S1

CALIBRATING SANDING MACHINE

Biesse

STURDINESS AND FUNCTIONALITY

THE MARKET EXPECTS

the ability to handle orders of different sizes and types, with guaranteed delivery times and high quality standards.

BIESSE RESPONDS

with technology solutions that can be customised depending on manufacturing requirements and deliver high finished product quality and productivity. **S1** is the calibrating and sanding solution that combines high performance standards with reduced working dimensions, at a very competitive price. Ideal for small and medium-sized businesses, the S1 ensures maximum reliability and precision, derived from the experience gleaned from higher-end machines.

S1

- **EXCEPTIONAL FINISH QUALITY**
- **TENORMOUS VERSATILITY AND FLEXIBILITY OF USE ON A MACHINE**
- **SUPERB RESULTS GUARANTEED BY CUTTING-EDGE TECHNOLOGY**


VIET
S1

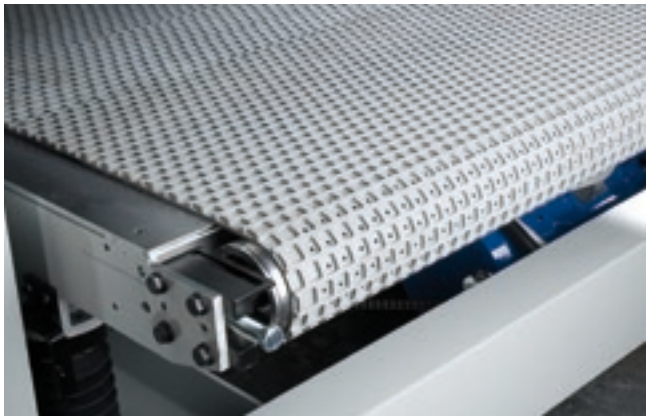
EXCEPTIONAL FINISH QUALITY

The robust and stable structure of the S1 ensures precision and reliability.

The **base** has a one-piece frame in welded steel. The generous thickness of the materials used guarantees the stability and durability of the entire structure.

In the mobile head version (optional), the work table is positioned at 900 mm from the ground, thus ensuring ease of panel loading and unloading.

S1 is equipped with a thick, wear-resistant stainless steel work table that guarantees precision and sturdiness during any type of machining operation.

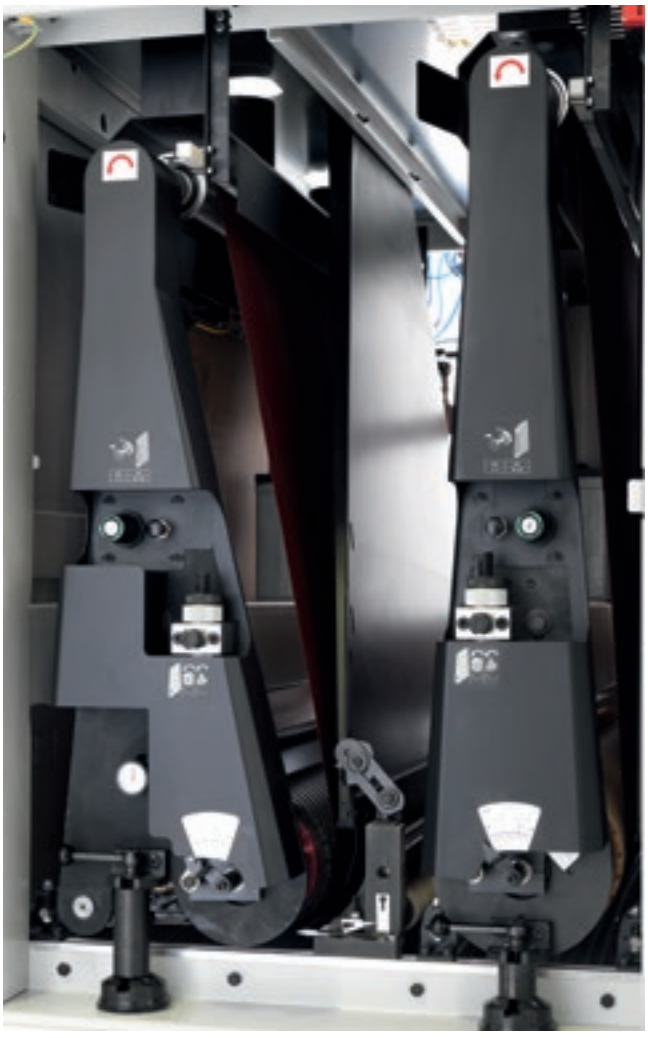


Pad

Roller

Combined

S1 is the calibrating sanding machine that can accommodate up to 2 working units, ensuring high finish quality across all products and superb machining flexibility.



Roller version, combined roller/pad.

Combined version roller/pad, pad.

CAN BE CUSTOMISED IN ACCORDANCE WITH CUSTOMER REQUIREMENTS

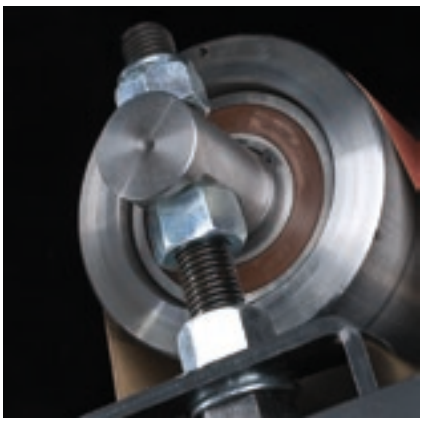
Vertical LED bar with different colours to understand the machine status at any moment.

The **Roller unit** is extremely precise and effective. Depending on the hardness of the rubber used and the roller's cross-section, the unit can be used to calibrate, sand or finish.

Available cross-section sizes:

190 mm
240 mm

For calibration operations, the machine can be equipped with 190 or 240 mm cross-section steel or 20-90 shore rubber rollers, fitted with 25 Hp motors.



Belt tensioning
The large tensioning roller allows for perfect belt translations in all working conditions.

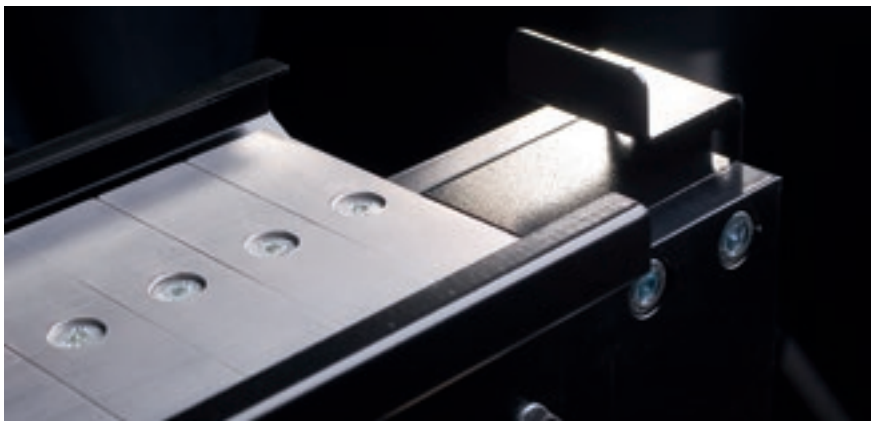
Braking system
Biesse uses disc brakes with floating callipers for every engine installed. This motorcycle-derived system guarantees speed and safety.

HIGH-TECHNOLOGY TO ENHANCE MACHINE PERFORMANCE

The S1 is built using the same technology implemented on higher-range machines. Optimal quality, less waste and significant cost reduction.

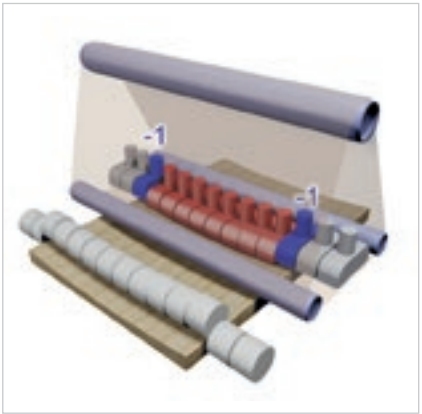
The **sectioned electronic pad** enables users to perform high-quality sanding operations thanks to the electro-pneumatic sectors that are only actioned on the panel's surface. The vast range of possible adjustments offers specific functionalities for different types of processing operations.

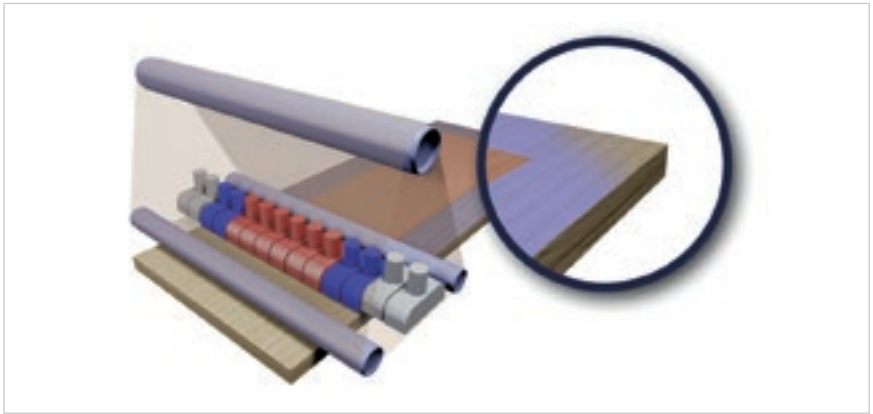
The **electronic pad equipped with HP (High Performance) technology** enhances processing results, both as far as surface flatness and finish are concerned.



- **+30% greater belt life expectancy.**
- **-30% consumption of electricity.**
- **Higher finish grade.**
- **Even surfaces.**
- **-20% dust.**
- **No excessive sanding.**

Save corner.
All electric pads, with IPC controls, are fitted with the exclusive patented Corner Saver function. The system limits the sanding time on the corners of the panel, thus preserving the most delicate portions of the panel's surface.

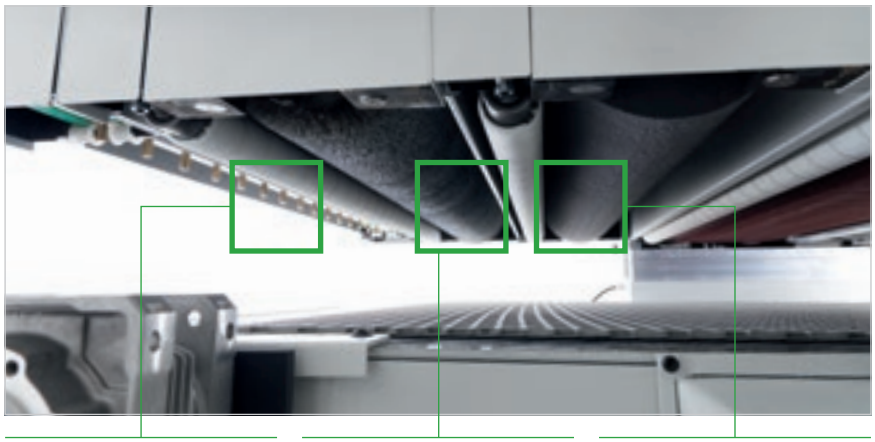




SUPERB RESULTS GUARANTEED BY CUTTING-EDGE TECHNOLOGY

Combined unit
The Kombi unit, (patented Viet 1967), allows for two tools to remain in contact with the same abrasive belt. Ideal for the operations in which differentiation between types of work is necessary, with no need to add an additional working unit.

Fine surface finishing and polishing for all types of application



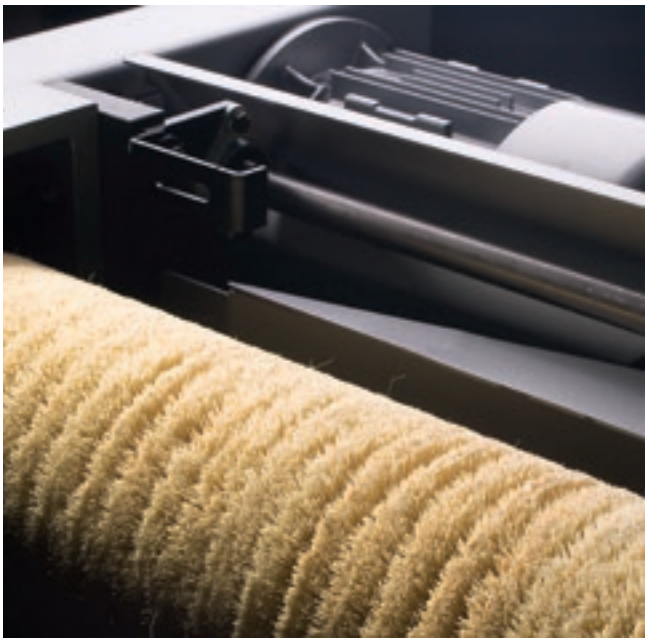
The **linear blower** cleans machining dust from the panel.

The **brushing unit** enables the customer to highlight the wood grain of processed panels.

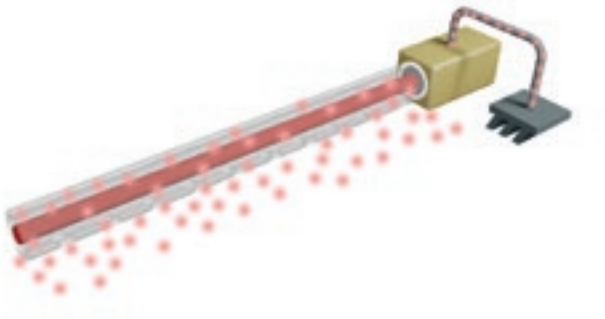
Scotch brite
The scotch brite unit is suitable for adding a satin finish to the panels after the smoothing cycle. It provides a uniform finish, using open-pore cycles.

The **brushing unit with abrasive inserts** can be equipped with a transverse oscillation system, to ensure that the finish quality of the product is entirely uniform. Abrasive bristles can be replaced quickly and without the need of removing the unit from the machine.

OPTIMAL PANEL CLEANING WITH A GREAT PRICE/PERFORMANCE RATIO

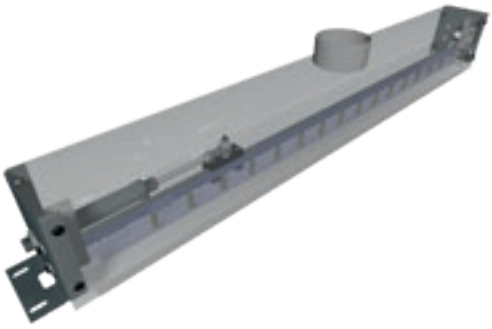


The **panel cleaning brush** can be fitted with bristles of different materials to deep clean the machined panels.



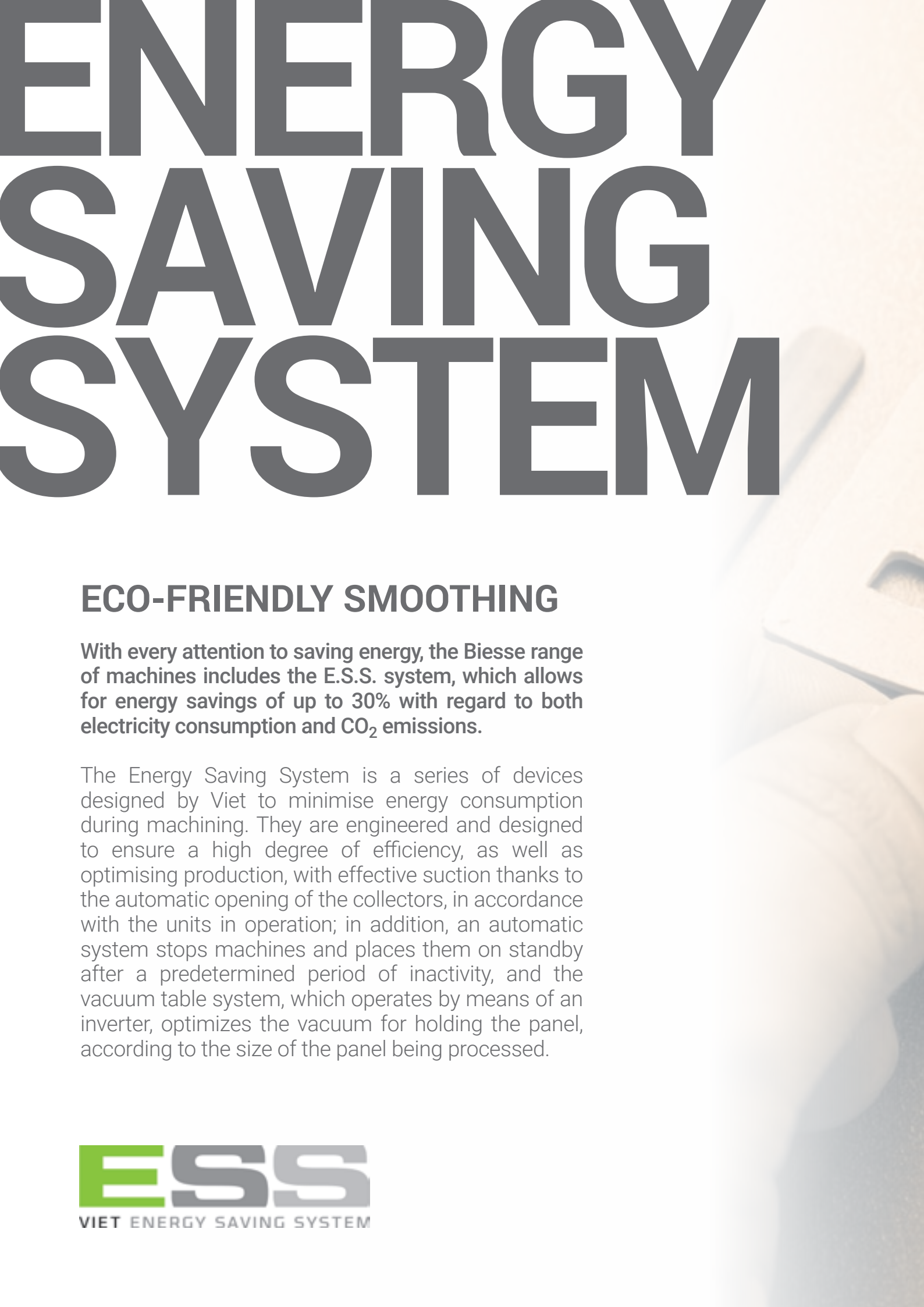
The **anti-static bar** eliminates electrostatic charges on painted panels.

The **rotating blower**, positioned downstream of the machine, enables optimal cleaning of the panel's surface at the end of the sanding cycle.



The **linear blower** is used to finish cleaning the panel's edges. Ideally, it should be coupled with the rotating blower.

ENERGY SAVING SYSTEM



ECO-FRIENDLY SMOOTHING

With every attention to saving energy, the Biesse range of machines includes the E.S.S. system, which allows for energy savings of up to 30% with regard to both electricity consumption and CO_2 emissions.

The Energy Saving System is a series of devices designed by Viet to minimise energy consumption during machining. They are engineered and designed to ensure a high degree of efficiency, as well as optimising production, with effective suction thanks to the automatic opening of the collectors, in accordance with the units in operation; in addition, an automatic system stops machines and places them on standby after a predetermined period of inactivity, and the vacuum table system, which operates by means of an inverter, optimizes the vacuum for holding the panel, according to the size of the panel being processed.

ESS

VIET ENERGY SAVING SYSTEM

EASE OF USE AND POWER

IPC is a range of **control systems** (optional) that are integrated into the machine via 8" or 15" Touch Screen monitors. This control system supports the management of all machine parameters, providing the operator with timely and intuitive information. The industrial PC processor provides control and feedback information to the machine in real time, making it extremely user-friendly for the operator.

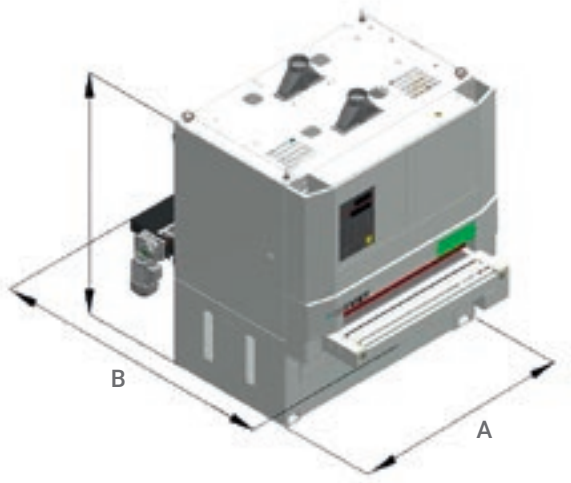
The IPC system is the highest expression of sanding machine management technology available on the market.

Sectioned pad management.

Alarm checks.

Belt wear.

TECHNICAL SPECIFICATIONS



A	mm / inch	1760 / 69.2	2010 / 79.1
B	mm / inch	2235 / 87.9	2235 / 87.9
C max (2200 production)	mm / inch	2235 / 87.9	2235 / 87.9
C max (2620 production)	mm / inch	2445 / 96.2	2445 / 96.2
Maximum operating width mm 1100 1350	mm / inch	1100 / 43.3	1350 / 55.1
Min-max processing thickness mm 3 - 160 3 - 160	mm / inch	3-160 / 0,1-6.2	3-160 / 0,1-6.2
Dimensions of sanding belts (2200 production)	mm / inch	1130x2200 / 44.4x86.6	1380x2200 / 54.3x86.6
Dimensions of sanding belts (2620 production)	mm / inch	1130x2620 / 44.4x103.1	1380x2620 / 54.3x103.1
Advance speed	m/min ft/min	3-16 / 9.8-52.4	3-16 / 9.8-52.4
Operating pressure	bar	6	6
Weight	Kg	2350	2690
Motor power of up to	kW	18,5	18,5

The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features.
Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted sound pressure levels at the machine entry operator station: 75.0 dB(A) without load, 76.0 dB(A) with load. Weighted sound pressure levels at the machine exit operator station: 70.5 dB(A) without load, 71.0 dB(A) with load.

Viet Srl. designed the machine to reduce airborne noise emission at source to the lowest possible level, in accordance with the requirements of Community Directive 2006/42/EC, and commissioned a test to determine the sound pressure emission level at the operator station for the smoothing/sanding machine. Standards: The measurement was carried out in compliance with UNI EN ISO 19085-8:2018, UNI EN ISO 11202:2010. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether further precautions are necessary. The factors determining the noise levels to which the operative personnel are exposed include the length of exposure, the characteristics of the work area, as well as other sources of dust and noise, etc. (i.e. the number of machines and processes concurrently operating in the vicinity). In any case, the information supplied will help the user of the machine to

CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.

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80% OF SUPPORT REQUESTS SOLVED ONLINE

88% OF CASES SOLVED WITH THE FIRST ON-SITE VISIT

90% OF MACHINE DOWN CASES WITH RESPONSE TIMES UNDER 1 HOUR

92% OF SPARE PARTS ORDERS FOR MACHINE DOWNTIME PROCESSED WITHIN 24 HOURS

+5.000 PREVENTIVE MAINTENANCE VISITS

96% OF SPARE PARTS ORDERS DELIVERED IN FULL ON TIME

MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER

SMART CONNECTION
Powered by Retuner

SMARTCONNECTION IS A SOFTWARE PACKAGE FOR MANAGING JOB ORDERS WITHIN THE COMPANY - FROM THE GENERATION PHASE TO SCHEDULING AND PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.

THANKS TO SMARTCONNECTION, PRODUCTION SITE MACHINES CAN BE LINKED UP TO TRANSFORM THE COMPANY INTO A 4.0 ENTITY.

SmartConnection is a web-based solution that can be used by any device.

MANAGE THE JOB ORDER → PLAN → SCHEDULE → WORK

Biesse is extending SmartConnection across all geographical areas.
To check availability in your country, get in touch with your commercial contact.

MADE WITH BIESSE

CRAFTSMANSHIP AND CUTTING-EDGE TECHNOLOGY TO MAKE THE SWEET MUSIC OF SUCCESS.

Over 80,000 instruments installed in over 80 countries for Allen Organ, the largest organ manufacturer in the world. Headquartered in Macungie, PA, in the USA, and founded by Jerome Markowitz in 1937, Allen Organ boasts 200 employees and manufacturing facilities with a surface of 225,000 m^2. "Allen" states Dan Hummel, Manufacturing Director, "has a high degree of vertical integration, which requires the company to have the utmost quality control and the flexibility to make changes in relatively quick time scales, depending on customer needs. We have some very peculiar requirements as far as production and planning of creative solutions are concerned. Our customers demand both customised products and classic organs that are standard stock items. However, even standard organs are often modified to respond to specific needs". Allen organs are built by combining veneered panels with solid wood. "Everybody works very closely with suppliers to guarantee the best quality solid woods and panels", adds Hummel. The raw material is processed using high-tech machinery during the various production phases, to get to the end product. During the last step, the processed wood is sanded using a Biesse finishing centre. The touch-screen operated sanding centre has a combined roller/roller and sectioned pad unit for the sanding of veneered panels and solid wood.

Source: Custom Woodworking Business Jan. 2013 Woodworking Network/Vance Publications.

Allen Organ is the leader in the manufacturing of superior-quality digital organs and similar instruments. Quality, craftsmanship and cutting-edge technology.

ALLENORGAN.COM

Founded in Italy,
international native.

We simplify yo
manufacturing
to make the po
of any materia

Biesse

We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

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