Sanding

Flexible Solutions for

Wide Belt Sanding Machines

S6 GU 1350

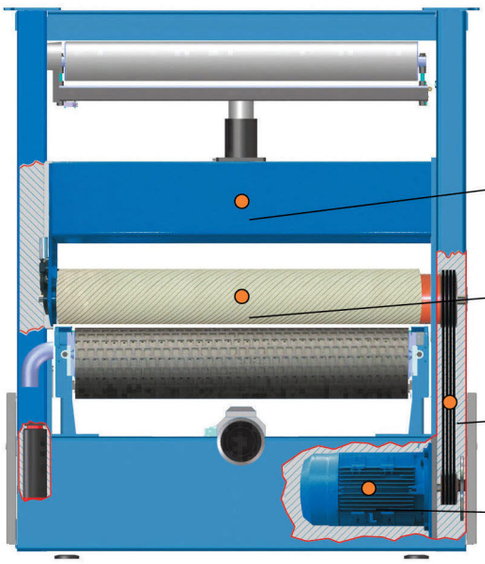
Universal Sanding (For small volume Production)

COSTA LEVIGATRICI

Wide belt Sanding Machines

Frame

The rigidity of the structure is essential to guarantee a perfect process of the panels.



Large beam for supporting the working unit and the tensioning system

Working unit totally adjustable on right-left sides to reset parallelism.

4 V belts for transfering up to 37 kW, with mechanical tensioning system

Main motor (max 30 kW) with pneumatic disk brakes, inside machine frame for lowest noise emmissions

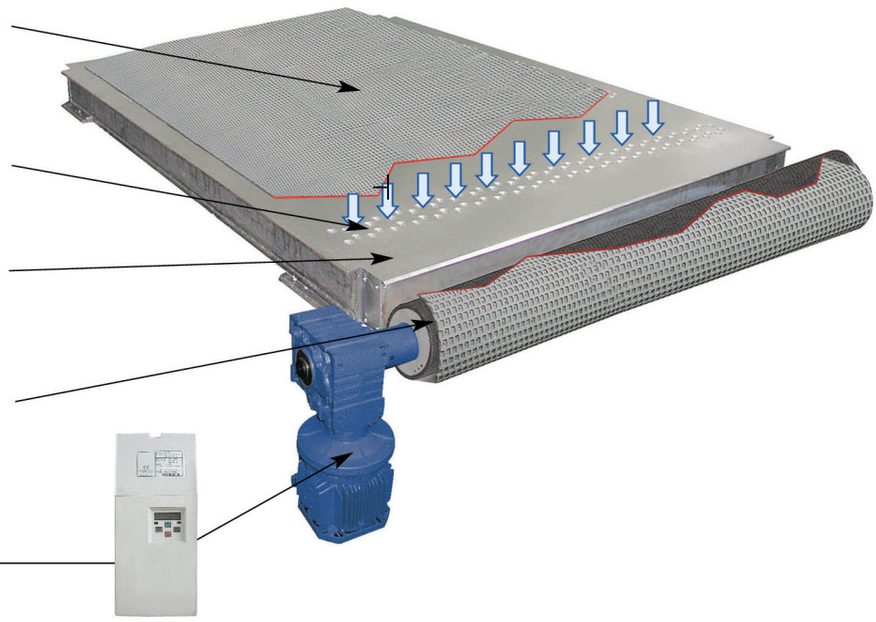
Feed system designed for heavy duty purposes and long lasting

Rubber feed belts with 3 layers of cloth without joint, for best surface planarity and longer lasting; thick rubber layer on top to allow many re-grinding operations over the years of utilization.

Vacuum intakes positioned under the working units to diminish the requirement of vacuum-power and to concentrate the vacuum pull only where needed.

T1 Steel feed-table with surface hardness of 260 Brinnel for longest lasting grinded to fine finish to prevent internal wearing of the feed belt.

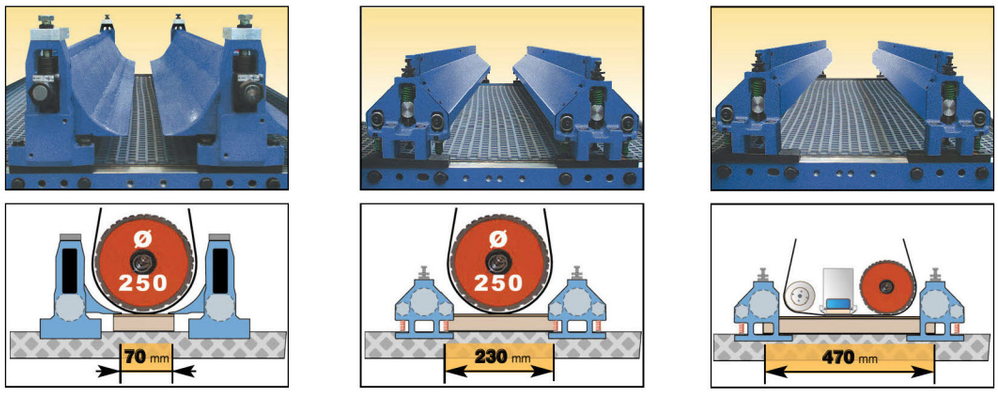
Large driven traction roller for wide contact area, not to stress the feed belt - traction roller rubber covered to increase the capacity of traction and to avoid sliding (that can deteriorate the feed belt).



Feed speed variation controlled by inverter from **3** m/min to **20** m/min

Pressure units

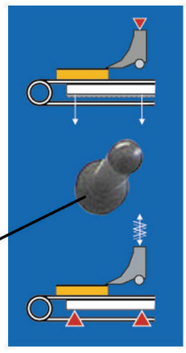
The safe traction of the work-pieces is determined by the rigidity of the pressure units; at same time these units must be able to adapt to thickness variations of work-pieces, this is the reason why we link them with springs/pneumatic pistons to the machine frame, to be rigid or flexible depending on mode of utilization (calibrating or fine veneer-lacquer sanding).

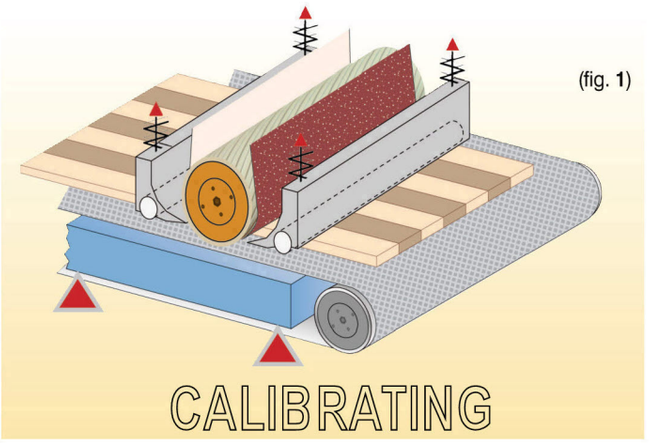


Multifunction feed table: Rigid / Floating

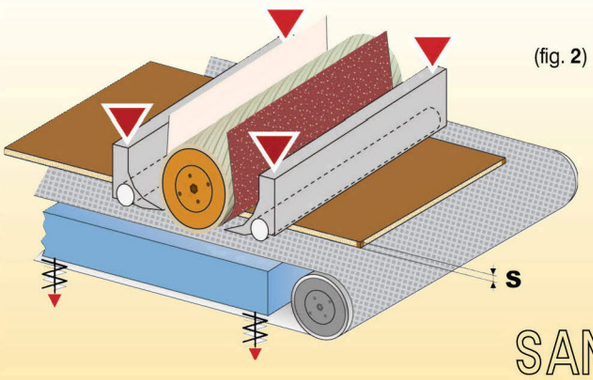
In calibrating mode (fig. 1) the feed table must be rigid to assure a high level of thickness tolerance of the processed workpieces, while the pressure units are free to float.

In veneer/lacquer sanding operation (fig. 2) the pressure units are set rigid and the feed table works in a floating mode. - This type of setting allows the levelling of different panel thickness (D) up to a maximum of 2 mm (fig. 3).
Setting operations of feed table and pressure units are automatically made by a quick set device.

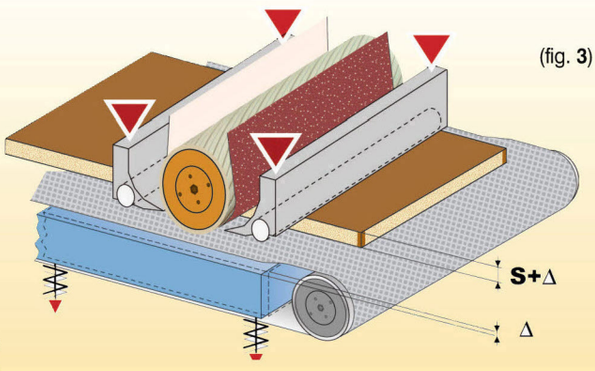




(fig. **1**)



(fig. **2**)

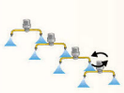


(fig. **3**)

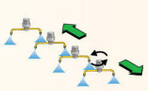
SANDING

Panel Cleaning Units in rear

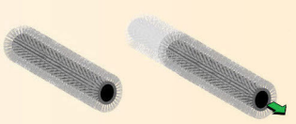
B1



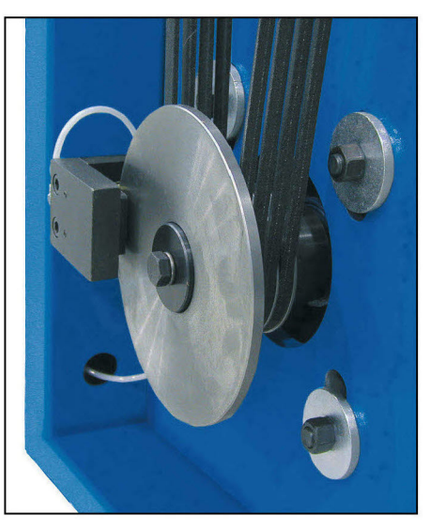
JR- Air jet blowers



JRO



Brushes

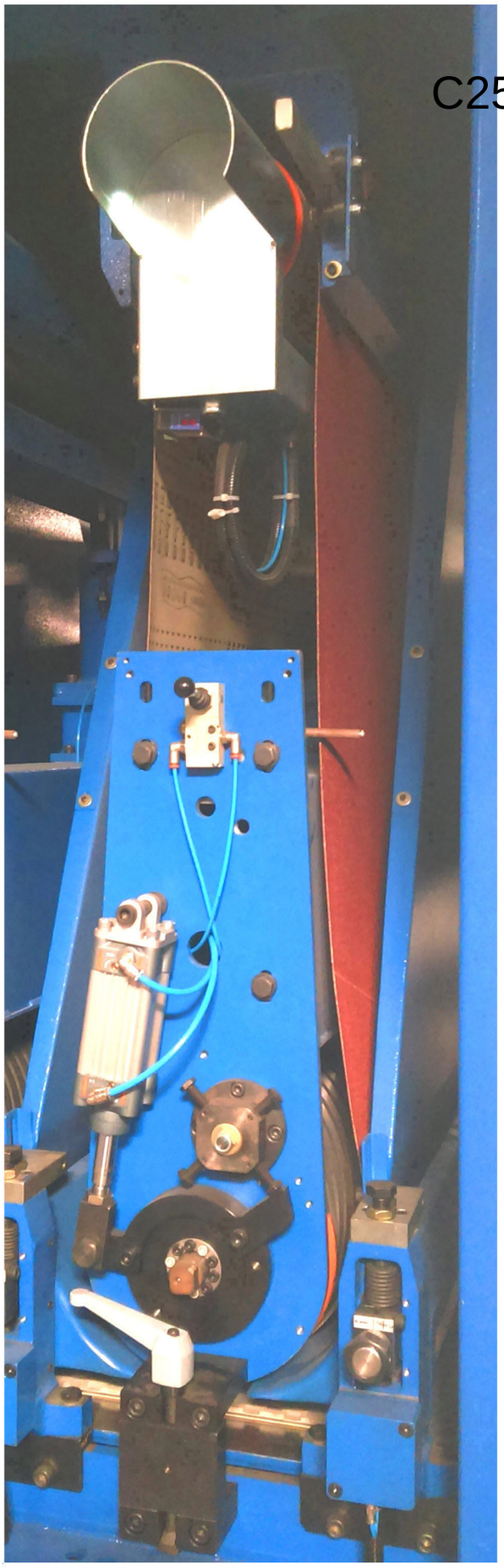


Disk brakes

Pneumatic operated disk brakes to stop the working units within few seconds from emergency.

Sanding belt oscillation system

Sanding belt oscillation system with electronic dual-photocell.
Complete with safety micro-switch to stop the machine in case of misalignment or breakage of the abrasive belt .



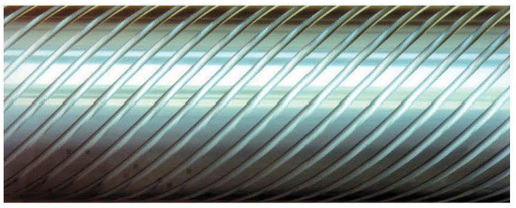
C25

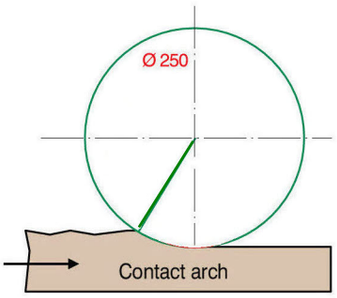
C25 - Cylinder

You can have rubber covered or steel surface cylinders depending on utilization at same cost.

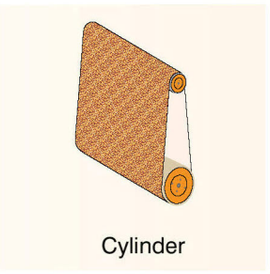
The rubber hardness determines the level of adaptation of the sanding action of the cylinder on the panel surface in white-wood/lacquer sanding operations.

A soft rubber covered cylinder has more adaptability to the unevenness of the surface therefore is preferred for veneer-lacquer sanding operations, while a hard rubber cylinder has less or no adaptability to the surface (thus better for calibrating operations).





For calibrating a smaller diameter cylinder is more aggressive, the angle of contact is more open, the surface of contact is narrower, this means less fritction and more take away.

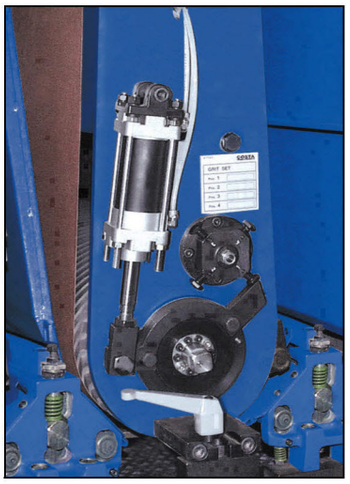


GSE Electronic Grit-Set (optional)

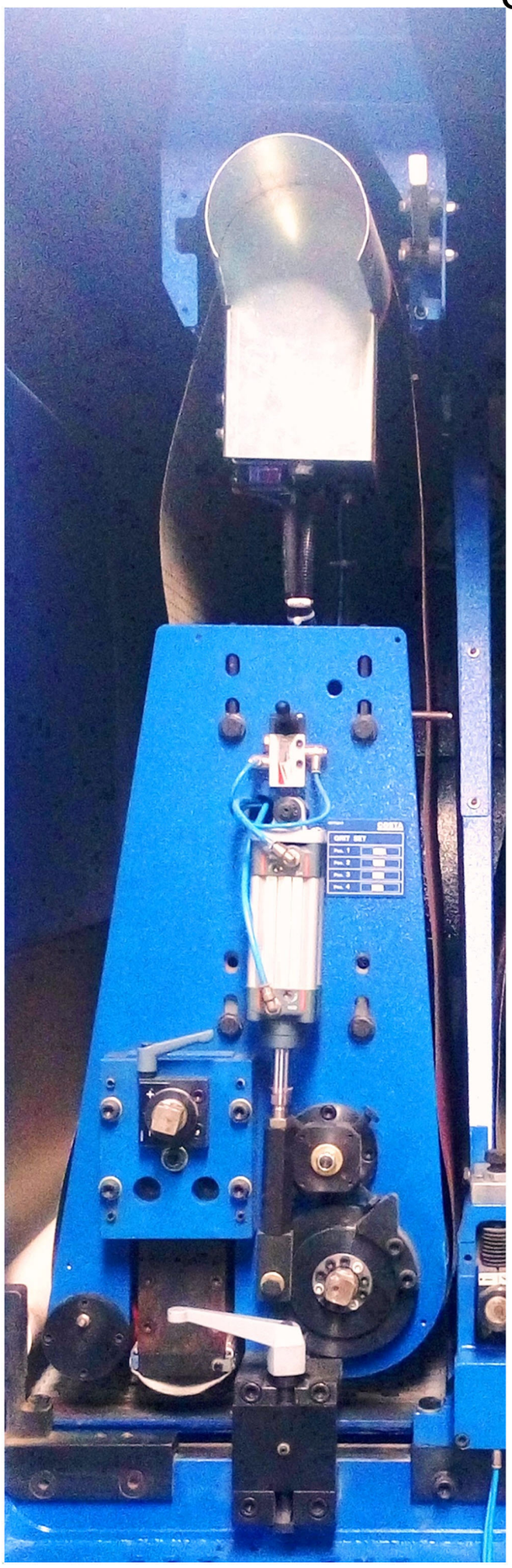
Centesimal positioning of the working level of the cylinder unit.
Exclusion of cylinder in emergency (stand-by)

GSP Pneumatic Grit-Set (optional)

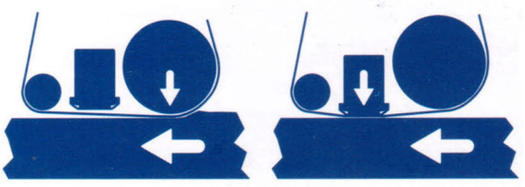
To position by pre-set steps the working level of the cylinder unit. - Exclusion of cylinder in emergency (stand-by)



U - Combi

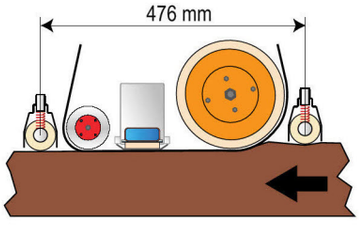


Multifunctional unit to calibrate and fine-sand with the utilization of one or the other of the two units



UCK

Combi unit cylinder + pad - a multifunctional unit to calibrate and to fine-sand with the utilization of one or the other of the two units



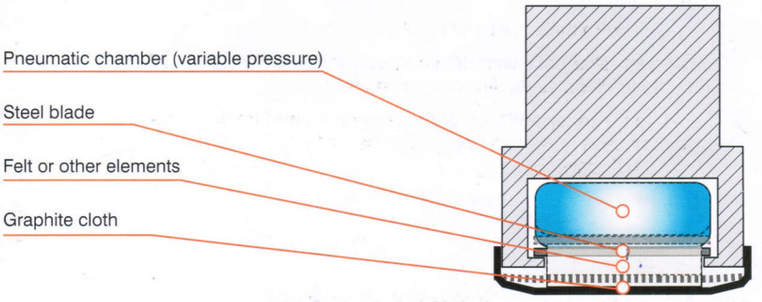
- Cilinder rubber covered Ø 200 mm, with a fine positioning system, with electronic grit-set (opt) or with pneumatic control in-out (standard)

- T1 pneumatic pad unit standard, or (opt) electronic controlled sectioned pad TP32 with pitch of sections 32 mm or TP16 with pitch of sections 16 mm, utilized for finishing sanding operations.

Combi

Pneumatic PAD

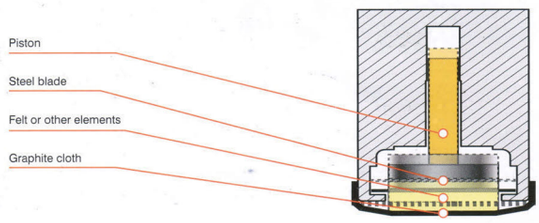
The pneumatic pad units press on a steel + felt + graphite contact elements in contact with the back side of the sanding belts and on-to the panel surfaces.
These pads utilize a wide air-chamber with variable pressure.

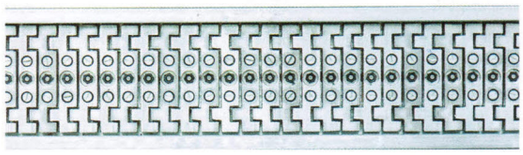


Electronic Sectioned PAD (optional)

A very effective and reliable system with a bronze cartridge, containing the stainless steel piston, thus totally unaffected by rust, with a stroke up to 2 mm (the real limit being the actual sanding belt flexibility).

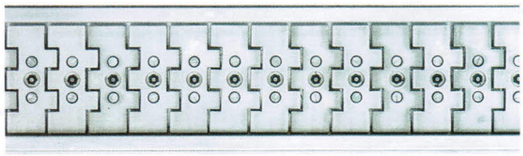
The pneumatic system can provide a contact pressure variable from 0 to 6 kg/cm^2 for each section; the value applied is set by our PC program, depending on sanding belt grit and type of finish required.



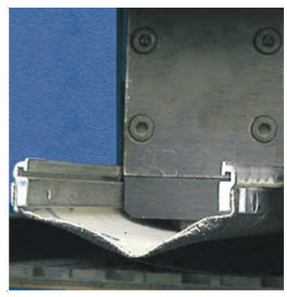


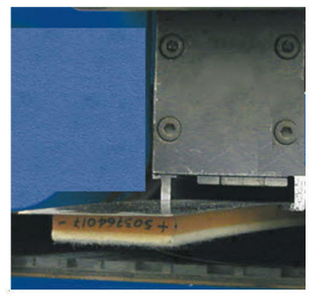
Contact actuators (CA16)
pitch of 16 mm
between sections

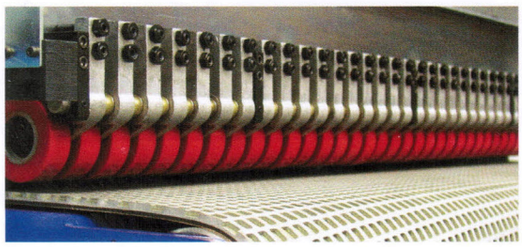
Contact actuators (CA32)
pitch of 32 mm
between sections



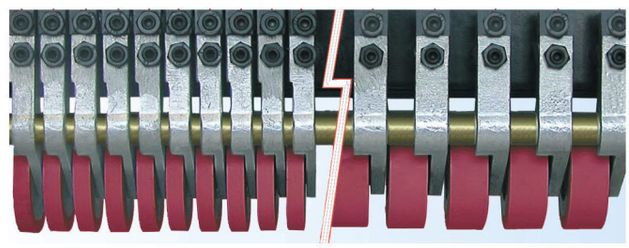
* Quick - easy change of graphite cloth and inspection of the felt-rubber and of the steel blade inserts

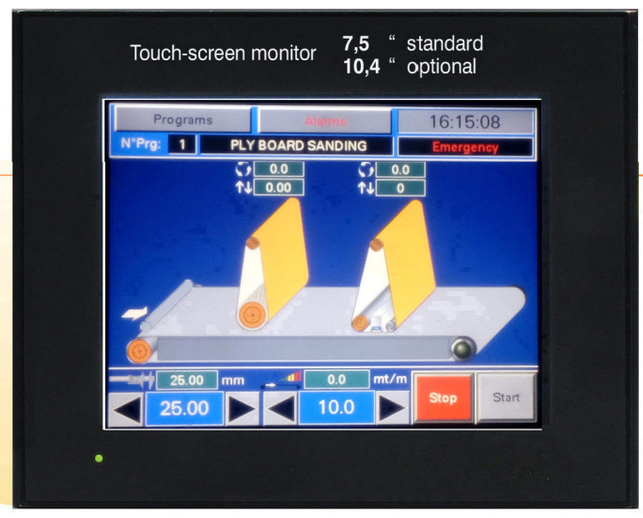






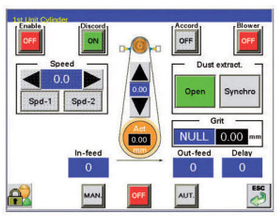
Definition Barrier (DB)
to detect size and form
of panels to process
with sectioned pads

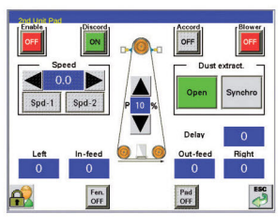


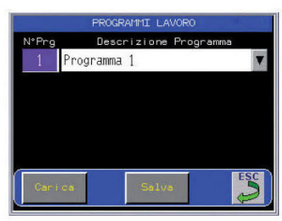


PLC VISION (optional)

The PLC panel VISION enable the visualization in a touch-screen monitor of the actual setup data and operation settings of the machine, to be filed in a number of complete working programmes.







The PLC contains a number of pages each for a machine function, that can be included in working programmes, to store and recall with own codes.

Series S sanding - K calibrating: Accessories & Options

Oscillating blowers (standard)

Oscillating air jet blowers for sanding belt cleaning, with high efficiency jets.

Electromechanical Panel (standard)

Control panel positioned in front of the machine, with push-buttons for all motors and amp-meter readers of power utilization of the working units. Digital positioner with read-out of the thickness adjustment with decimal accuracy.
Range change switch for the variation of the feed speed. Diagnostic leds of electric-pneumatic-safety problems.
Emergency stop and reset.

Main technical data

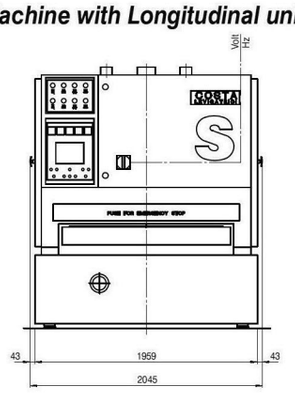
Longitudinal sanding belt dimensions	1380 x 2620	[mm]
Useful working widths	**1350**	[mm]
Standard machine opening	3 ÷ 160	[m/min]
Feed speed of calibrating machines	3 ÷15	[m/min]
Feed speed of sanding machines	4 ÷ 20	[m/min]

Air volume required for each unit

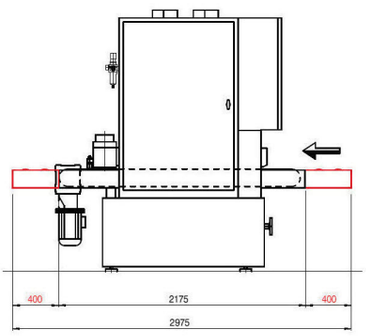
	ø outlet	20	24	28	[m/s]
Each longitudinal working unit	160 [mm]	1447	1737	2026	[m³/h]
Each F250/350 - S18/25 - SB18/25	160 [mm]	1447	1737	2026	[m³/h]

1st Unit Cylinder

Machine with Longitudinal units



version with 2 working units



We reserve the right to change features without any notice.

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