IT'S A MATTER OF TOUCH!

As often as it happens in life, it's a matter of touch!

And the IMEAS team knows this very well. Hence, it is not a coincidence that the main company goal is the continuous search for new technical solutions aimed to optimise the surface finish of wood panels.

Oh yes! The greatest satisfaction is when a customer touches a sanded panel with his hand and is pleased with the high-quality finishing.

As the name suggests, EvoL is the evolution of more than 50 years of experience and know-how in calibrating and sanding wood panels

The reason for this success is due to an important development and a technological integration that allowed user to obtain control and precision that has never been reached before in the polishing process

SANDING EVOLUTION

IMEAS has been following this vocation since the beginning in 1966, and its history, especially the recent one, is full of interesting news: In 2017, the EvoL model, which represents the ninth generation of IMEAS sanding machines, was presented to the market.

As the name suggests, EvoL is the evolution of more than 50 years of experience and know-how in calibrating and sanding wood panels; a year after its launch in the market, EVOL has gathered a high appreciation in the market — with more than 70 sanding and calibration heads purchased by IMEAS customers all over the world.

The reason for this success is due to an important development and a technological integration that allowed user to obtain control and precision that has never been reached before in the polishing process.

The synthesis of this technological evolution in IMEAS is known as "Full Control System", which together with the "Full Control Belt", allows the line operator to configure, check and if necessary, correct the sanding process with the ease of a click. Through an easy-to-use graphical interface, it is now possible to control every aspect of the sanding process such as starting a motor, oscillating an abrasive belt, checking the state of health of a bearing or adjusting each calibration/sanding head, which can be set using a touchscreen panel with a precision up to one hundredth of a millimeter (0.01mm).

All of these are possible thanks to the development of a new control software that, through the operator panel installed on the machine or directly from the panel of the control room, shows the operator a synoptic view of the sanding line together with a rational graphical interface. In addition, there is local language support to enable the ease of use of the Full Control System, thus, reducing the learning curve drastically.

Sanding recipes can be stored and used by the operator in accordance with the current job — the sanding units will reset their working position in less than 10 seconds!

The second major innovation introduced by EVOL generation is the Full Control Belt, a new system to ensure better abrasive belt control. This is to achieve an automatic and self-stable system to control or correct the position of the abrasive belt without cares of the operator.

The system is composed by a proportional valve controlled by the PLC to move the belt slightly so as to restore the original belt position.

In addition, a new construction design was developed to reduce the number of internal components so as to gain easy accessibility into important areas of the machine — reducing and simplifying the maintenance activities as compared to the previous generations of machines.

EvoL is a family of machines engineered to evolve continuously and competitively. Hence, IMEAS machines in the woodworking field offer the following:

- Excellent calibration
- High sanding quality
- Simplified operational use
- Flexibility

STATE-OF-THE-ART

However, the innovations and improvements of the wood panel surfaces do not end with just the new Evol series. In fact, the Cross Belt Sander (CR-TB), one of the company's flagships too, has seen much developments too.

Unique in the production of sanders, the CR-TB is the result of IMEAS business policy, which consists in differentiating its product portfolio from competitors.

The CR-TB is also a review of the industrial sanding technique — redefining the quality and productivity factors of a modern sanding line.

This innovative solution aims to satisfy the market's need to integrate value-added processes in new or existing sanding lines and to improve surface quality. It is especially suitable for the production of MDF, HDF or chipboard panels intended for painting or coating with melamine papers.

With subsequent applications of paints, the fibers do not straighten up again and the surface remains smooth. The basic concept of this model is to sand the wood panel transversely to the feeding direction, while the wood fibers, which run lengthwise, are cut at a right angle to obtain a panel finishing through fine cross cutting. This method allows the transversal cutting of micro-peaks, also known as roughness crests, which are typically present in the wood panels.

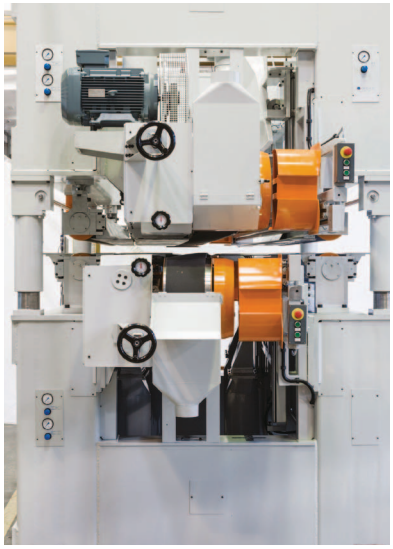
The benefits are many in both technical and environmental:

- Remove marks and lines
- Reduce surface roughness up to 30 per cent less than traditional sanders
- Reduce quantity of paint or solvents with a favourable impact on production costs
- Improve the environmental impact

The CR-TB model has recently been updated to optimise performance. A new feeding system with independent motors was developed through which the feeding speeds can be managed to induce a state of tension in the surface processed, thus, improving the workability of thin panels.

The machine is also equipped with a revolutionary integrated belt change trolley designed to reduce the stop time of the machine. Installed at the end of a sanding line (new, existing or other supplier), the Imeas transversal sander is able to obtain an even more homogeneous and low roughness surface using less than 10 per cent of the energy of a conventional sander.

IMEAS models and applications are not only dedicated to wood panels, but special machines have been developed for the finishing of HPL sheets, flexible materials also in coils and CLT panels for continuous production, 24/7/365. All the machines are made in Italy and can be developed in various sizes according to the format of the panels to be processed. The current range is from 1600mm up to 3600mm of useful width.



The CR-TB is the result of IMEAS business policy, which consists in differentiating its product portfolio from competitors

IMEAS has always cooperated with its customers so that the engineering and technological development could be customised, and to respect the needs of each customer while keeping up with the increasingly demanding market trends

IMEAS has always cooperated with its customers so that the engineering and technological development could be customised, and to respect the needs of each customer while keeping up with the increasingly demanding market trends. With more than 1600 processing line installed worldwide in Europe, America, Asia and Oceania, and constantly growing its global turnover, IMEAS is a world leader in the supply of special machines and plants for grinding or finishing of stainless-steel metals, wood, plastic and composed materials.

The company is headquartered in Villa Cortese (Milan) and has a presence in three continents — with offices in Peachtree City (Atlanta, Georgia, USA), Beijing (China) and Melbourne (Victoria, Australia). Ⓟ