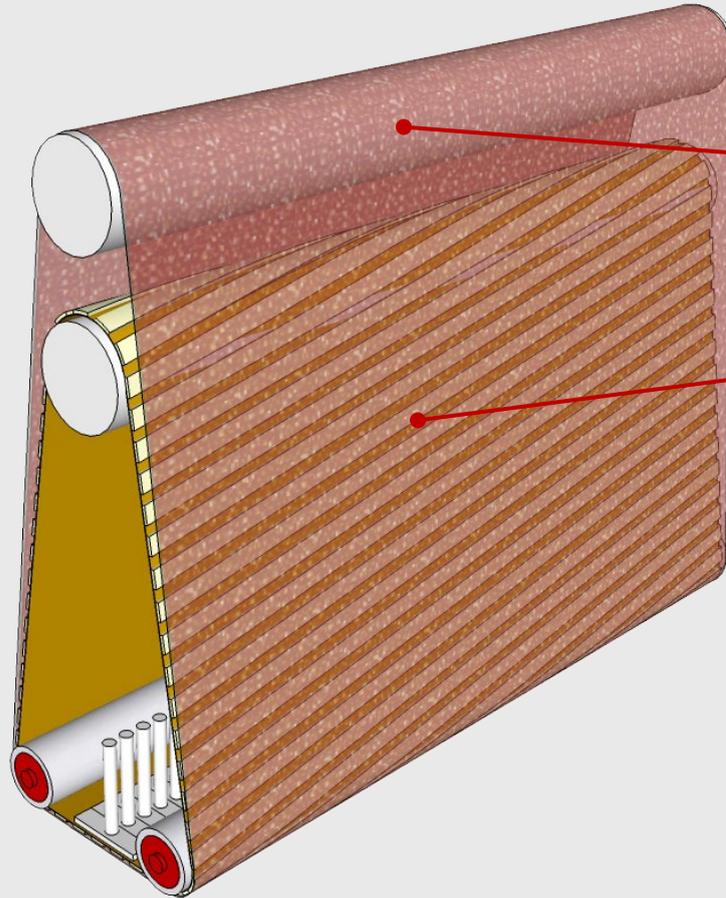
**CA16 /
VA16**

pitch of sections 16 mm
n°84 sections (1350 mm working width)
n°104 sections (1650 mm working width)



Quick - easy inspection and/or change of the graphite cloth, of the felt-rubber and of the steel blade inserts whichever may be required.





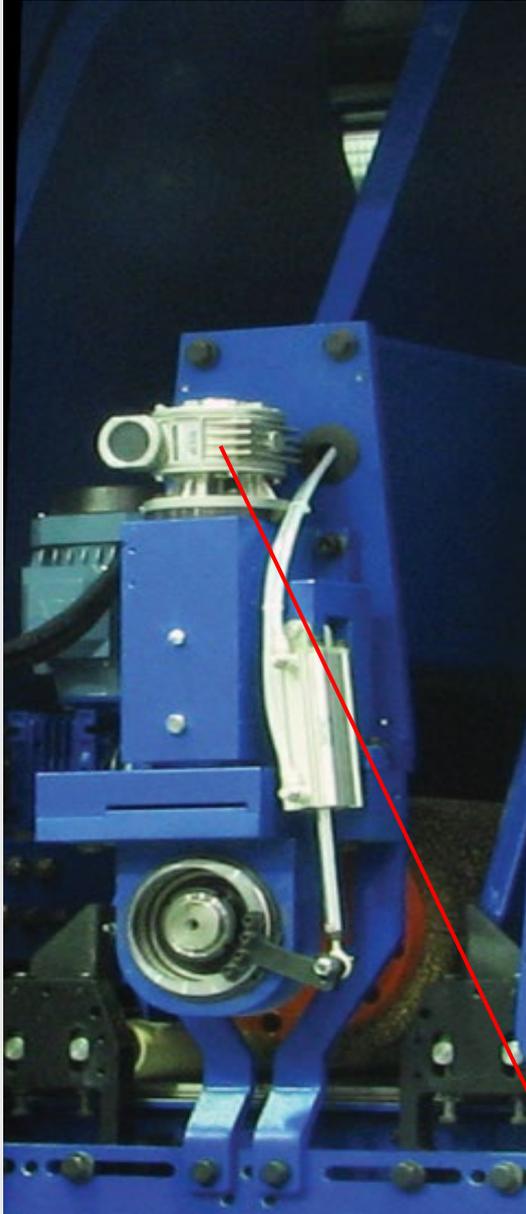
	S6 SERIE	S7 SERIE
Sanding belt lengths [mm]	2620	3250
Lamellar belt lengths [mm]	2120	2620

Advantages of the Superfinishing unit:

- the air can flow between the felt stripes of the lamellar belt and is cooling the abrasive belt;
- possible to utilize pads wider than normal;
- possible to diversify the finishing of the surface by utilizing lamellar belts with different ratio full/empty of the lamellas;
- thanks to the independency of the tensioning and tracking systems, we can take out the lamellar belt and work with the sanding belt only.

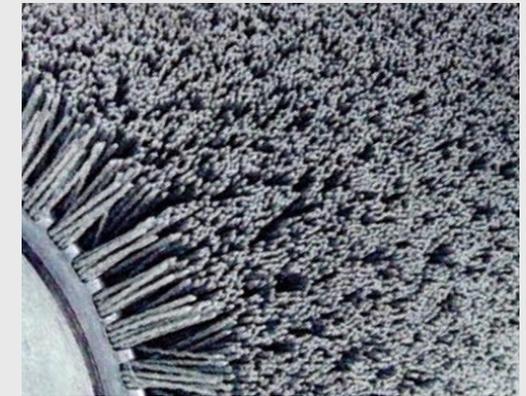
Quick - easy change of the **graphite cloth** and inspection of the **felt-rubber** and of the **steel blade inserts**



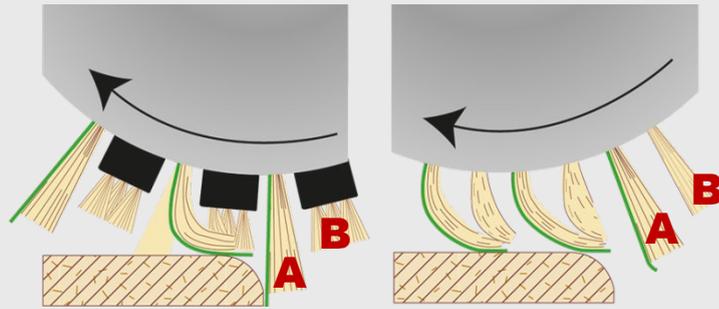


Bigger motors are required for the brush units, from 7,5 to 11 / 15 / 22 kW each working unit, if we need to increase of the feed speed of the structuring operation.

We can supply steel brushes with different density, anderlon or tynex brushes, and/or finishing brushes with softer material to eliminate fuzz.

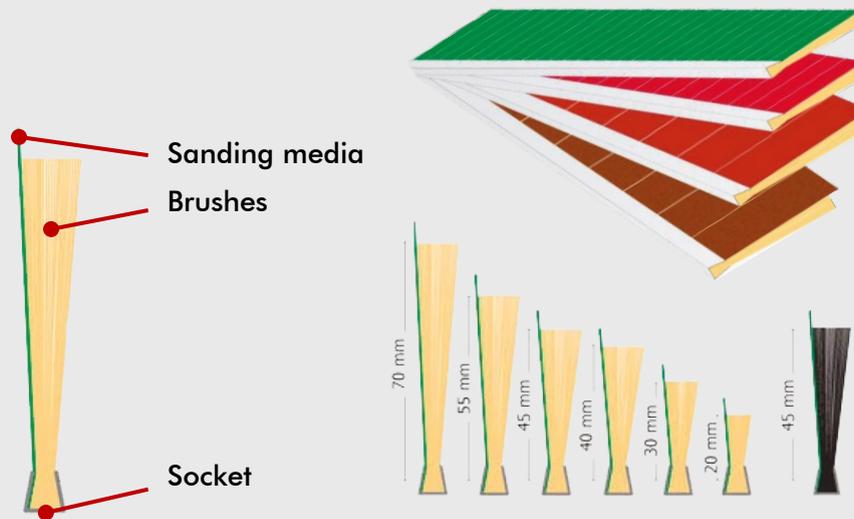


Motorized height adjustment of the brush unit, with electronic control of the height quota and centesimal read-out on the HMI.



The brushes with interchangeable inserts (of various types and brands) are an industrial solution to the effective elimination of fuzz and raised fiber before and during the finishing operations.

This wide adaptability is given by the possibility to insert sanding strips with different abrasive paper grit-hardness (A) in the same roller (ex. 120 + 220 + 260), with the possibility to change the back supports (B) also with different flexibility to increase or lower the brushing action on the work pieces.



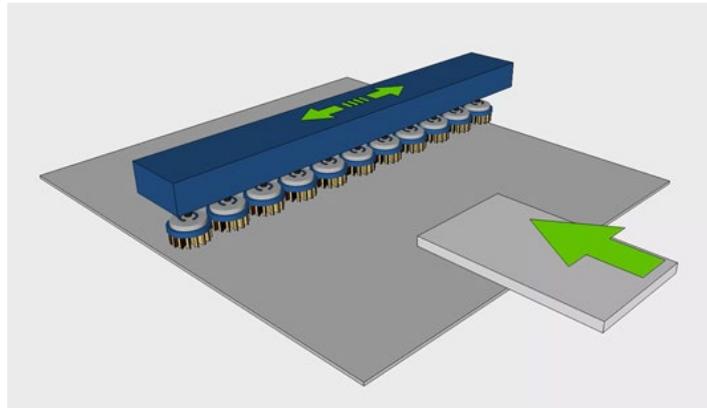
The F brush can be equipped with spring-loaded pressure rollers with tilting of the pieces that guarantees a pressure / hold optimal in all working conditions.





Vertical brushes with cross oscillation (adjustable in frequency) equipped with interchangeable brush-sanding elements. The V unit is completely extractable, for quick and easy change of the brush tools (quick-lock system for rapid change of tools). The V unit utilizes readily available, low-cost brushes as well as more specific brush tools with different materials and various diameters for special utilization.

Diameters of brushes variable from 80 to 135 and up-to 250 mm; the larger brushes assure longer lasting but higher distance between pressure rollers; short work-pieces may require vacuum feed table. These units can be assembled in any position inside our machines-frames, in variable number, depending on the required feed speed.





A number of turning turrets (depending on width of machine) - each with a set of 3 brushes with diameter variable from 80 to 130 mm each for quick and easy change of the brush tools (quick-lock system for rapid change of tools).

The R unit utilizes readily available, low-cost brushes as well as more specific brush tools with different materials and various diameters for special utilization. This working unit R is inserted inside the machine frame, the number of units varying depending on the feed speed required. To consider also the overall dimensions of the unit that allows the passage of short work-pieces between the front and rear pressure rollers of only 385 mm away between them.

The rotation of the turrets is inverter controlled as well as rotation of the brushes, increasing of up to 3 times the brushing effect.

Also the corner brushing improves by three times.

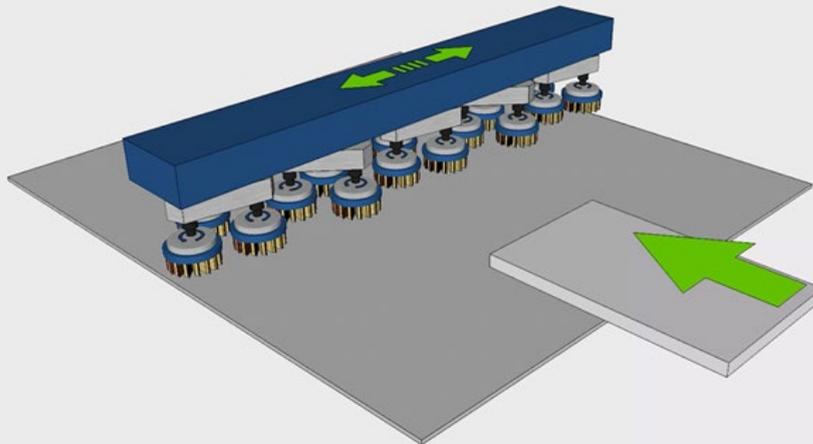
The rotation motor has a power from 6 to 12 kW (variable depending on machine width).

The lateral oscillation is adjustable in frequency, max oscillation mm. +/- 50, adjustable also in extension.

The oscillation is controlled by a brushless motor with Nm. 5,3

The lifting/lowering of the complete R unit is achieved by an independent motor 0,25 kW.

The working unit R is completely extractable, easy to change brushes and for maintenance.



Cleaning brushes

SE18 - SE25 unit can be equipped with motors from: 1,5 - 2,2 kW, that can be fitted with inverters for rotational speed variation.

The brushes can be:

- vegetal fibers for the dust removal;
- scotch-brite™ for veneer and lacquers finishing;
- with interchangeable inserts for the elimination of wood fibres;
- steel or tydex for structuring.

Single & Double Antistatic bars

Antistatic bars help lowering the static electricity from the panels.

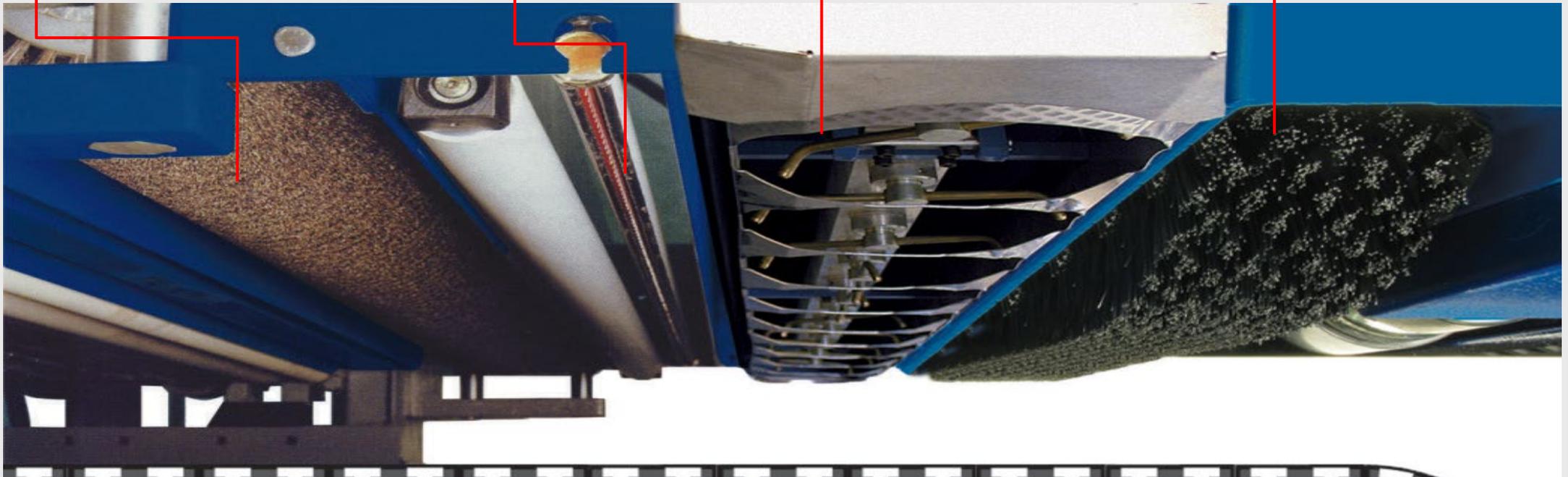
Rotary air jet blowers

The rotary blowers are helping to blow away the very fine dust from the surface as well as from the sides of the panels.

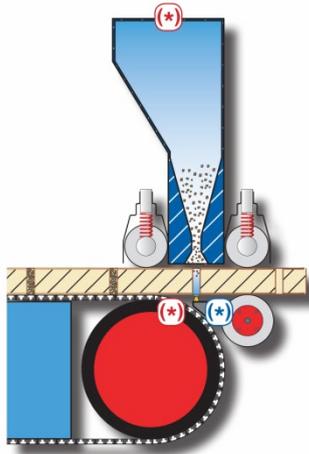
The new version of rotary blowers with lateral oscillation system are fitted with jet blowers with special nozzles that can blow away more effectively the dust from inside the holes of the panels.

Ultra-fine antistatic cleaning brush

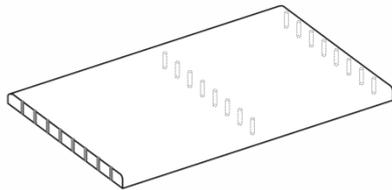
Brush complete with integrated micro-moistening, self-cleaning mechanism (compressed air nozzles, roto-rack), motor with inverter



RSHC – Bottom jet blower with opposed top dust hood

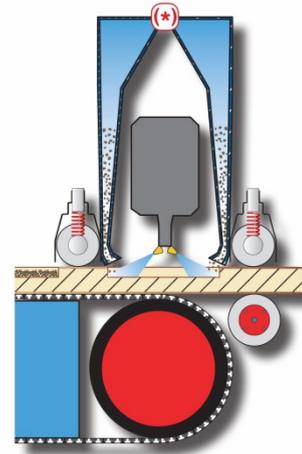


optional:
 (blue arrow icon) air jet blower to apply below the unit
 (red asterisk icon) Electro-ventilator 3 kW for air jet blower or to improve the dust extraction of the hood

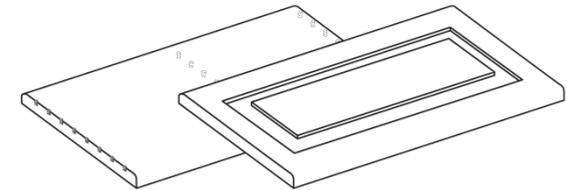


This cleaning system is completing the elimination of dust particles, especially from inside holes; if these holes are passing through the panels we can add a set of specific air-jet blowers under the panels to help expelling the dust from inside the holes. Finally, if the dust system is not sufficient, a vacuum ventilator with 3 kW of power can be added to take out the dust independently.

RDHC - Double Blowing blade with double dust hoods



optional:
 (red asterisk icon) Electro-ventilator 3 kW for air jet blower or to improve the dust extraction of the hood



This special cleaning system is particularly effective on panels with recessions, where the special blower system (activated by its own electro-ventilator kW3) is pushing the dust particles in direction of the two dust-hoods intakes in front and rear



Electric cabinet mounted on board.

The electric cabinet can be on board of the machine or separate, depending the size of the machine and the number of elements required (number of working unit, inverters, cooling system etc.)

The cabinet on board is surely better especially when the machine is inserted in complete lines as there are not wires of connection visible.

When the size of the cabin does not make possible the cabinet on board, the external cabin must be positioned at service side, opposite to the working side (that of the abrasive belts insertion).

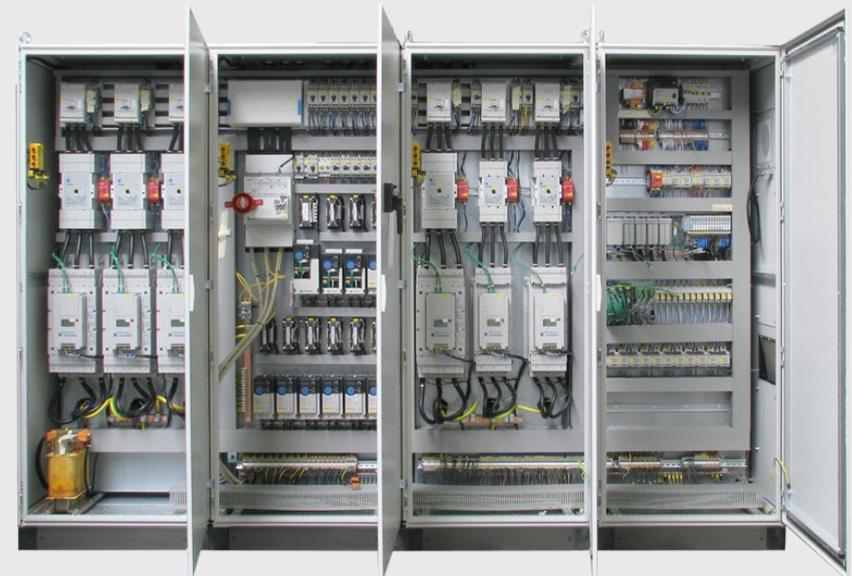
The cables standard have a distance of max. 5 meters from the machine; longer distances are possible at cost and with a pre-agreed system of connection of cables (above the machine with a metal connection to be defined at time of order, or under the floor)

All doors are equipped with a safety switch with separate mechanical interlock actuator to prevent the doors to open with main motors in motion.

The opening of doors can only be allowed with motors stopped and not turning, by manually unlocking the selector positioned by the HMI control panel.

With electric power off a special key will release the lock of the doors.

The inverters can be mounted on the rear side.





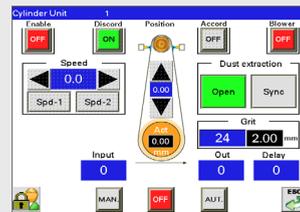
HMI "VISION" (Touch screen)

The HMI panel VISION enables the visualization in a color touch-screen monitor of the actual setup data and operation data of the machine.

In the HMI we have a number of pages available for many machine functions, each function can be stored forming complete working programs, easy to store and recall with codes.



Main



Working units



Save programs



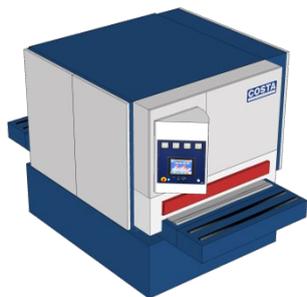
Interconnecting possibilities

Option available: wired connection to a Line Manager PC or PLC to remotely control the machine parameters.

HMI CONTROL - Available Units



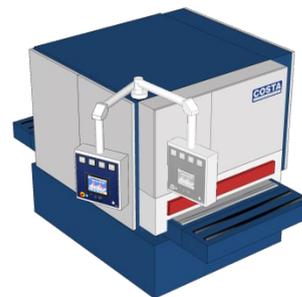
FFS
Fix control unit positioned on the electric panel on board of machine



FF45
Control unit inclined at 45°, positioned on the electric panel on board of machine



FO90
Control unit orientable at 90°, positioned on the electric panel on board of machine



FO90
Control unit of machine separate from electric panel, positioned on a top swinging support at 90°



FPF
Control unit or machine separate from electric panel, positioned on a podium on floor

