OPERA 5

FINISHING CENTRE

Biesse

FINISH QUALITY SUPERIOR TO MARKET STANDARDS

THE MARKET EXPECTS

a simple technology that matches the continuous **evolution of the materials** and the application requirements and grants **performance and control over production costs**.

BIESSE ANSWERS

technology solutions that can be customised to depending on manufacturing requirements and deliver high quality finishes and productivity. **Opera 5** is the modular finishing centre that can be used in any type of application; it represents the ultimate expression of configurability. It is designed for small and medium-sized companies that need to carry out particularly complex calibration and sanding processes, whilst ensuring high levels of productivity.

OPERA 5

- RELIABILITY, ROBUSTNESS AND ERGONOMICS
- A HIGHLY CUSTOMISABLE MODULAR SOLUTION THAT CAN BE ADAPTED ACCORDING TO CUSTOMER REQUIREMENTS
- HIGH QUALITY FINISHES
- OPTIMAL PANEL CLEANING WITH A GREAT PRICE/PERFORMANCE RATIO
- PERFECT INTEGRATION IN THE PRODUCTION FLOW

RELIABILITY, ROBUSTNESS AND ERGONOMICS

Opera 5 is equipped with a substantial, wear-resistant steel worktable which guarantees precision and sturdiness for any type of processing operation. The worktable is positioned at 900 mm from the ground, thus ensuring ease of panel loading and unloading.

The structure of the machine ensures excellent ergonomics, as well as the scope to incorporate this solution into the production line.

ULTIMATE MACHINE CUSTOMISATION

A comprehensive range of units can be combined and duplicated within the 4 position head, deliveringa quality finish for any type of panel which is vastly superior to the usual market standard.

Brite Roller | Abrasive brush | Structuring Cleaning | Cleaning brush | X-Spin | HPG knife planner

Superfinishing pad | Pad | Roller | Compact cross unit | Combined

A WIDE RANGE OF APPLICATIONS

SOLUTIONS FOR CALIBRATION AND BULK REMOVAL

For calibration operations, the machine can be equipped with 190 or 240 mm stainless steel or 90 SH rubber roller fitted with 30 Hp motors.

ROLLER UNIT

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 satin-finish.
Diameters::190 mm 240 mm 300 mm.

HPG UNIT

The **HPG unit** is recommended for the calibration of blockboard panels andsupports the removal of several millimetres of material in a single run.

The HPG knife unit is available for extreme removal operations. Together with other working units, it ensures maximum material removal and a perfectly flat surface.

SOLUTIONS FOR IMPECCABLE FINISHES

Opera 5, available with 2 to 5 working units and equipped with cross units, pad units, superfinishing pad units and/or sanding brushes in any positioning order, is configured as a genuine finishing centre.

The same machine can be configured to combine calibration units and soft rubber sanding rollers with a 300 mm cross-section and/or superfinishing padunits makes Opera 5 a multi-functionalsanding centre that can respond to themost diverse processing needs.

In the version with 5 internal units, the Opera 5 maximises the flexibility and variety of processes available, from calibration to glossy finishing operations and decorative surface effects, enabling the initial preparation, intermediate processing and finishing of the panel to be carried out using the same machine.

WATCH THE VIDEO

HIGH PERFOR MANCE

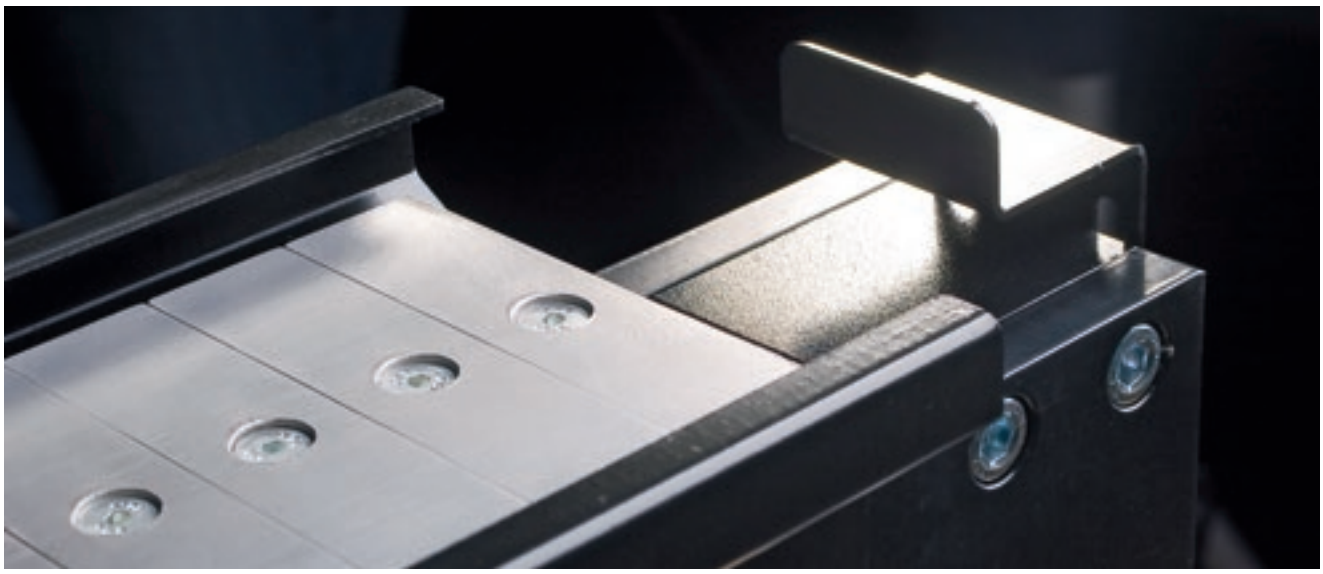
PERFECT SURFACES

The minimum pressure means 100% quality on sanded components.

The High Performance technology of electronic PAD and rollers on Biesse sanding machines, maintains the same sanding pressure, adapting to different surface thicknesses whilst appllying a constant abrasive action to ensure optimum surface flatness.

ADVANCED TECHNOLOGY TO ENHANCE MACHINE PERFORMANCE

Opera 5 is built using the same technology of higher-range machines. Optimal quality, less waste and significant cost reduction.



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

In its **IPA version**, the sectional pad enablesuniform and precise processing at low working pressures, which increases the sanding quality and life of the sanding belt.

The **electronic pad equipped with HP (High Performance) technology** enhances processing results for both surface finish and flatness.

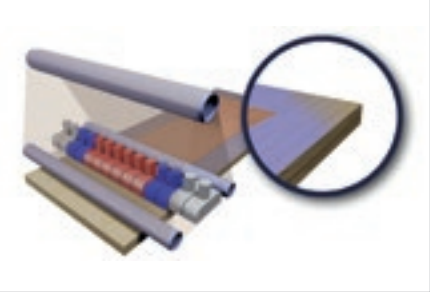
By installing an **oscillation kit on the electronic pads**, it is also possible to achieve a wavy effect on the panels.

Advantages of low-pressure pads:

- **+30% greater belt life expectancy**
- **-30% lower electricity consumption**
- **Higher finish grade**
- **Even surface**
- **-20% less dust**
- **No excessive sanding**

Save corner

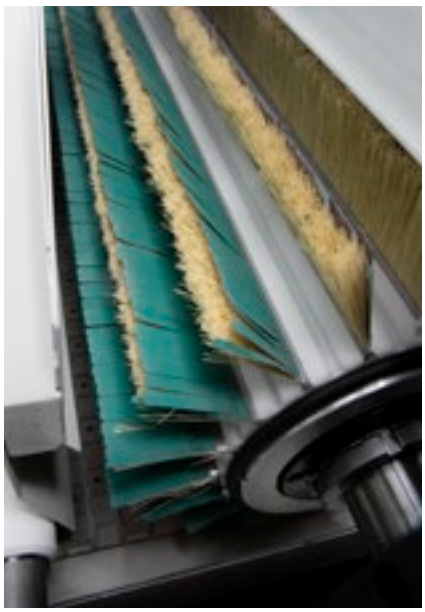
All electric pads, with IPC controls, are fitted with the exclusive, patented Save Corner Function. The system limits the sanding time on the corners of the panel, thus preserving the most delicate portions of the panel's surface.



BRUSHING UNIT BRUSH

Enables the customer to highlight the wood grain of processed panels.

XLL configuration for brushing: The option of configuring the solution with a vertical brush unit and two longitudinal brushes with abrasive inserts enables excellent results to be obtained both on panels with flat and three-dimensional surfaces. The flexibility of the X-Spin vertical brush unit adds further machining possibilities.



LONGITUDINAL BRUSH

Sturdy and reliable, the longitudinal brush is fitted with a cross-sectional oscillation system to provide a uniform finish quality for the end piece, as well as with electronic interference adjustment managed from the control panel.
Abrasive strips can be replaced quickly and without the need to remove the unit from the machine. 300 or 400 mm cross-section abrasive brush.

X-SPIN UNIT

The X-Spin unit functions include corner-rounding of painted panels, which eliminates any issues linked to manual handling and the resulting uneven production and system slowdowns, plus brushing of pantographed panels.

The X-Spin is also the ideal solution for sanding components manufactured with wood types which have different grains: soft material is removed from the wood grain in a uniform way, also thanks to the tool's oscillating motion, which ensures an extraordinarily even processing finish.

OPTIMAL PANEL CLEANING WITH A GREAT PRICE/ PERFORMANCE RATIO

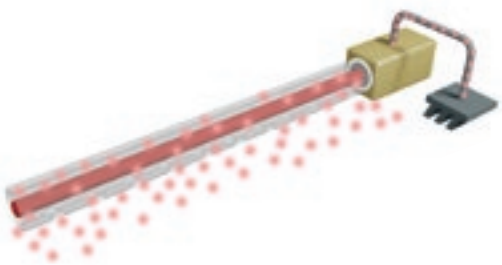
A host of solutions that ensure a better finish quality of the machined panel.

PANEL CLEANING BRUSH

The **panel cleaning brush** can be fitted with bristles of different materials to respond to the most stringent cleaning requirements for processed panels.

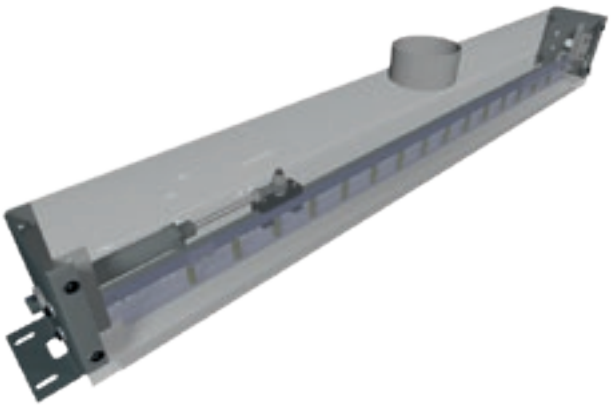
ANTI-STATIC BAR

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



ROTATING BLOWER

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



LINEAR BLOWER

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

PERFECTINTEGRATIONINTHE PRODUCTION FLOW

Biesse can provide a range of bespoke solutions tailored to meet your specific productivity, automation and space requirements.

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 CO2 emissions.

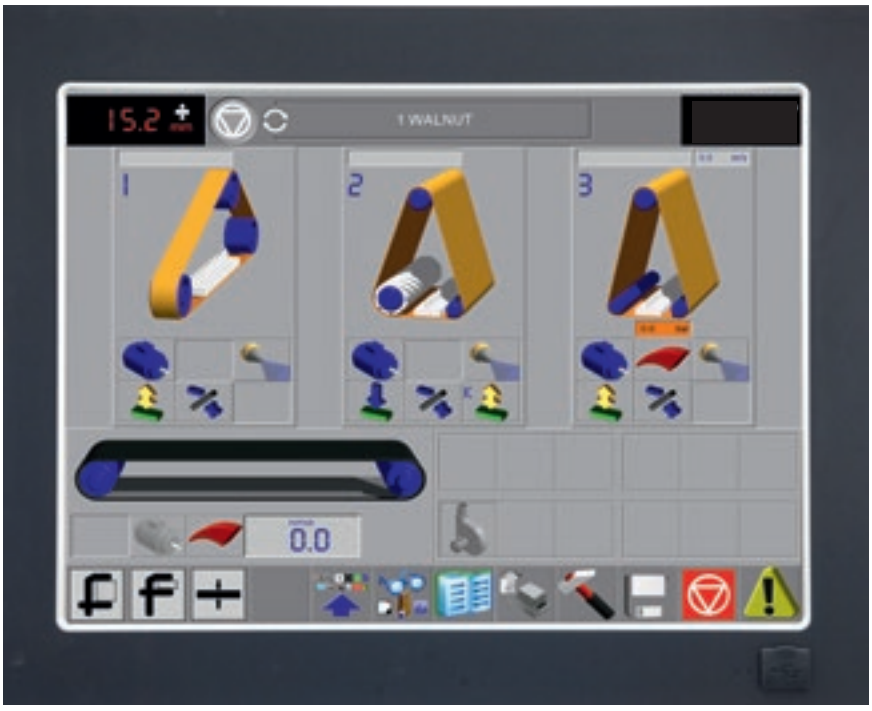
The Energy Saving System is a series of devices designed by Biesse to minimise energy consumption during machining. They are engineered and designed to ensure a high degree of efficiency, as well as optimising production, with effective suction thanks to the automatic opening of the collectors, in accordance with the units in operation; in addition, an automatic system stops machines and places them on standby after a pre-determined 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.



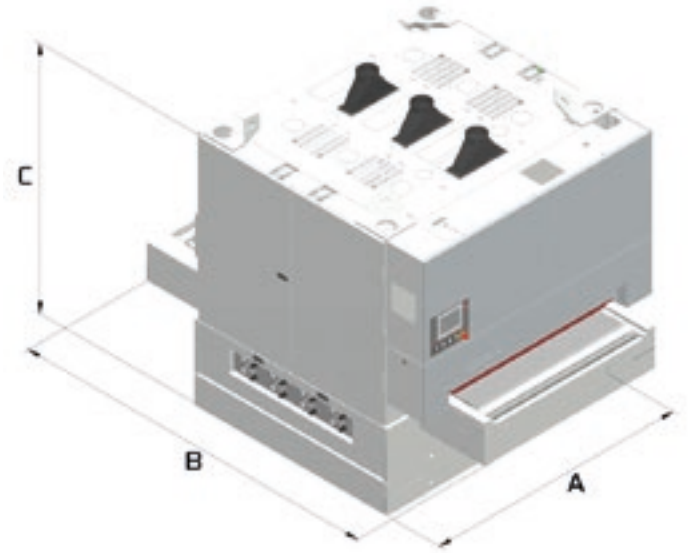
The IPC system is the highest expression of sanding machine management technology available on the market.

Sectioned pad management.

Alarm checks.

Belt wear.

TECHNICAL SPECIFICATIONS



		OPERA 5-2	OPERA 5-3	OPERA 5-4	OPERA 5-5
A	mm/inch	2175/86	2175/86	2175/86	2175/86
B	mm/inch	2580/102	3057/121	3515/159	4252/167
C	mm/inch	2438-2635/96-104	2438-2635/96-104	2438-2635/96-104	2438-2635/96-104
Working units length	mm/inch	1350/53.1	1350/53.1	1350/53.1	1350/53.1
Min-max processing thickness	mm/inch	3-200/0.12-7.9	3-200/0.12-7.9	3-200/0.12-7.9	3-200/0.12-7.9
Size of longitudinal sanding belts	mm/inch	1380x2620/54.3x103.1	1380x2620/54.3x103.1	1380x2620/54.3x103.1	1380x2620/54.3x103.1
Size of cross sanding belts	mm/inch	150x5520/5.9x217.3	150x5520/5.9x217.3	150x5520/5.9x217.3	150x5520/5.9x217.3
Forward speed m/min	m/min ft/min	3 - 16	3 - 16	3 - 16	3-20/9.8-65.6
Operating pressure bar	bar	6	6	6	6
Mass (variable according to composition)	Kg	3950	4700	5450	8000
Motor power up to Kw (HP)	kW (HP)	22 (30)	22 (30)	22 (30)	22 (30)

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 accordancewith 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 better assess the danger and risks involved.

MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER

SMART
CONNECTION
Powered by Retuner

SC

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..

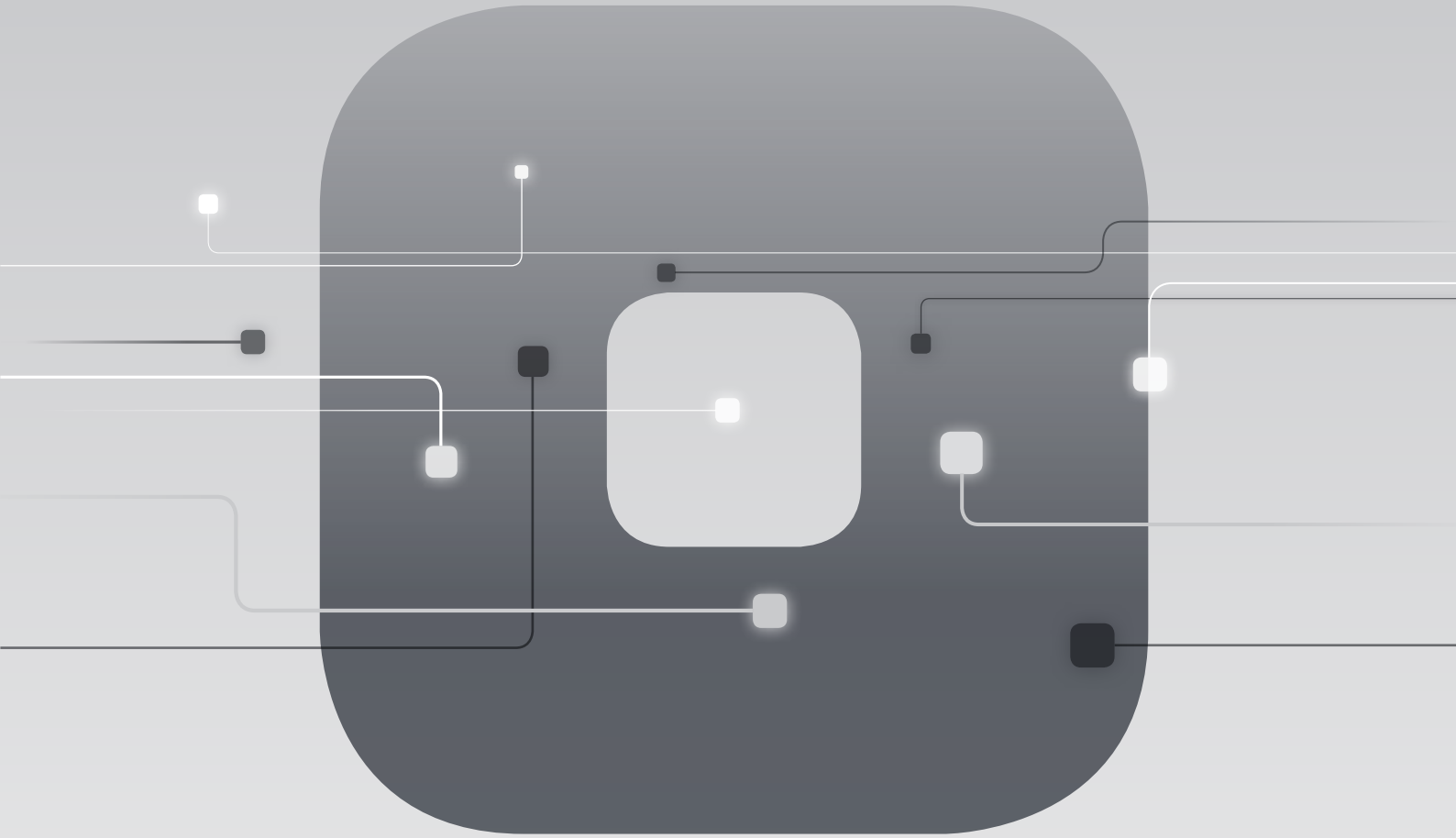
SmartConnection is a web-based solution that can be used by any device.

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.

SOPHIA

GREATER VALUE FROM MACHINES



The Biesse IoT platform which enables customers to access an extensive range of services to streamline and rationalise their work management processes.

SERVICES PROACTIVITY ANALYSIS

Biesse

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.

ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.

A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.

SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.

EVOLVED TRAINING OPPORTUNITIES

Lots of on-site, online and classroom training modules for personalised growth.

VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

AN EXCELLENT LEVEL OF SERVICE

+550 HIGHLY SPECIALISED TECHNICIANS AROUND THE WORLD, READY TO HELP CUSTOMERS WITH EVERY NEED

+100 EXPERTS IN DIRECT CONTACT THROUGH REMOTE CONNECTIONS AND TELESERVICE

+50.000 ITEMS IN STOCK IN THE SPARE PARTS WAREHOUSES

80% OF SUPPORT REQUESTS SOLVED ONLINE

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

90% OF MACHINE DOWN CASES WITH RESPONSE TIME 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

MADE WITH BIESSE

LA SINGLE SOLUTION FOR SANDING AND PROFILING

Alpilegno, a Leader in the sector of high-quality, high-performance windows and doors, performs sanding operations followed by profiling operations in its Val di Ledro (TN) manufacturing unit. Loris Cellana, an entrepreneur with long-standing experience in this sector, recalls how he evaluated machinery and system suppliers for over two years to find one that could guarantee a cutting-edge finished product: "In the end I chose Biesse". The core of the new manufacturing line is a Uniwin machine, combined with a modern 5-axis Rover C that produces doors.

"I think that Uniwin is already a good profiling machine in itself, but what was equally important to me was its interaction with other line components, such as the planer, the sanding machine and the press, and the material flow between the various machines". Components are custom-cut and stored in a loading device by Biesse's automation programme that feeds the automatic planer. A conveyor belt moves the work pieces from the planer to the sanding machine, a Viet Narrow 334 Bottom also supplied by Biesse. From there, the components are sent to the Uniwin's loader, from which they are picked to be fully processed. 72, 80, 92 and 104 mm thicknesses in wood and wood-aluminium are processed. The magazines house up to 98 tools that are always available. Such tools can be changed in real time during machine operation thanks to a chain-operated tool-changer.

"Assembly precision enables us to avoid having to remove glue residues from the frame", explains Cellana: "in this way, surface calibration and sanding must be arranged the one after the other, to go to the pressing stage immediately after profiling". Moreover, individual components are not painted before they are pressed, as it is customary. As a matter of fact, Cellana paints the entire frame. The compact production line occupies a footprint of only 15x15 metres; components are always handled forward and backward from the planing to the profiling machine, leaving enough space also for a walkway. "I like Biesse's solution: it is compact, the machines are efficient and, since they all come from the same supplier, it is easy to learn how to operate them", explains a visibly satisfied Cellana.

Source: Holzkurier Austrian magazine/special Nurenberg Exhibition issue.

Founded in Italy, international native.

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.

We simplify your manufacturing process to make the potential of any material shine.

Biesse

Join the
Biesse world.

biesse.com

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