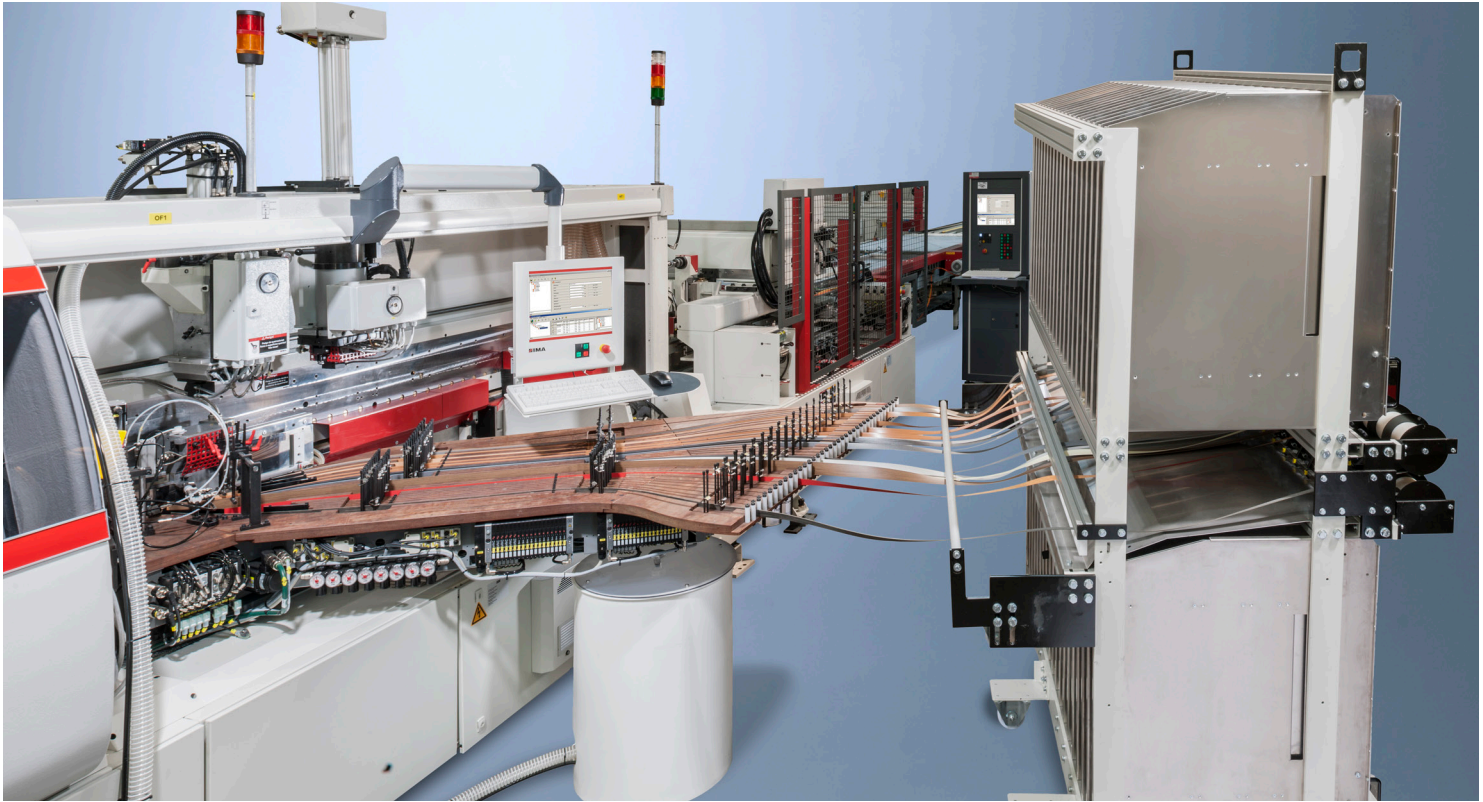


Performance One – Perfect panel infeed ensures economic success with batch-size 1



Any furniture manufacturer who wants to be ahead of its industry on a global basis needs above all a reliable partner for the development of the right production processes and systems. Because what counts here is only flexibility and speed, combined with great demands placed on the quality of every single work step. The machine-based production of furniture components is undergoing a constant change which responds to the individual needs of the customer and hence requires a particularly flexible production process. In this respect, investment in innovative and sustainable technology that is fit for the future is the key to long-term success in this industry.

Performance.one enables batch-size-1 production without any great complexity

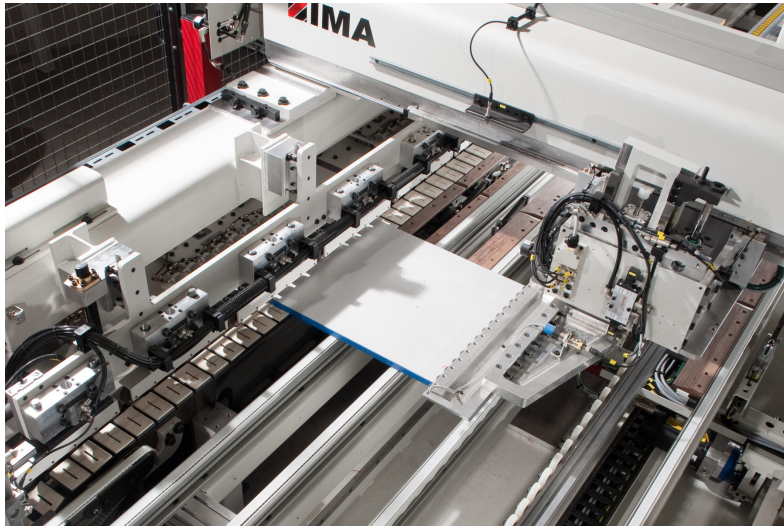
With Performance.one, IMA has developed a highly sophisticated automation solution for flexible batch-size-1 production that requires a minimum on personnel and sets completely new standards in terms of flexibility. The fabrication of furniture components is dominated by small batch sizes intended to meet high quality standards. In this process, complete processing on one machine substantially reduces setup and machining times. Shorter production cycles as well as more and more complex products have made this development necessary. In order to be able to achieve efficient and competitive production under these conditions, production processes need to be oriented towards this goal. The Performance.one made by IMA is a modular and future-proof machine concept for panel sizing and edge banding machines of the Novimat and Combima types relying on the most advanced equipment, the latest technology available and an operator-friendly design. Hence, batch-size-1 production is becoming possible without the need to make large investments and without requiring much setup.

Highly flexible processing line achieves great dimensional and angular accuracy

Performance.one has been developed for custom production and small batch sizes production runs. The highly flexible processing line for panel sizing, edge banding and fine finishing consists of a single-side edgebander with proven IMA processing unit technology that is individually matched to the needs of the specific application. The servo infeed table for fully automatic panel infeed can be equipped with an

alignment system to fabricate panels with a high degree of dimensional and angular accuracy. A both powerful and surface-protecting return conveyor returns the panels back to the infeed of the machine, where the machining program for each panel is identified and loaded by barcode. Three cross-transfer devices and a dynamic minimization of the panel gap significantly increases capacity. The plant is controlled by the well-known and proven ICOS controller made by IMA. With the help of Performance.one, fully automatic fabrication of panels with great dimensional & angular accuracy and in the quality you can expect from IMA becomes a reality that increases competitiveness. Training programs for operators as well as a 24-hours service with the IMA Service Platform will make the tailor-made package round.

IMA infeed system offers absolute dimensional accuracy



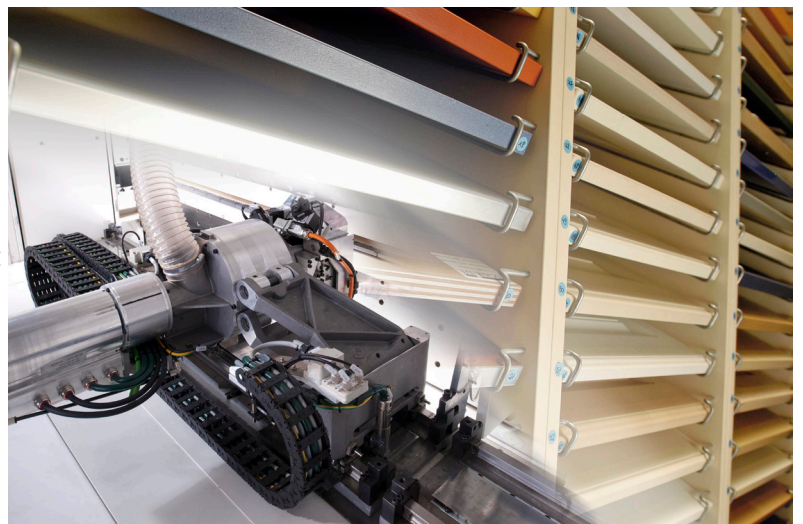
The servo infeed and alignment system for feeding the panels into a single-side edge banding machine independently of their lengths and widths represents a particularly innovative component of the Performance.one package. It allows manufacturers to fabricate parts with accurate squareness and parallelism as well as absolute dimensional stability. Due to its flexible dog spacing, the infeed system provides the highest accuracy of size and form – even with inaccurately pre-sized panels. Hence, production capacity can also be increased in the case of batch-size-1 projects. Another highlight of the infeed system is that it generates the optimal panel spacing both for transversal and longitudinal processing operations.

Laser Edging process produces an invisible joint

The innovative IMA laser technology can also be integrated smoothly in the Performance.one package. IMA applies the laser technology to create an inseparable bond with the surface making the coextrusive edging an integral part of the board substrate. Accurate processing of both materials allows for identical colours and an invisible joint that no longer attracts dirt. Without heating times and with reduced setup times, the laser technology significantly increases capacity in the machines and minimizes the rejects rate. An unbeatable improvement of the visual appearance of furniture components, a greatly increased resistance to environmental influences and guaranteed robustness due to the laser joint are the unique result of this technology.

Contour milling unit ›KFA‹: high quality, increased capacity and no setup times

The contour milling unit (KFA) offers features that have been and still are unique in regards to performance and capacity. So-far unseen "state of the art" features on high feed rates process security and repeatability. Edge finishing on Novimat and Combima machines, combined with Performance.one, is performed at an entirely new level of quality. The special arrangement of the tracing system ensures that the tracing forces always act perpendicularly to the surface of the workpiece. This guarantees an optimal machining result both for the profiled path section and the vertical path of the edge. Moreover, the large tracer wheel provides a perfect surface finish, little contact pressure and smooth rolling properties. Modern drive technology allows for high dynamics and



minimizes wear and tear on the mechanical parts. Setting up the milling motor, which is tilted at 45°, to the edge profile occurs through axial axis adjustment without tracer wheel change, hence related setup times are eliminated. This process is carried out within the time of the panel spacing, which results in significantly increased productivity.

Simple data link

The machines are controlled by the proven ICOS Open controller from IMA. The PC-based control system with integrated PLC and electronic line point control has a user-friendly HMI with Windows standards. The ICOS Open user interface provides perfect information flow between the operator and the processing plant. The numerous interfaces enable functions such as barcode control with stationary scanners or, if desired, via mobile handheld radio scanners as well as tape management. In addition, the network points accelerate and facilitate connection to the customer software. That means, job data and program data can be received from external sources, or the transfer of production messages can be integrated.

Profitable and competitive

The Performance.one package from IMA offers a sophisticated production environment for true batch-size-1 jobs which can be managed by one operator only. These solutions utilize the most innovative technology such as the Laser Edging process and the IMA >KFA< contour milling unit. Due to their dependable quality and commitment to high-performance, the machines will be running in a very profitable and competitive production environment.

