



OPERA 7

Finishing centre



When growing means
increasing
your productivity



Made **In** Biesse

The market demands

the ability of **handling orders** of different sizes and types, whilst guaranteeing **delivery times and high-quality standards**.

Viet responds with

technology solutions that can be customised depending on manufacturing requirements and deliver high product quality without compromising productivity. **Opera 7** is a finishing centre designed for large enterprises that enables processing operations to be performed using high-productivity automatic production systems, ensuring constant performance quality.

- ✓ **Ultimate machine customisation to respond to all production needs.**
- ✓ **Processing time reduction and maximum manufacturing efficiency.**
- ✓ **Exceptional, reliable finish quality over time.**

The most advanced
and high-performance
sanding centre
on the market



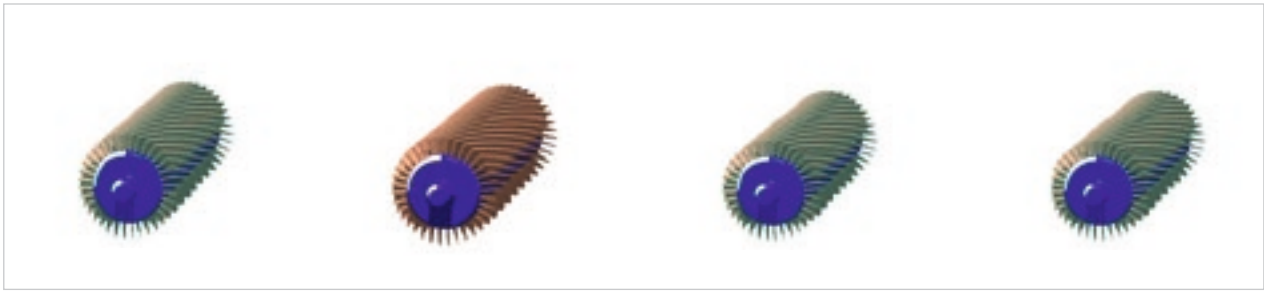
OPERA 7



Ultimate machine customisation to respond to all production needs

A comprehensive range of units are available to be combined and repeated inside the machine in 10 positions, delivering a quality for all types of panel finish that is vastly superior to the market standard.



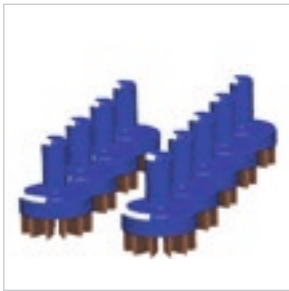


Buffing roller.

Abrasive brush.

Brushing brush.

Cleaning brush.



SpinBrush.



Win units.



HPG plane.



Superfinisher.



Pad.



Roller.



Compact cross unit.



Cross unit.

High-tech solutions available for any processing operation requirement

Sanding solutions.

Soft rollers rolls with cross-section up to 400 mm combined with pad and superfinisher groups equipped with patented HP and HP DUO technology for sanding rough, veneered and/or painted panels.



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:

- 240 mm
- 320 mm
- 400 mm.



The **Roller unit with HP (High Performance) technology** supports the processing of panels of varying thickness with no need to change the working position. This solution reduces machine set-up times and ensures a homogeneous finish also on batches of panels with different thickness (up to 1.4 mm variation).



Sanding centre for sanding high-gloss panels.



Finish and flatness reach optimal quality levels, delivering a perfect end product to the customer for subsequent finishing and polishing thanks to the option of combining working units such as the superfinisher and cross units equipped with HP and HP DUO technology.

Solutions for calibration and large removals.

For calibration operations, the machine can be equipped with 240 or 320 mm stainless steel or 90 sh rubber roller, fitted with 50 Hp motors. 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.



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

Perfect surfaces

The High Performance technology for electronic buffers and rollers of Viet sanding machines maintains the same sanding pressure, adapting to different surface thicknesses.

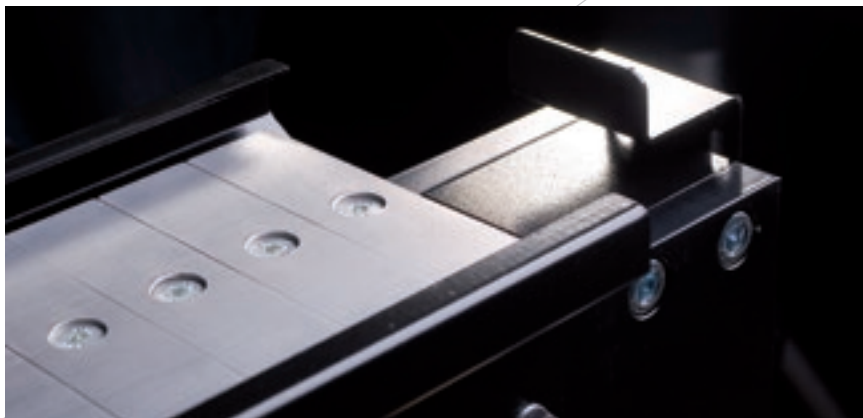
At the same time, it applies a constant abrasive action to ensure optimum surface flatness.

HIGH PERFORMANCE

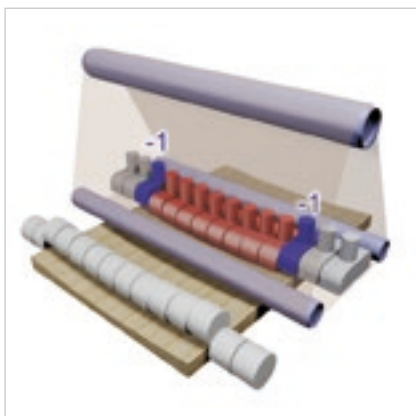
The minimum pressure means 100% quality on machined components. The perfect combination of a Biesse finish and Italian genius.



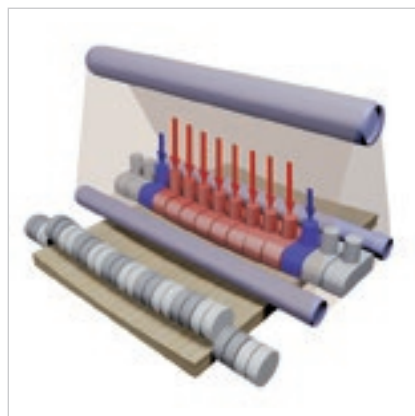
High-technology to enhance machine performance



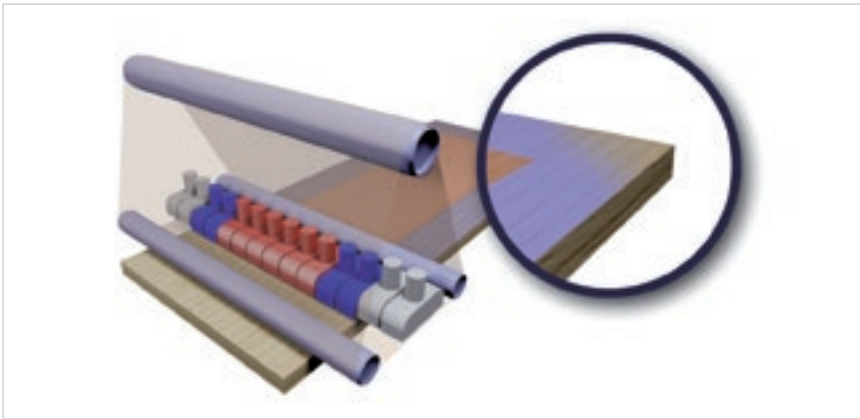
The sectioned **electronic pad** enables users to perform high-quality sanding operations thanks to the electro-pneumatic sensors that are only actioned on the panel's surface. The vast range of possible adjustments offers specific functionalities for different types of processing operations.



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

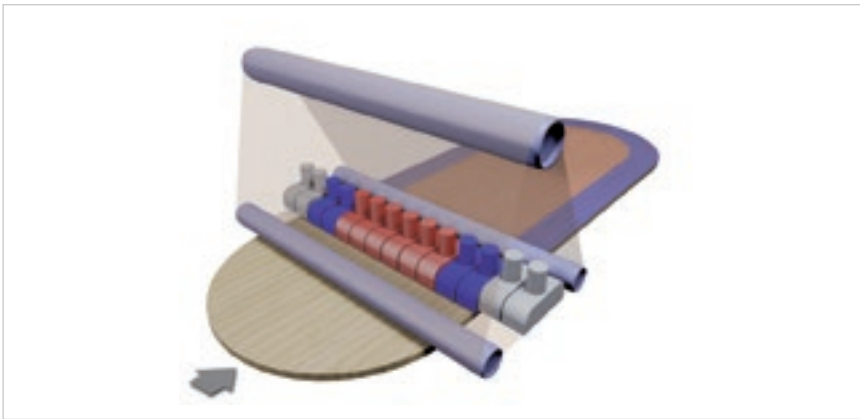


The HP system is available in the **DUO** version, which supports the modulation of two operating pressures for any individual sector at a given time. This solution supports the use of two different operating forces on the same panel.



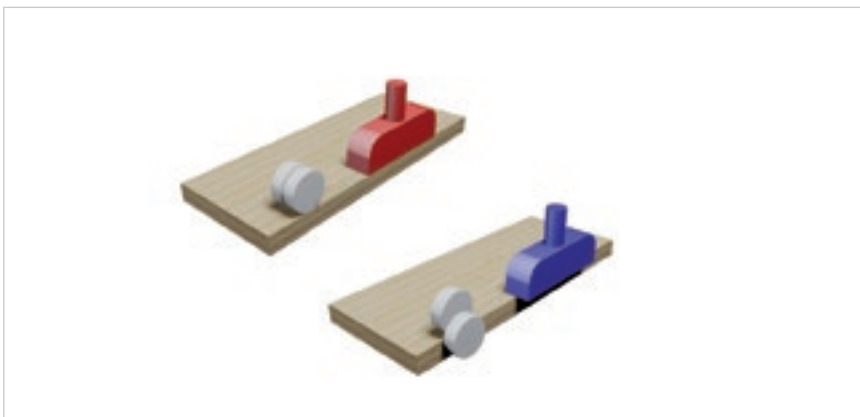
Save corner.

All electric pads, managed by 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.



Dynamic adaptation.

The HP DUO system supports a dynamic adaptation to individual processing needs and follows perfectly the different shapes of the processed panel.



Differentiated reading.

HP DUO pads are equipped with dual input reading to increase resolution and automatically differentiate the pressure on the side edges of the panel.

Exceptional finish quality



Opera 7, thanks to the possibility of fitting vertical, longitudinal and Spin-brush brush units, becomes a veritable modular sanding and brush-

ing centre that supports the full processing cycle for any type of product. Configurations with longitudinal belt tools and brush units within the same

machine provide a wide working field also for the most complex components.



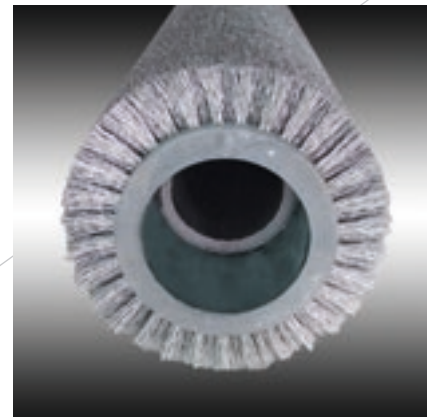
↙
The **unit with vertical win brushes** is a vertical rotating brush sanding system. The unit enables customers to sand - via a brushing action - the object's profiles and side surfaces, ensuring an even finish. Individual units, equipped with large cross-section brushes (300 or 400 mm), can be adjusted independently as far as side position, angle (-10° $+35^{\circ}$) and height.



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 bristles can be replaced quickly and without the need of removing the unit from the machine. 300 or 400 mm cross-section abrasive brush.



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



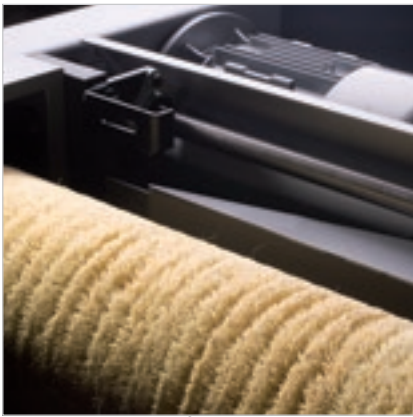
The **Spinbrush unit** is the ideal solution for sanding components manufactured with types of woods that have different grains: soft material is removed from the wood's grain in a uniform way, also

thanks to the tool's oscillating motion, which ensures an extraordinarily even processing finish. The SpinBrush unit's functions include corner-rounding for painted panels, which eliminates any

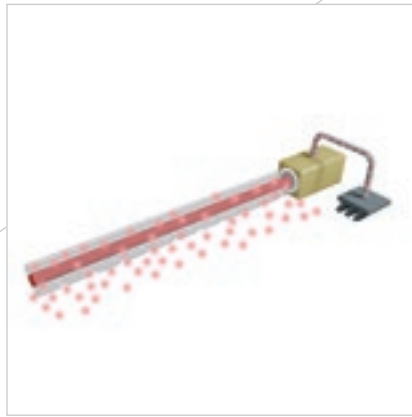
issues linked to manual handling and the resulting uneven production and system slowdowns.



Optimal panel cleaning with a great price/performance ratio



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



VIET - Energy Saving System Viet, always focussed on energy conservation, provides the E.S.S. Energy Saving System within its product range i.e. a series of accessories aimed at reducing energy consumption.

Maximum visibility of machining operation



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



The use of large cross-section **rollers** makes the structure sturdy, ensuring precision for any positioning.



Max. standard work height
200 mm
(7.8 inches).

Standard fixed work table
900 mm
(35.4 inches).

The standard Mobile Head solution supports a standard working height of up to 200 mm, whilst keeping the work table at a height of 900 mm from the ground.

- ✓ Ease of component loading/unloading.
- ✓ Ease of line insertion.
- ✓ Greater stability.

Ease of use and power

IPC is a range of **Control systems** that are integrated into the machine via 8" or 15" Touch Screen monitors. This type of 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 pads management.

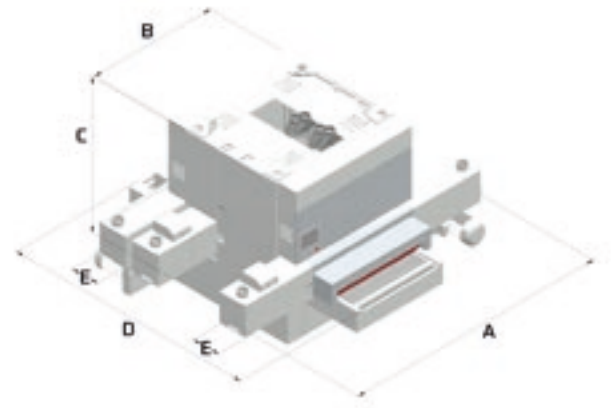


Alarm checks.



Belt wear.

Technical specifications



	Opera 7-2	Opera 7-3	Opera 7-4
	(mm / inch)	(mm / inch)	(mm / inch)
A	4315/170	4315/170	4315/170
B	2175/86	2175/86	2175/86
C 2620	2445-2645/97-105	2445-2645/97-105	2445-2645/97-105
C 3250	2760-2960/109-117	2760-2960/109-117	2760-2960/109-117
D	2680/106	3100/122	3665/145
E	500/20	500/20	500/20
Maximum operating width	1350/ 53.1	1350/ 53.1	1350/ 53.1
Min-max processing thickness	3-200/ 0.12-7.9	3-200/ 0.12-7.9	3-200/0.1-7.9
Size of 2620/3250 longitudinal sanding belts	1380x2620-3250/54.3x103.1-128	1380x2620-3250/54.3x103.1-128	1380x2620-3250/54.3x103.1-128
Size of 5520 cross sanding belts	150x5520/5.9x217.3	150x5520/5.9x217.3	150x5520/5.9x217.3
Size of 7400/8700 cross sanding belts	150x7400-8700/5.9x291.3-342.5	150x7400-8700/5.9x291.3-342.5	150x7400-8700/5.9x291.3-342.5
Forward speed m/min	4-20	4-20	4-20
Operating pressure bar	6	6	6
Mass Kg	5830	7630	8600
Motor power up to Kw (HP)	37 (50)	37 (50)	37 (50)
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.			

The measurement was carried out in compliance with UNI EN 848-3:2007, UNI EN ISO 3746: 2009 (sound power) and UNI EN ISO 11202: 2009 (sound pressure levels at workstation) during panel machining. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Despite the fact that there is a relationship between emission and exposure levels, this may not be used in a reliable manner to establish whether further measures need to be taken. The factors determining the exposure level for the workforce include length of exposure, work environment characteristics, other sources of dust and noise, etc. i.e. the number of other adjoining machines and processes. At any rate, the above information will enable the operator to better evaluate dangers and risks.

A-weighted surface sound pressure level (Lp_{fA}) during machining for operator workstation on vane-pump machine Lp_{fA}=76dB(A) Lw_A=95dB(A) A-weighted sound pressure level (Lp_{fA}) for operator workstation and sound power level (Lw_A) during machining on cam-pump machine Lw_A=76dB(A) Lw_A=95dB(A) K measurement uncertainty dB(A) 5

Service & Parts

Direct, seamless co-ordination of service requests between Service and Parts. Support for Key Customers by dedicated Biesse personnel, either in-house and/or at the customer's site.

Biesse Service

- ✓ Machine and system installation and commissioning.
- ✓ Training centre dedicated to Biesse Field engineers, subsidiary and dealer personnel; client training directly at client's site.
- ✓ Overhaul, upgrade, repair and maintenance.
- ✓ Remote troubleshooting and diagnostics.
- ✓ Software upgrade.

500 / Biesse Field engineers in Italy and worldwide.

50 / Biesse engineers manning a Teleservice Centre.

550 / certified Dealer engineers.

120 / training courses in a variety of languages every year.

The Biesse Group promotes, nurtures and develops close and constructive relationships with customers in order to better understand their needs and improve its products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts.

With its global network and highly specialised team, it offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.



Biesse Parts

- ✓ Original Biesse spares and spare kits customised for different machine models.
- ✓ Spare part identification support.
- ✓ Offices of DHL, UPS and GLS logistics partners located within the Biesse spare part warehouse, with multiple daily pick-ups.
- ✓ Order fulfilment time optimised thanks to a global distribution network with de-localised, automated warehouses.

87% / of downtime machine orders fulfilled within 24 hours.

95% / of orders delivered in full on time.

100 / spare part staff in Italy and worldwide.

500 / orders processed every day.

Made **With** Biesse

Biesse Group technologies join forces with Lago's innovation and total quality management processes.

In the crowded world of domestic design, Lago takes its place as an emerging brand, thanks to a collection of stimulating products and a corporate philosophy that embraces the interaction between business and art, coupled with on-going research into sustainable development. "We created a number of projects, or rather, concepts - states Daniele Lago - that have shaped Lago as we see it today: we saw design as a cultural vision that applies not only to individual products, but rather to the entire business chain". "Flexibility is the key word here at Lago" says Carlo Bertacco, Manufacturing

Manager. "We started to introduce the concept of processing only outstanding orders, which enabled us to reduce our footprint and empty the site from the very beginning". "The machinery that we purchased - states Bertacco - is great, it entailed a limited investment versus the capabilities it offers and is linked to a specific manufacturing approach. What I am talking about is a given manufacturing volume with Lago-standard quality levels and the possibility of customising as late as possible, at the customer's request: in short, the very basic principles of lean manufacturing".

*Source: IDM Industria del Mobile
Lago, our customer since 1999, is one of most prestigious Italian furniture brands in the world.*



Biesse Group

In

1 industrial group, 4 divisions
and 8 production sites.

How

€ 14 million p/a in R&D and 200 patents registered.

Where

30 branches and 300 agents/selected resellers.

With

80% of its customers abroad.

We

2,700 employees throughout the world.

Biesse Group is a multinational leader in the technology for processing wood, glass, stone, plastic and metal.

Founded in Pesaro in 1969, by Giancarlo Selci, the company has been listed on the Stock Exchange (STAR segment) since June 2001.

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

MECHATRONICS

