

LEUCO to Exhibit at LIGNA 2017

Tool innovations and innovative application solutions

The leading international trade fair and get-together for the wood and furniture industry LIGNA will be held from May 22 - 26, 2017. And LEUCO will be there. Visitors to its booth in Hall 15, booth F34, will have a chance to get inspired by new innovative tools and innovative application solutions and concepts regarding integrated manufacturing.

The company's exhibit will focus on new products to increase machining quality and performance while also improving the work environment by reducing noise. These new, flexible tools will help our customers to perform more machining processes on the CNC using just one tool. This benefit is relevant for companies that want to produce small batch sizes economically.

LEUCO will be introducing impressive tool and system solutions on the trending topic of "material diversity in the furniture industry" at LIGNA. For example, in the special LIGNA exhibition area dedicated to the "Processing of Plastics and Composites," LEUCO will demonstrate machining methods for "non-wood materials."

Development studies on connected manufacturing have revealed the enormous potential for companies in the wood and furniture industry through the "digital resume" of cutters and other machinery. Up-to-date and constantly available data between the machine, tool and sharpening cycle result in a smooth "plug & play" operation, i.e. installation and smooth start-up of the tool.

During live machine demonstrations, booth visitors will see, hear and feel what LEUCO tools are really capable of.

In fact, there will be a lot for LIGNA visitors to see and do at the LEUCO booth. "Magentify Wood Processing" is what the tool manufacturer with its characteristic magenta U calls wood processing and machining with higher quality, better performance, increased innovation and more solutions.



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LEUCO is particularly looking forward to personal interaction with its customers and colleagues in the industry and will have its international team on hand to meet and greet LIGNA visitors. Get your free LIGNA ticket today under www.leuco.com, LEUCO-News.

→ LEUCO, Hall 15, Booth F34



LIGNA 2017 Innovations

"Innovation in Sizing - Milestone for the Industry!"

Once again, LEUCO is focusing on reducing noise during the sizing process. To this end, the tool research company from Germany's Black Forest region has developed a **jointing cutter with diamond cutting edges using a completely new approach** in that it has an even more noticeable aerodynamic design than has been available on the market so far.

This kind of design has never been used in the field of woodworking and therefore represents a milestone in the jointing cutter evolution in the industry. This technology systematically guides the air flow around the rotating tool which considerably reduces noise. In addition to the focus on aerodynamic design, the tools are equipped with additional new features. LEUCO will present this new generation of jointing cutters for the first time at LIGNA 2017 and is looking forward to introducing them to other industry professionals.



LIGNA 2017 Innovations

New: Coated diamond-tipped panel sizing saw blades

Operates for longer periods than only a diamond tip

Diamond-tipped (DP) panel sizing saw blades from the LEUCO product portfolio are well-known in the industry and are popular because of the long edge lives on the pressure beam machine

During LIGNA 2017, LEUCO will introduce industry professionals to a solution that offers a longer edge life than previous diamond-tipped saw blades. The diamond-tipped cutters have a special LEUCO topcoat coating that considerably extends the already long edge life. When trimming wood materials, the running meter performance has reached a completely new level when it comes to edge life.

The goal of the LEUCO developers was also to design the tool body so that it is suitable for extremely long periods of operation. The laser ornaments with their special arrangement and shape and filled with a dampening material are the result of intense development work. Users are guaranteed to receive the same high cutting performance and quality throughout the entire life cycle of a saw blade. This new diamond tipped product line with the new laser ornaments filled with a dampening material will be available starting at LIGNA. The marathon cutting tool operators who want to achieve the maximum edge lives choose the blades optionally coated with "LEUCO topcoat"

The diamond-tipped teeth of the new panel sizing saw blades are additionally coated. Customers achieve an edge life that has never been seen on the market.



LIGNA 2017 Innovations

New LEUCO p-System Groove Shank-Type Cutter

Chip-free milling grooves in all layers

In addition to traditional grooves for rear cabinet paneling, grooves and milling grooves for pilaster strips, (connection) fittings, hinges, assembly plates, etc. rank among the most often used milling processes of a groove shank-type cutter.

At the LIGNA 2017, LEUCO will present the new small dimensions offered by the "LEUCO p-System" shank-type cutter. At the same time, to round out its trade fair exhibits and demos, LEUCO will be showing exciting application samples that were all produced using cutters from the new shank-type cutter product line. At first glance, you wouldn't think that some of the work pieces could be produced by a shank-type cutter. Since grooves are not only cut into the surface, but also on the front and longitudinal edge, this is an interesting area of application for this shank cutter. Thanks to the high shear angle of 70 degrees, the LEUCO p-System does not simply trim the fibers, rather peels them off with minimal cutting pressure. It is possible to produce flat and deep grooves and milling grooves on almost all surfaces without generating chips. The materialconserving process allows oak veneers, for example, to be machined across and along the fibers without chipping, thus meeting the highest quality standards. The outstanding technological performance of this milling system combined with additional new dimensions allow for solutions that will chills send excitement throughout industry.



Chip-free dovetailing using a LEUCO p-System shank-type cutter



LIGNA 2017 Innovations

Nesting Shank-Type cutter Product Family Welcomes New Applications

How fine grooves are generated in massive materials

LEUCO will also be presenting at LIGNA three new diamond-tipped nesting shank-type cutters, especially designed for machining multiplex and MDF support panels. These new cutters reduce the chip volume and, at the same time, enlarge the chip gullet volume in the tool. This guarantees that chip evacuation goes more smoothly, literally. New additions to the DP nesting cutter product family include tools with 12 mm and 16 mm cutting diameters with a special cutting geometry for traditional panel thicknesses.

Diamond-tipped, high performance shank-type tools are commonly used for nesting. These triple-tooth cutting tools (Z=3+3) can handle feed speeds of 25 m/min and more for particle board. However, if very dense or very hard materials are machined, such as MDF or multiplex boards, the situation changes noticeably. The volume of the chip material produced by the cut MDFs increases dramatically, which means that the chip gullet in the tool quickly fills up, thus producing more cutting pressure and friction. This, in turn, generates heat, reduces the tool's service life and even the loss of the teeth. The new nesting shank-type cutter product family from LEUCO is a true problem-solver for these applications.



Thanks to a modified cutting geometry, the expanded diamondtipped nesting shank-type cutter product family meets the special challenges of MDF and multiplex boards as well as similar wood materials.



Smooth surfaces and long edge lives

New Trimming Cutter Head for Planing, Folding or Grooving

The new LEUCO trimming cutter head is impressive due to its outstanding smooth milling surfaces and long edge lives. Regardless of whether leveling, folding or grooving, the LEUCO cutter head can do almost any kind of cutting thanks to its lined arrangement of cutting edges. During an independent customer test, the LEUCO trimming head demonstrated an edge life of up to four times longer than other conventional trimming heads on the market.

The issue of sustainability played a major role in its development. Due to the new cutting geometries in the exchangeable inserts, there is less wear and tear and therefore a considerably higher edge life. Not only are time-consuming setting-up times reduced, but also the exchangeable inserts are used one-quarter less. Furthermore, the chip space geometry consists of an aluminum basic body that is configured for large chip volumes as required by the application.

LEUCO will introduce its innovative trimming head for the first time at LIGNA 2017. This tool is immediately available for timber construction operations and carpentry shops with a well built-up base tool program. Parallel to this, the new geometry can be applied to other milling systems.

All in all, the new LEUCO trimming cutter head presents itself as a powerful cutter head with an excellent price/performance ratio



Regardless of whether planing, folding or grooving, the new LEUCO trimming cutter head is sure to excite due to its smooth, chip-free surfaces and long edge life.