Fill Machine Engineering Media Service May 2019

Industry/Machine Engineering/Woodworking/Innovation/Trade Fair

Virtuality meets reality

Wood, man, and machine in unison. Digitalization is gaining ground in the world of wood machining and opening up new opportunities.

Fill Machine Engineering presents the Future Zone at Ligna 2019. Extensive digitalization in the sense of Industry 4.0 enables the highest levels of quality and efficiency in the machining and processing of wood. In addition, the High Pressure Core Composer process ensures maximum raw material utilization. The latest developments can be seen on Fill's exhibition stand at Ligna 2019 in Hannover (Hall 27, Stand G28) from 27 to 31 May.

Hannover/Gurten, 27 May 2019 – A combination of advanced series production machines and expertise in customer-specific solutions makes the difference: 150 million square meters of wood are cut on Fill bandsaws every year; 60 million square meters of board are repaired using Fill spot repair units. "The main focus of our attention is the development of innovative solutions for producing parquet, solid wood boards, and solid wood components, as well as for surface repairs of plywood and 3-layer boards," explains Erwin Altendorfer, Head of the Wood Competence Center at Fill.

Efficient production of core layers

The innovative HPCC (High Pressure Core Composer) process enables significantly more efficient core layer production. First, gluelam is produced in this process. Depending on quality requirements, knots and other defects are left – to the greatest possible extent – in the gluelam. Intelligent optimization allows knots and joints to be positioned at non-critical points. The sawn timber is only pre-planed to level out excess convexity. Trimming is only required if there is excessive curvature; the ends remain largely uncut. In this way, the individual strands are configured, glued, and compressed into butt-jointed gluelams. The wood is broken partially in order to compensate for thickness tolerances and to prevent excessive stress in the lamellae. First, the pressed gluelams are gouged out and separated into lamellae by *speedliner*

bandsaws. Then glue is applied to the joints to make finished core layers. The yield is 25 to 35 percent higher than with conventional methods. With HPCC, it is possible to produce up to 90 square meters of core layers from one cubic meter of raw material for the first time. The patent for this has already been applied for.

A question of precision

The *speedliner 920-750* is ideally suited to high-precision cutting of gluelam, multilayer boards, and solid wood components up to a width of 750 millimeters. Workpieces are guided on a high-precision transport chain and divided into strips by the horizontal fine-cutting bandsaw module. "With kerfs as narrow as 1.6 millimeters, we guarantee high levels of cost-effectiveness," says Erwin Altendorfer, describing the performance of the machine. The "easy-to-use" concept ensures clear and intuitive user guidance and results in shorter startup times and therefore higher system availability. Fill is presenting a new bandsaw model for the first time at Ligna – *speedliner 710 hybrid*, the specialist in lamellae production. Improved accessibility, new looks, and a larger cutting range impress as highly as its exceedingly simple operation, high output, and minimum cutting tolerances. Depending on individual requirements, Fill *speedliner* bandsaws may be operated as freestanding machines or in production lines of several in-series, automated bandsaw modules.

Repair small flaws automatically

The Fill *speedfiller visco* and *speedfiller solid* spot repair systems have been developed for fully automatic, reproducible correction of surface flaws on solid wood and plywood boards. The defects are detected as boards pass through a scanner, then milled out if necessary, and repaired using viscous filler materials or solid wood elements. Thanks to its modular construction, the capacity can be adapted precisely to individual customer requirements.

Fill Cybernetics – welcome to the Future Zone

With its *Cybernetics* smart factory solution, Fill is bringing digitalization to production processes. *Cybernetics* connects to all the machines in a factory and enhances them with intelligent algorithms. The smart process control optimizes not only component flows but also machine capacity utilization. In parallel, production and process data is collected and recorded. Platform-independent dashboards designed individually to customer specifications provide an optimum overview and enable detailed analysis of

production and machines. This guarantees high availability levels and boosts productivity decisively.

Corporate data

Fill is a leading international machine and plant manufacturing company serving diverse branches of industry. The family-owned business excels in the use of the latest technology and methods in management, communication, and production. Business operations encompass the fields of metal, plastics and wood for the automotive, aviation, sport, and building industries. The company is the global market and innovation leader in aluminum core removal technology, casting technology, wood bandsaw technology, as well as in ski and snowboard production machines. Andreas Fill and Wolfgang Rathner are joint CEOs of the company founded in 1966, which is still completely family-owned and now has about 860 employees. In 2018, the company recorded sales of around 160 million euros.

Further information can be found at: www.fill.co.at

If you have any questions, please contact:
Kommhaus
Altausseer Strasse 220
8990 Bad Aussee, Austria
Tel.: +43 3622 55344-22
Fax: +43 3622 55344-17
E-mail: press@kommhaus.com