



Made In Biesse



#### The market requires

a change in manufacturing processes that enables users to perform **complex processing operations** also for small and medium-size production lots, achieving **best-in class performance** with **a modest investment**.

#### Viet responds with

**technology solutions** that can be customised depending on manufacturing requirements and deliver high finished product quality and productivity. **Opera 5** is the new finishing centre designed to satisfy the needs of small and medium-sized enterprises that require versatility and a high technology content.

- **☑** Simple, functional cutting-edge technology.
- ✓ Ultimate machine customisation.
- ✓ High tech solutions available for any processing operation requirement.
- ☑ Minimal footprint.





# Simple, functional cutting-edge technology



Opera 5 is equipped with a thick, wear-resistant stainless steel fixed **worktable** that 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. This solution makes it possible to incorporate Opera 5 into automatic production lines.



Intuitive, text-free user interface: icons facilitate the operator's task.



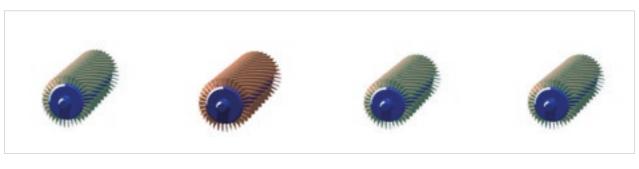
IPC is the range of Control Systems that are integrated into the machine thanks to a Touch Screen monitor. This control system supports the management of all machine parameters, providing the operator with timely and intuitive information. The industrial PC processor provides control and feedback information to the machine in real time, making it extremely user-friendly for the operator.



The control system is an industrial PC with 8" or 15" touch-screen display. The interface is available in 18 different language versions. The software version can be configured for right and left-handed people. Tablet-supported remote control.

## Ultimate machine customisation

A comprehensive range of units can be combined and repeated within the machine in 4 positions, delivering a quality for any type of panel finish that is vastly superior to the market standard.



Buffing roller.

Abrasive brush.

Brushing brush.

Cleaning brush.



SpinBrush.



Win units.



HPG plane.



Superfinsher.



Pad.



Roller.



Compact cross unit.



Combined.

# High-tech solutions available for any processing operation requirement

### Solutions for calibration and large removals.

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.

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 **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.

Available cross-section sizes:

190 mm 240 mm 300 mm.







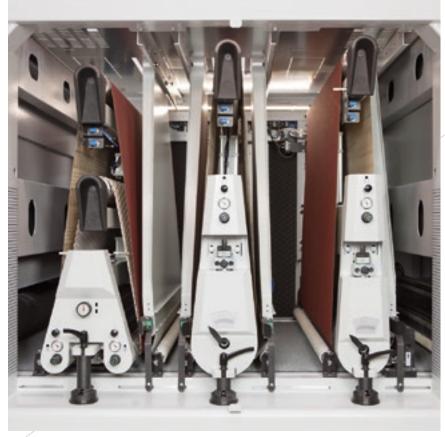
The **HPG unit** is recommended for the calibration of blockboard panels and supports the removal of several millimetres of material in a single run.



## Solutions for high-quality finishes.



Opera 5, available with 2 to 4 working units and equipped with cross units, pad units, superfinisher pad units and/ or sanding brushes in any positioning order, is configured as a veritable finishing centre.



The ability to combine in the same machine configuration calibration units and soft rubber sanding rollers with a 300 mm cross-section and/or superfinisher pad units makes Opera 5 a multi-functional sanding centre that can respond to the most diverse processing needs.

# High-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 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.

- ☑ Higher finish grade.

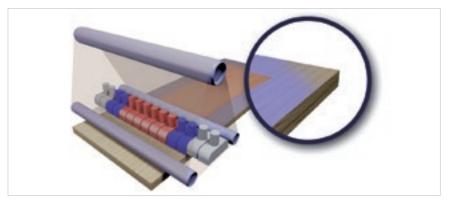
- No excessive sanding.



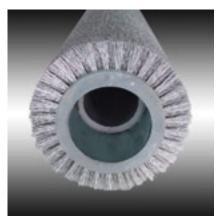


#### Save corner.

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.







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

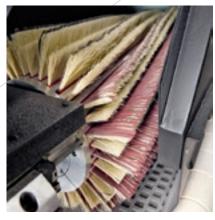
The unit with vertical win brushes is a vertical rotating-brush sanding system. The unit enables customers to sand - via a brushing action - the object's profiles and side surfaces, ensuring an even finish. Individual units, equipped

with large cross-section brushes (300 mm), can be adjusted independently as far as side position, angle (-10° +35°) and height.



The **Spinbrush unit** is the ideal solution for sanding components manufactured with types of woods with 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 of painted panels, which eliminates any issues linked to manual handling and the resulting uneven production and system slowdowns.



Sturdy and reliable, the **longitudinal brush** is equipped 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.

### 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.

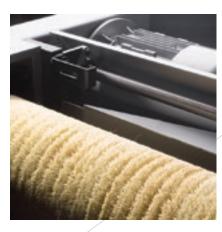
At the same time, it applies a constant abrasive action to ensure optimum surface flatness.

#### HIGH PERFORMANCE

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



# 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 the 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



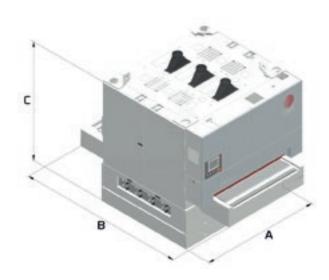


VIET - Energy Saving System Viet, always focussed on energy conservation, provides the E.S.S. Energy Saving System within its product range i.e. a series of accessories aimed at reducing energy consumption.

# Technical specifications



20% smaller footprint. Motors and cooling fans housed within the machine.



	OPERA 5-2	Opera 5-3	Opera 5-4
	(mm / inch)	(mm / inch)	(mm / inch)
A	2175/86	2175/86	2175/86
В	2580/102	3057/121	3515/139
С	2438-2635/96-104	2438-2635/96-104	2438-2635/96-104
Working units length	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	3-200/0.12-7.9
Size of longitudinal sanding belts	1380x2620/54.3x 103.1	1380x2620/54.3x 103.1	1380x2620/54.3x 103.1
Size of cross sanding belts	150x5520/5.9x 217.3	150x5520/5.9x 217.3	150x5520/5.9x 217.3
Forward speed m/min	3 - 16	3 - 16	3 - 16
Operating pressure bar	6	6	6
Mass Kg	3950	4700	5450
Motor power up to Kw (HP)	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.

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 (LpfA) during machining for operator workstation on vane-pump machine Lpfa=76dB(A) Lwa=95d-B(A) A-weighted sound-pressure level (LpfA) for operator workstation and sound power level (LwA) during machining on cam-pump machine Lwa=76dB(A) Lwa=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.

Biesse Field engineers in Italy and worldwide.

Biesse engineers manning a Teleservice Centre.

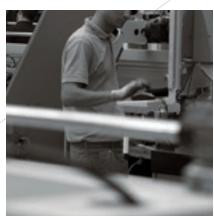
550 certified Dealer engineers.

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.

of downtime machine orders fulfilled within 24 hours.

95% of orders delivered in full on time.

spare part staff in Italy and worldwide.

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** / **☑INTERMAC** / **☑DIAMUT** / MECHATRONICS