

# ***EvOL** Sanding Machines*



*Sanding Technology  
Evolution*



**IMEAS**

1966 50 Years of 2016  
Innovation and Service

# Highlights

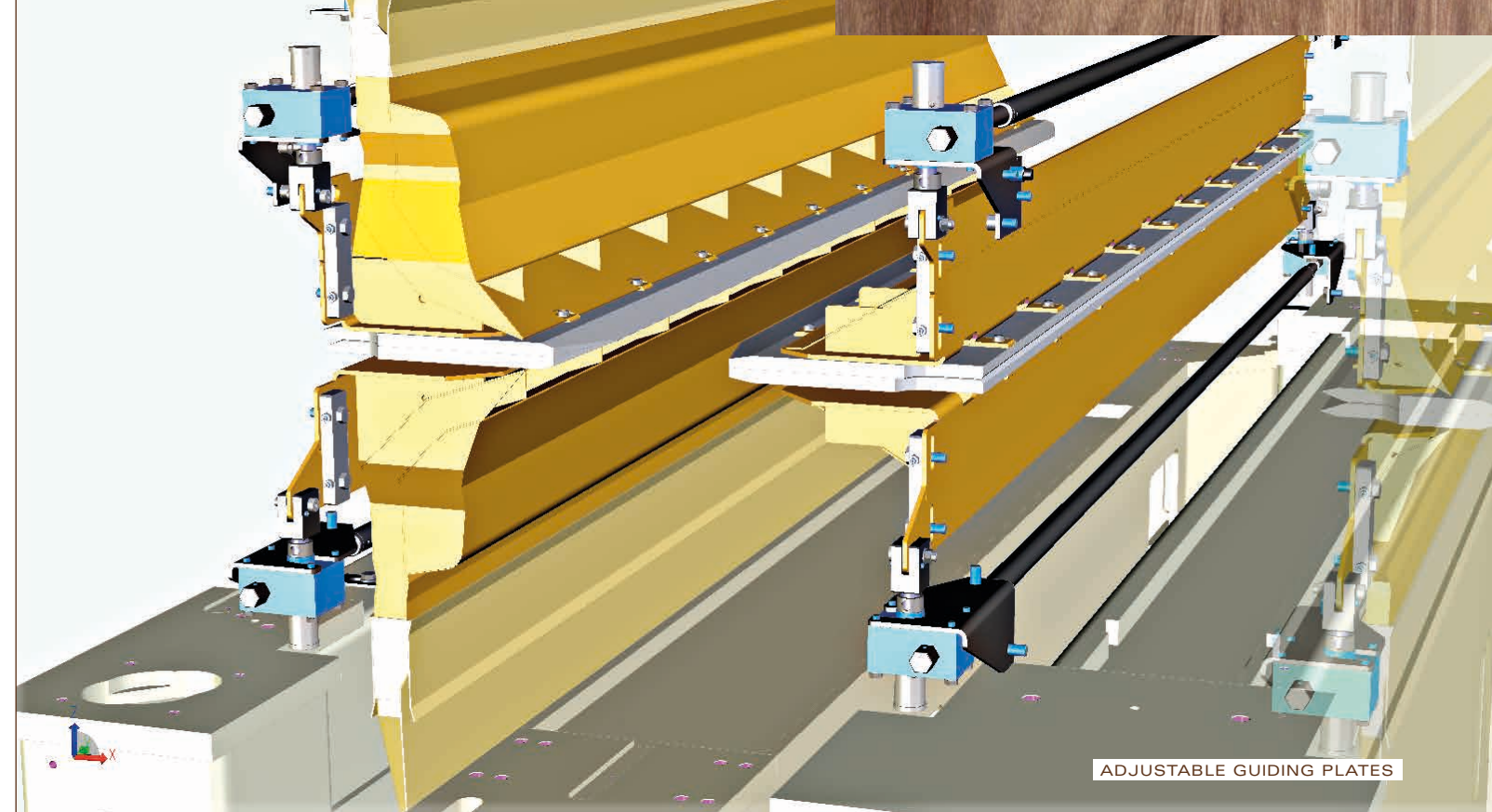
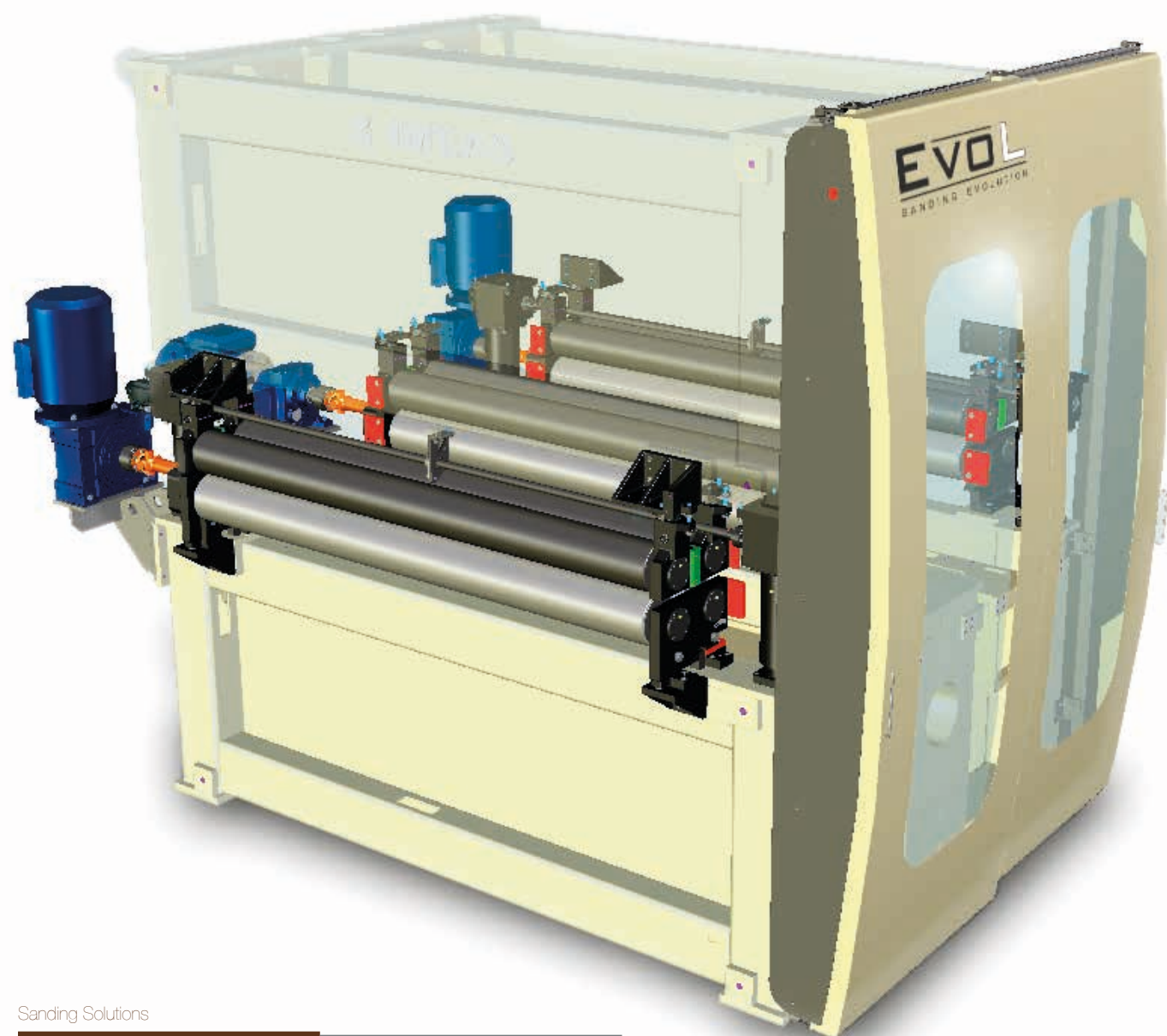
The new **EvoL** model represents Imeas' ninth generation of sanding machines.

As the name suggests, it is the evolution of the company's 50-years long experience and know-how in sanding of wood based panels.

As a result, **EvoL** machines not only integrate state-of-the-art control technologies like our premium **Full Control System™** and **Full Control Belt™**, but also simplify maintenance by reducing the number of components and improving their accessibility in all-important areas.

**EvoL** is a family of machines engineered to evolve continuously to face an ever challenging business and as such they offer:

- Excellent calibration
- Superior sanded surface
- Cost savings
- Simplified operation
- Flexibility



## THIN PANELS PROCESSING

The new feeding system is specifically designed to process thin boards. It's three-stage gearbox concept leverages on fine electronic controls to create a tension that keeps the panel flat and easy to sand. This makes always perfect surfaces!

## PLYWOOD SANDING

The **EvoL** sanders have built-in technologies that are based on Imeas longstanding expertise and know-how in processing of plywood panels. This grants perfect calibration and smooth surfaces with thick and thin panels as well.

## UNCLUTTERED DESIGN

The redesign has involved almost all the machine's functional components, with the aim to reduce the mechanical complexity. As a result, the machine is now much more accessible especially for maintenance purposes. In this way Customers can save precious time and be more productive.

## SANDING SPEED

**EvoL** machines are designed for sanding speeds of up to 150m/min, with possibility to increase to 200m/min.

## FULL CONTROL SYSTEM, 8<sup>TH</sup> GENERATION

The new version of our **FCS** has been re-engineered together with the **EvoL** sanders to be fully integrated with them. It uses hi-torque servomotors and enables the two sides of the sanding unit to be adjusted independently from each other. Furthermore, it can operate in conjunction with your thickness measuring system to make close-loop, fine adjustments. That's control!

## INDUSTRY 4.0 READY

Being the next generation, Imeas' **EvoL** machines fully comply with the Industry 4.0 concepts. They can be integrated with your company's ERP systems to exchange product information and they can be controlled and managed remotely through our **TeleService™** system.



# New & Improved

**EvoL** sanders are the result of an extensive re-engineering that introduces many novelties and improvements:

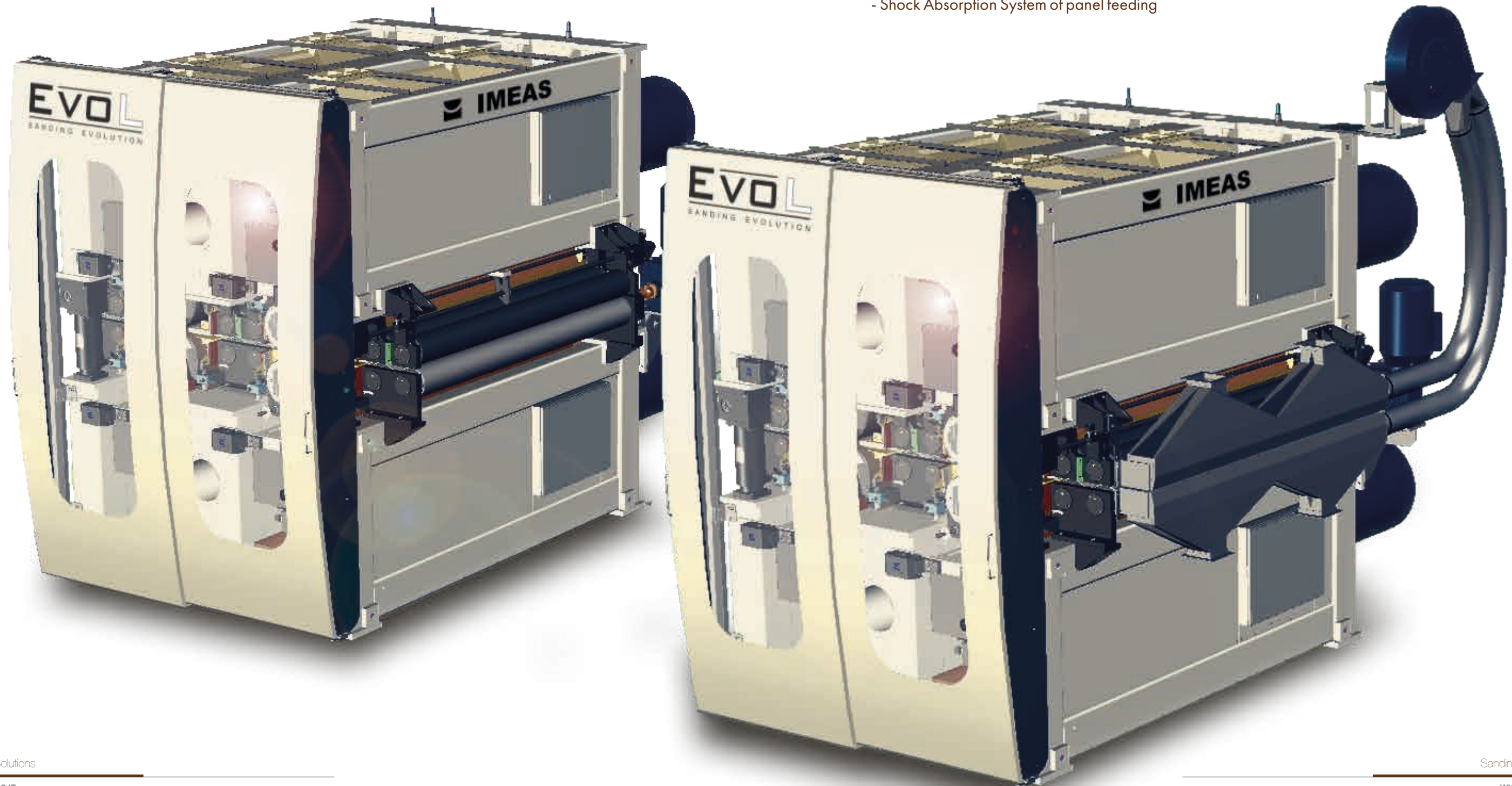
- Feeding system <sup>New</sup>
- Contact roll design

- Power transmission on main motors <sup>New</sup>
- Main motor assembly <sup>New</sup>
- Upper frame lifting system
- Abrasive belt tracking and oscillation <sup>New</sup>
- Temperature sensors

- Active vibration control <sup>New</sup>
- HMI graphical interface
- Lubrication system
- Dust collection
- Safety doors <sup>New</sup>
- Differential speeds <sup>New</sup>
- Dust barriers design <sup>New</sup>
- Atex design <sup>New</sup>
- Shock Absorption System of panel feeding

- Power belt tensioning system <sup>New</sup>
- Central beam locking system
- Abrasive belt tensioning system
- Full Control System motors <sup>New</sup>
- Guiding plates
- On-board junction boxes and pneumatic

Your Imeas representative will be glad to illustrate and explain you all this features in detail.



# Models

**EvoL** sanders are available in a number of different configurations designed to match our Customers’ most demanding applications.

That’s why with the launch of a new family of machines Imeas introduced also a new naming system intended to be both descriptive and easy to understand.

**EvoL** machines can be equipped with three different types of sanding units:

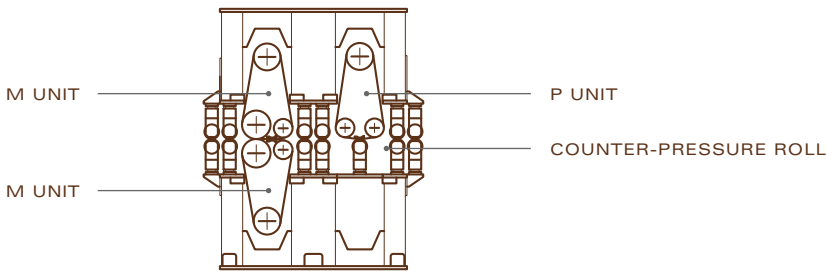
- **C**, for calibration
- **M**, multi-purpose for calibration & sanding
- **P**, for fine sanding

Beside the standard configuration with opposite units, a number of variants are available as well:

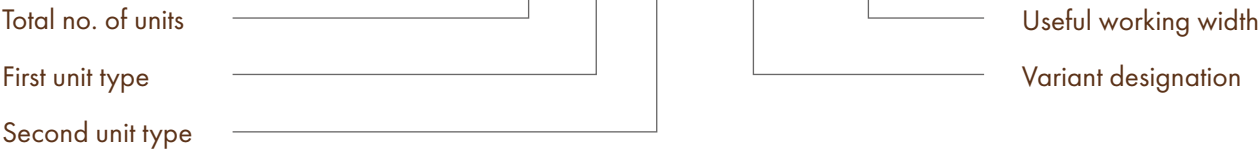
- **A**, asymmetric (offset) units arrangement
- **B**, bottom-only units
- **T**, top-only units

**EvoL** machines can also be customized according to Customer’s requests to suit specific needs and applications.

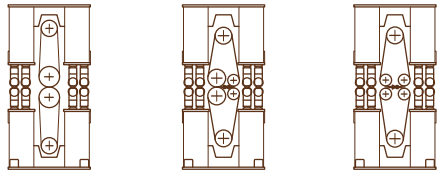
**EvoL** frames can host up to four units of different types. Some of the most common configurations are presented here, although many others are possible.



EvoL 3MP-A/230

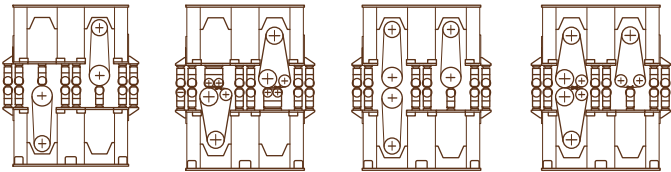


Two units, opposite



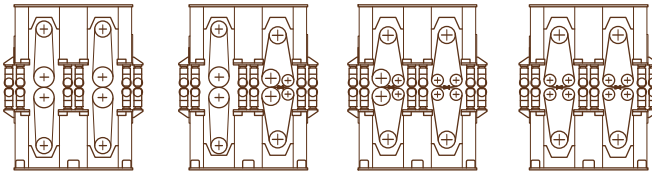
EVOL 2C EVOL 2M EVOL 2P

Two and three units, offset (asymmetrical)



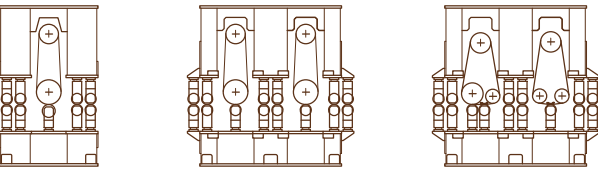
EVOL 2C-A EVOL 2M-A EVOL 3C EVOL 3MP

Four units, opposite



EVOL 4CC EVOL 4CM EVOL 4MP EVOL 4P

One and two units, top



EVOL C-T EVOL 2C-T EVOL 2MP-T

# Technical Data Sheet

## STANDARD FEATURES

- Frames made of electro welded steel, stress relieved, CNC milled, prime-coated and painted.
- High efficiency motors
- PLC Siemens S7 with ProfiNET™ connection
- Wide screen with touch panel graphical interface
- FCB technology for abrasive belt tracking with automatic stabilization, offset and oscillation capabilities
- Integrated lubrication circuit and bearing temperature monitoring system<sup>(1)</sup>

- Top cleaning brush at machine in feed and top/bottom air cleaning device at machine out feed

- On-board pneumatic plant with emergency tank, lockable inlet, manometer and pressure adjustment

## OPTIONAL FEATURES<sup>(2)</sup>

- Full Control System™ for electronic interfacing and self-setting of the sanding units

- Sound-proof enclosure cabinet

- On board vibrations monitoring system

- Allen-Bradley PLC

Unit type	C (Contact Roll)	M (Multi Purpose)	P (Sanding Platen)
Application	Calibration	Calibration & Sanding	Fine sanding
Full Control System™ control	Symmetric/asymmetric <sup>2</sup>	Symmetric	Symmetric
Process type	Calibrating and sanding of MDF, HDF, Particle board, Plywood and OSB panels		
Useful working widths	1600 - 1900 - 2300 - 2600 - 2900 - 3.200 - 3.600 mm (5÷12 feet)		
Thickness range	5÷250 mm		
Machine opening	300 mm		
Feeding speed	15÷150 m/min (200 m/min as option)		
Main motors	up to 250 kW	up to 175 kW	up to 110 kW
Abrasive belt length <sup>3</sup>	3.200 mm		
Machine weight	20.000 - 55.000 kg (according to model)		

## NOTES

1. Only available on high-speed rotating bearings.

2. Some of these features may be available at extra price.

3. Abrasive belt length is 4.000 mm on 3.200 & 3.600mm wide models.

IMEAS spa reserves the right to change any data without notice.