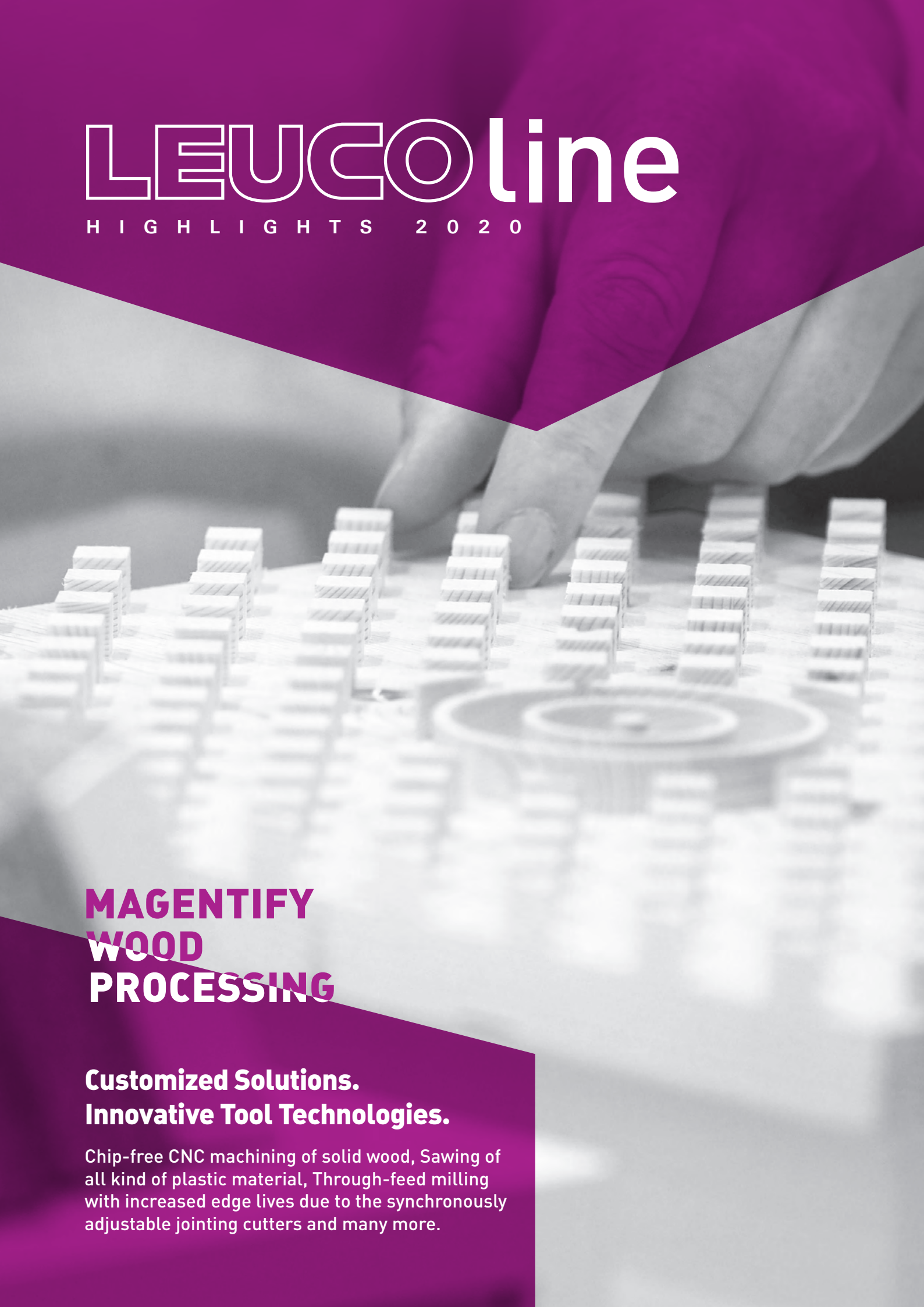
LEUCOline

HIGHLIGHTS 2020



MAGENTIFY WOOD PROCESSING

Customized Solutions. Innovative Tool Technologies.

Chip-free CNC machining of solid wood, Sawing of all kind of plastic material, Through-feed milling with increased edge lives due to the synchronously adjustable jointing cutters and many more.

MAGENTIFY WOOD PROCESSING

Magentify is the word that characterizes LEUCO and stands for innovative tool solutions and application know-how for wood processing.

Our claim "Magentify Wood Processing" stands for our promise to provide our customers actively with a comprehensive support during their daily work.

CONTENT

The Q-Cut G6 is the best seller in the Q-Cut family. It is used for finish cuts in foil-coated, plastic-coated or veneered wood-based materials.

Q-Cut saw blades from LEUCO

BEST FINISH-CUT QUALITY...

The strength of the Q-Cut family from LEUCO is the very good quality of cut. In addition, the saw blades for horizontal panel sizing saws have very long edge lives. Users appreciate the good price-performance ratio.

Saw blades from the Q-Cut family are used for single and stack cuts up to an 80 millimeter height of cut when finish-cut quality is required. The reason for this is the low-vibration tool body. As a result, operation is smooth; the cut edges are clean and chip-free.

Q-Cut panel sizing saw blades are used for single and stack cuts up to 80 mm.

Long edge lives in the standard assortment

The tungsten carbide cutting material used by LEUCO is breakage- and impact-resistant. That is why the edge lives are relatively long. Depending on the material, the saw blades last for up to 5,000 running meters.

These saw blades are part of the standard assortment and the purchase price is relatively low. Plants that use the saw blade are thrilled with the price-performance ratio.

Various versions for users

LEUCO has four versions of the Q-Cut family in the standard assortment:

- With the **Q-Cut G6**, LEUCO provides finished-cut quality in the diameter range of 280-520 millimeters.
- If reduced noise is required as well, the **Q-Cut G6 nn-System** is the correct choice.
- Whoever processes plywood, veneered wood-based materials, panels with sensitive top layers or lightweight panels should reach for the **Q-Cut G5**.
- The **Q-Cut TR-F K** for anti-fingerprint materials and plastics rounds out the finished-cut assortment from LEUCO.

Saw blades from LEUCO for abrasive materials

SPECIALISTS ARE WORTHWHILE

Carpentry shops frequently use and like to use all-round saw blades such as the "nn-System DP flex" from LEUCO. When many abrasive materials need to be processed, special blades are worthwhile. After all, their edge life is up to six times longer.

Multi-purpose saw blades are preferred when processing small quantities of a variety of materials. That is why LEUCO offers very good quality and long edge lives with all-rounders such as the DP flex for many materials. When orders involving larger quantities of abrasive materials need to be processed, switching to a special blade can be worthwhile. Their different tooth geometries and DP types are tailored to specific materials and as a result have considerably longer edge lives.

When is a specialist worthwhile?

Abrasive materials such as cement fiber or magnet bond board are such cases, for instance. A specialized saw blade typically has a three to six times longer service life. For comparison: While the DP flex needs to be resharpened after half a day, the DIAREX saw blade with the proven HR tooth geometry can be used for up to three days. Changing the tool is definitely worthwhile.

Moreover, when using all-round saw blades in abrasive material, there is a risk of unintentional overrun. Because of the rapid wear, the resharpening area can also be worn away; the tool can then no longer be resharpened.

The right saw blade can be found in the LEUCO ONline Catalog (www.leuco.com/products). Purchasers can simply filter the products by material options. The website then displays the all-rounders and corresponding specialists.

The "KO-HR" scoring saw blade is suitable for use with all panel sizing saw blades in the Q-Cut family and provides a very good quality of cut in all common coatings used on wood-based materials.

Scoring saw blades from LEUCO

... WITH THE RIGHT PARTNER

The scoring saw blade with the conical hollow-back geometry is an ideal match for the Q-Cut. The tool offers convincing performance with its high quality of cut and outstanding economics. This is because the LEUCO scoring saw blade combines long service life with low cost.

The conical scoring saw blade with hollow back offers 20% longer service life than comparable scoring saw blades and thus a good price-performance ratio. Thanks to the cutting geometry and high-quality tungsten carbide in the Q-Cut, tools can be used longer in a set.

Because of the tool geometry, the scoring depth is reduced by about 30%. This results in lower cutting pressure – and thus less wear. Nevertheless, the number of possible resharpenings remains the same despite the shorter cutting edges.

The HL Board 04 plus tungsten carbide grade used for the cutting edges also contributes to the longer service life of this scoring blade. This tungsten carbide was developed specifically for LEUCO and is characterized by a its high performance and ruggedness.

→ Scoring saw blades at leuco.com

THE RIGHT SCORING SAW BLADE WITH THE CLICK OF A MOUSE

As a simple orientation aid for customers, LEUCO has matched saw blades with appropriate scoring saw blades. These can be viewed online on the product pages for the respective main saw blades. Clicking the recommended scoring saw blade takes you directly to this blade's own page.

The search function or tool finder takes you to the product pages for the main saw blades. The appropriate scoring saw blade is displayed there.

Which saw blade is the best selection? LEUCO recommends the all-round saw blade nn-System DP flex (left) for small quantities of the widest variety of materials with excellent quality of cut and extremely low operating noise. On the other hand, the LEUCO DIAREX HR blade (right) with up to a six times longer service life is preferable when a large quantity of the same, possible abrasive material, needs to be processed.

G5 and G7 blades for Schock Fensterwerk

TRIMMING PROFILES AND SEALS CLEANLY AND BURR-FREE

When it comes to saw blades for miter cuts, Schock Fensterwerk relies on LEUCO. The G5 and G7 models are used on CNC machining centers. Long service lives and high quality are the convincing arguments.

Windows, doors and fire protection elements are the special field of Schock Fensterwerk, which has its headquarters in Denkendorf, Bavaria. For miter cuts in window profiles, the window manufacturer uses blades from LEUCO, because they best satisfy the high quality requirements.

"Miter cuts must be clean and burr-free here. Only in this way can we achieve the highest quality of the end products. Long service lives are a welcome bonus", explains Matthias Waffler, production manager at Schock Fensterwerk. For over 38 years he has worked at the company, which today has 120 employees. Miter cuts in window profiles are produced on three large systems that are fitted with standard and special tools.

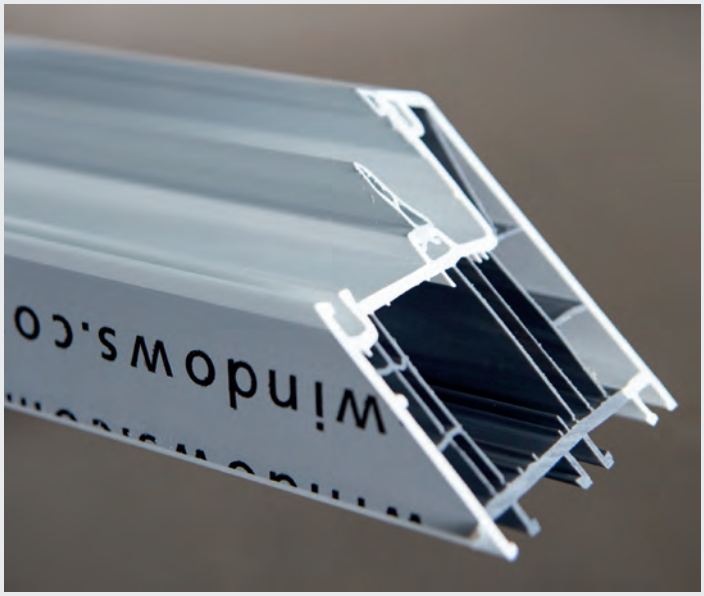
The challenge of window profiles

Schock Fensterwerk processes the widest variety of window profiles - with or without seals, plastic or aluminum, with coarse or

fine geometries. This is where standard tools sometimes reach their limits. "Working together with us, LEUCO has developed appropriate saw blades for especially demanding window profiles", states Matthias Waffler. "The know-how was definitely there, so that the entire development was handled professionally and well".

G5 for the widest variety of plastic profiles

LEUCO developed the G5 saw blade for processing of plastic. "We use the standard version for profiles with fine geometries and different materials, such as combined profiles of plastic and aluminum", explains Matthias Waffler. "The



Clean and burr-free miter cuts in the plastic profile and already installed seal by using the LEUCO g5-System saw blade

Three systems with LEUCO G5 and G7 saw blades are used at Schock for miter cuts in various materials and geometries.

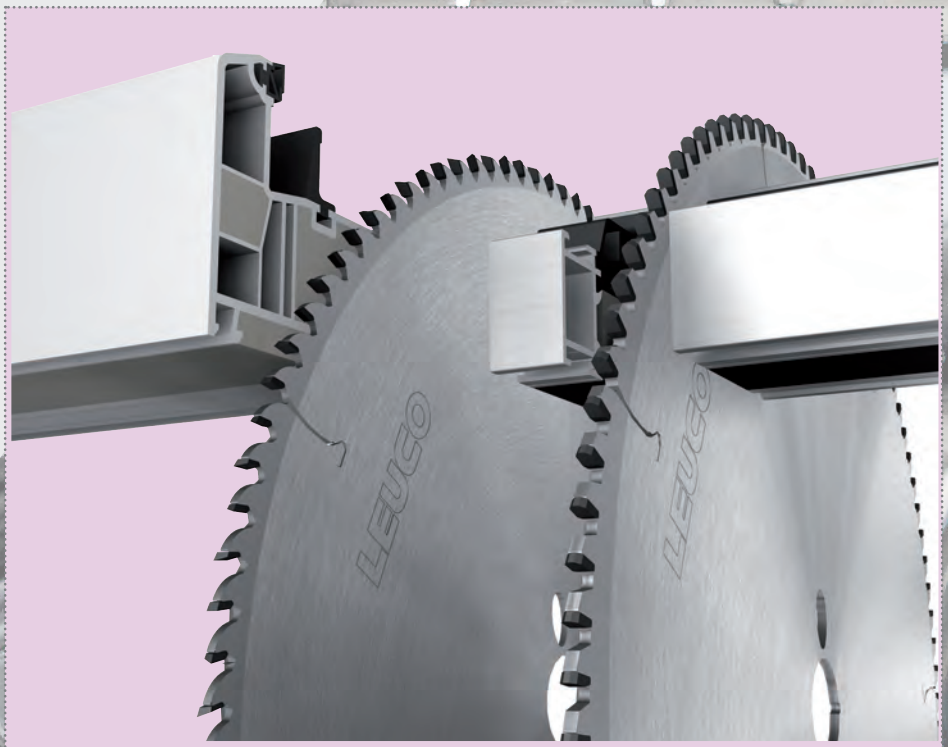
> „At LEUCO we have a contact person on whom we can rely completely and a creative, open team. That is why we are so satisfied.“
>
> MATTHIAS WAFFLER, PRODUCTION MANAGER AT SCHOCK FENSTERWERK

version adapted to the machine miters profiles that already have seals installed. These seals must remain undamaged".

G7 for demanding aluminum profiles

The G7 saw blade is an additional tool for miter cuts.

"With it, for instance, we process the PU core with plastic ribs and aluminum shell, also coated and anodized', explains the production manager. "It is important here that the powder coating or painting remains intact. The customer would see damage on the end product". To prevent this, LEUCO adapted the basic tool together with the customer. Matthias Waffler summarizes: "At LEUCO we have a contact person on whom we can rely completely and a creative, open team. That is why we are so satisfied".



g5-SYSTEM SAW BLADES

- For PVC, solid wood and composite profiles
- High quality and long edge lives
- Low noise and vibration
- For clipping and miter saws
- Cutting material: Tungsten carbide or diamond

g7-SYSTEM SAW BLADES

- For thin-walled aluminum profiles
- High quality and long edge lives
- Low noise and vibration
- For clipping and miter saws
- Cutting material: Tungsten carbide

Saw blades for plastics

THREE TRUMPS FOR PLASTICS

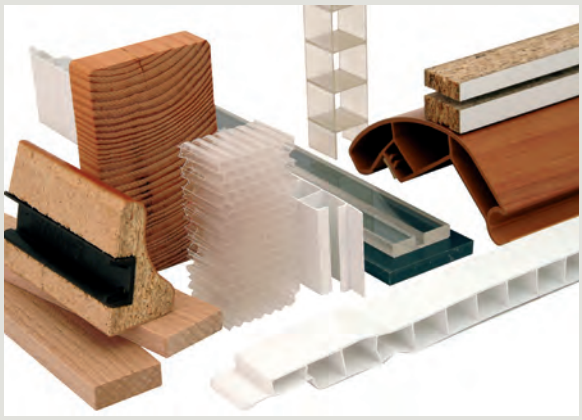
The growing use of plastic panels means that carpenters face new challenges when using a sizing saw. Only saw blades designed especially for plastics ensure high quality and a long edge life. LEUCO offers three circu-lar saw blades that provide a good solution for every type of plastic.

With three circular saw blades, carpenters overcome challenges that arise from the growing use of plastics in furniture and kitchens. After all, plastics differ quite significantly. For instance, thermoplastics such as polycarbonate and polystyrene easily become too warm and melt when sawed, while thermosets tend to chip. With three saw blades from LEUCO, almost all plastics encountered in carpentry can be processed: Plastics (item no. 193109), G5-System (item no. 192794) and Solid Surface (item no. 193133).

Using these three saw blades ensures easy trimming of plastic panels and quite good to very good results. It is thus advisable for carpenters to have these blades always available and ready for immediate use.

The new saw blade for plastic material is, above all, a specialist for all kinds of flat plastic panels such as glass laminate or many thermoplastics.

The **sizing saw blade "G5"** provides the highest quality when sawing thin polycarbonate panels, twin-wall sheets, for instance. Lightweight



Excellent chop cuts in thin-wall and brittle thermoplastic profiles can be achieved with the "G5" sizing saw blade.

and brittle panels of extruded polystyrene can also be processed very well with this saw blade. They are commonly found as the Danopren and Efyos brands.

The "**Plastics**" saw blade processes, for instance, all transparent PMMA panels (e. g. Plexiglas), as well as transparent polystyrene panels (Wattolene). It also saws solid polycarbonate (PC) panels, available under names such as Lexan and Makrolon.

"**Solid Surface**" is a saw blade designed for hard and abrasive thermosets. Thus, high-pressure laminates (HPL) can be sawed quickly and with high quality with this blade. It is ideally suited for the mineral-based panels known as Solid Surface, after which LEUCO also named this saw blade. Such panels are available under brand names such as Avonite, Corian, Hi-Macs and Varicor.

	MATERIAL	EXAMPLE	FEATURES	192794 G5-SYSTEM	193109 KUNST-STOFFE	193133 SOLID SURFACE	193195 ANTIFIN-GERPRINT
THERMOPLASTICS	Polymethylmeth-acrylat (PMMA)"	PLEXIGLAS®, LUCITE®, ALTUGLAS®,...	hard, stiff and brittle	+	+++	+	+
	Polycarbonat (PC)	LEXAN®, Makrolon®, solid panel	hard and very brittle	+	+++	+	+
		LEXAN®, Makrolon®, twin-wall sheet	hard and very brittle thin wall thickness	+++	+	+	+
	Polystyrol (PS)	DANOPREN®, EFYOS®, (extrud PS = XPS)	lightweight, light and brittle	+++	+	+	+
	Polystyrol (PS)	WATTOLENE®, (crystal clear PS)	transparent, hard, stiff and brittle	+	+++	+	+
DUROPLA-STICS PHENOLICS	High Pressure Laminate (HPL)	Trespa®, HPL	very hard, compact and abrasive	+	+	+++	+
	SOLID SURFACE	Corian®, Avonite®, Varicor®, HI-MACS®,	very hard, compact and abrasive	+	+	+++	+
ANTI FIN-GER-PRINT		Duropal XTreme®, Westag Getalit Mondo®, Egger Perfect Sense®,	hard, brittle surface	+	+		+++

Legend: cutting result +++ very good + sufficient to poor

tapio
Partner

twinio

Some of the functions of the twinio app: Scanning the data matrix code (left), ...

TOOL AND MATERIAL MANAGEMENT WITH "TWINIO"

Do you always know what tool is at which storage location or how much material still remains on the edgeband roll? Probably not. Then you are in good company.

Our goal with twinio is to provide you with an overview of where the tool or material is located and the condition of it.

For a tool, this is frequently the number of resharpening cycles or parts, running meters or square meters produced. For materials, we concentrate on properties such as remaining length or remaining weight.

twinio is only the web app on your mobile device or PC. In the background, there is a clever system running that can be used to store various information on tapio. Only in this way is it possible to create a tool or material only one time. This information is then available in all apps that are connected to tapio and allow you to access your data. As a result, there is nothing preventing a future connection to a machine. Thanks to tapio, you no longer need to update data multiple times, yet you still remain the master of your information.

How does the data reach the twinio app?

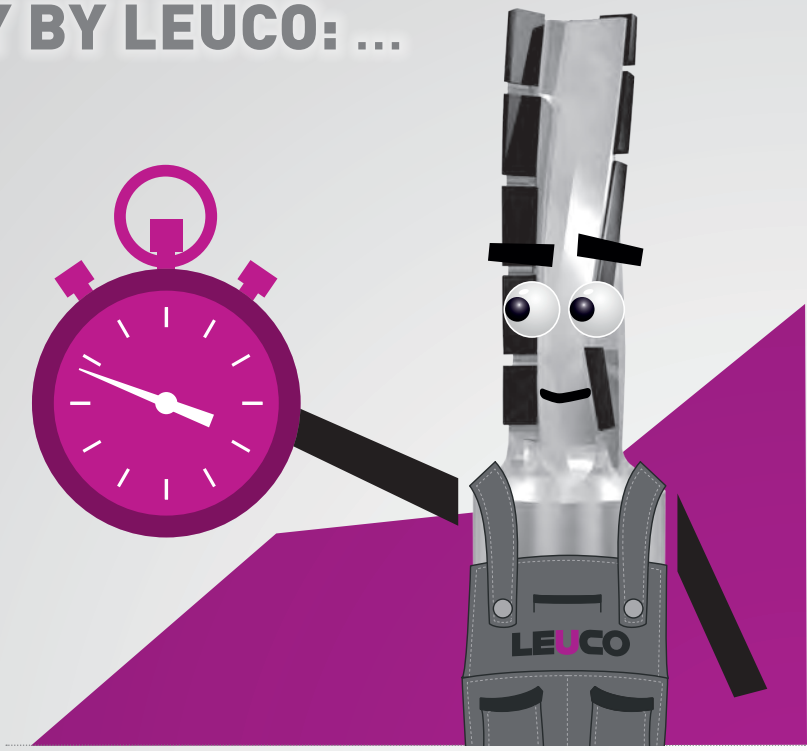
Creating something manually is still possible, but it would be much more efficient if the digital image of a tool or material were available automatically. This is where you benefit from the synergies of our tapio ecosystem. Thanks to LEUCO and other tapio partners, we can already provide most information automatically. You can scan the code on a tool or material, and the information provided by the manufacturer will then already be in your twinio app. If something is not recognized, you can fill the gap yourself and create the tool or material for your company.

For carpenters and furniture manufacturers, there is one location at which all of their physical property such as machines, materials and tools are together – their production.

Many have told us that it is precisely this location which must also be present in the digital world. Only in this way are they able to have an overview of everything and work efficiently with the solutions. Individual solutions for each physical item would make working with digital products difficult. For many, this one location with clear "rules" for the interaction among each item and with data was missing. Only with clear rules is it possible to share data and employ novel solutions. In this regard, who the owner of the data is must always be clear. You surely also believe that the data that your machine generates in your product also belongs to you, don't you? Why should this be otherwise; after all, you purchased the machine or the tool.

...overview of tool inventory (center), tool tails at a glance (right)

EXPLAINED BRIEFLY BY LEUCO: ...



... Sharpening tools

WHEN DO I NEED TO RESHARPEN MY TOOLS?

Poor cut quality is the most important reason for replacing tools. At the same time, phenomena such as loud operating noises and visible wear indicate that it is the right time to resharpen.

There are various indicators that a tool has reached the end of its edge life. The most obvious is usually the cut quality on the workpiece. If this is no longer acceptable, the user generally decides to replace the tool. Further indicators include increased noise development and power consumption by the equipment as well as signs of wear (for instance, rounded cutting edges and chipping of the cutting edge) on the tool. The user with corresponding empirical values has the opportunity to establish for himself fixed criteria as the reason for a tool change. This includes, for instance, a specific value for the power consumption.

... Changing tools

WHY DO COMPANIES REPLACE THEIR TOOLS AT FIXED INTERVALS?

Standardized replacement cycles for all tools make sense for large production facilities in particular. They prevent machine downtime due to unscheduled tool changes.

Large plants specify a fixed time for a tool change. Doesn't this result in high tool costs when the tools are not used to the end of the edge life? No, since before a time is specified, test series are used to determine the average edge life. These empirical values then provide the basis for establishing the "most ideal" change point. This tool change takes place before the quality of the workpiece is affected. For large plants with a high output, unscheduled machine downtime as the result of reaching the end of the edge life abruptly costs more than repairing the tool (possibly) prematurely. The benefits of scheduled tool changes are obvious: personnel can be scheduled and prepare for the tool change, the process planning department can take the tool change into consideration in relation to production planning. In addition, overuse of tools is prevented.

... Exceeding edge life

HOW CAN I EXTEND THE EDGE LIFE OF MY TOOLS?

The first step to achieving longer edge life is to select of an optimized tool. Good maintenance also contributes to a longer useful life of tools.

What are the options for increasing the edge life of tools on existing machinery? It is first necessary to check what kind of tools are currently in use and what material mix is being processed. In most cases, it is possible to use tools with a geometry optimized for edge life. For instance, as a rule, the greater the tool's shear angle, the longer is the tool's edge life. It is also frequently possible to better utilize underused cutting edges on the tool by adjusting the height. Moreover, various versions of adjustable milling tools where unused cutting edges can be repositioned from the outside to the inside to extend the useful life have been available on the market for some time. However, the quickest and easiest way to extend edge life is to clean the tool regularly. What may erroneously be considered a dull tool can frequently provide good cutting quality again after the cutting edges have been cleaned.

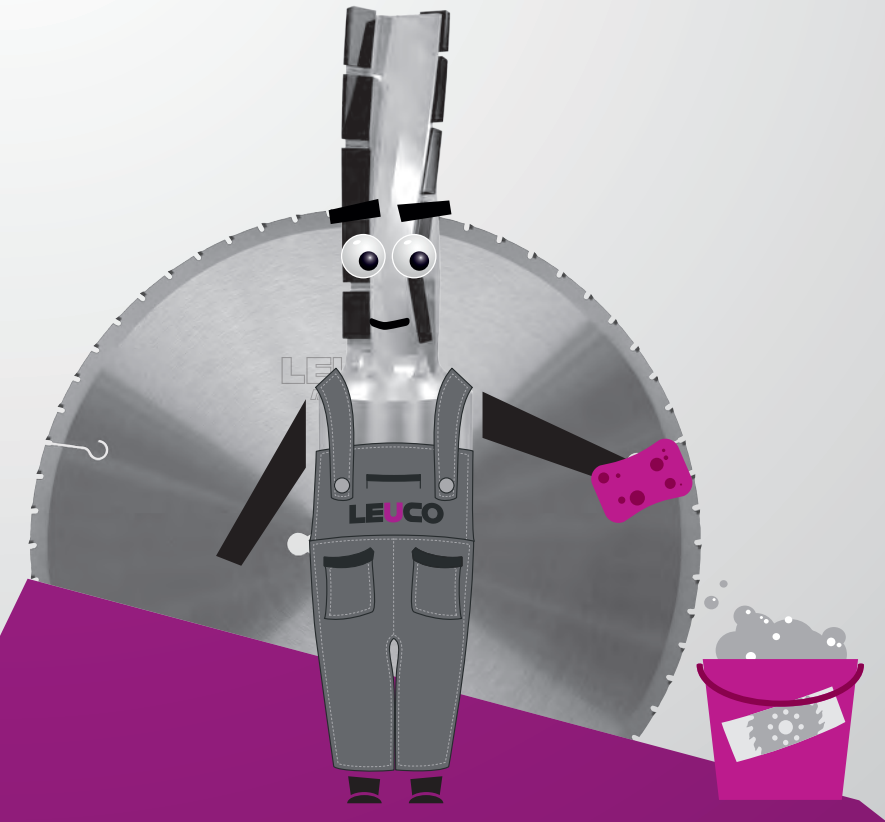
... Exceeding edge life

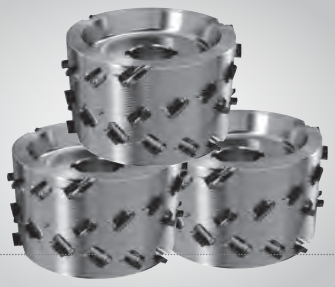
WHAT DOES EXCEEDING THE EDGE LIFE OF TOOLS MEAN?

Using tools beyond the wear limit has adverse effects on tool life. Replacement at the right time and resharpening are worthwhile.

What constitutes overuse of a tool? This expression means that a tool has been used beyond the "healthy" wear limit. Generally, a tool in new condition exhibits almost no wear at first; then wear increases linearly with duration of use. At some point, the wear phase reaches a condition where the degree of wear increases exponentially and significant chipping occurs frequently, since the tool no longer works properly. The phase of exponential wear is designated "overuse".

Can a tool that has been "overused" be repaired again? Usually, yes! It depends on the resharpening area still available. Unfortunately, it is frequently necessary to remove more material from overused tools in order to eliminate the deepest chip. As a result, the tool loses even more resharpening area and the number of times it could be resharpening again than would have been the case if the tool had been changed. Every time a tool is resharpened, the service life of the tool is extended, thus saving the cost of a new tool. This means that it is worthwhile from a cost standpoint to change a tool somewhat earlier!





... Extending edge life

WHAT FACTORS AFFECT THE EDGE LIFE OF MY TOOLS?

The edge life of tools depends on factors such as machine type, processing parameters and quality requirements. This means that plants can affect the useful life of their tools in many ways.

Major factors that affect the edge life include:

→**Processing parameters:** The material type of the workpiece to be processed has a major influence together with the basic sizing concept, for instance, hogging or joining or a combination thereof. Depending on the concept, the depth of cut during processing affects the edge life significantly..

→**Machine type and condition:** In addition, the machine type, i.e. tradesman model or industrial model, plays a role in determining the edge life. The same holds regarding the machine's condition: Older machines may already show signs of wear and higher tolerances, which can result in shorter edge life.

→**Type of tool clamping:** The more exact the interface between tool and machine, the lower are the radial and axial run-out, and thus the maximum achievable edge life of a tool.

→**Type of tool and tool geometry:** The cutting material used on the tool, e.g. tungsten carbide or diamond, has a major effect on the edge life. There are also tool geometries that provide long edge life and others that are more prone to wear.

→**Degree of tool soiling:** The greater the tool soiling, the shorter is the edge life, since the cutting edge geometry that existed when the tool was new can be used to only a limited extent because of deposits.

→**Quality requirement of the customer:** The quality requirements that the workpiece being processed must satisfy differ greatly from customer to customer and depend on the use and quality expected of the product produced. Tool life is generally longer when requirements are less demanding than when very high quality standards must be met.

Most of the factors mentioned differ with every user! That is why no specific value can be given for a tool's edge life. After consulting with the customer, however, the tool manufacturer can offer the best possible tool design for the particular application.

Noise-absorbing double hogger hood

Cleaner and quieter HOGGING

Anchoring of the two-piece hood to the upper pressure beam allows the ideal gap to be set automatically for each panel thickness. The sandwich construction with sound-absorbing material reduces noise by 2 to 3 dB.

The new extractor hood for double hogging adjusts automatically to the panel thickness. Efficiency increases and the equipment operates more cleanly and quietly. In addition, optimized extraction increases manufacturing quality.

The new hood from LEUCO is intended for use on double end tenoners as well as on large edge banding machines with a double hogger. On such industrial machines, it increases the efficiency of chip capture to a new level. The main reason for this is anchoring of the top hood half to the upper pressure beam, since this varies with a change in workpiece thickness. In this way, the hood always adjusts to the right height in relation to the panel thickness. The result is a constant, narrow gap - ideally about 2 mm between the hood and workpiece - and thus to very efficient extraction.

Extractor hood responds to change in panel thickness

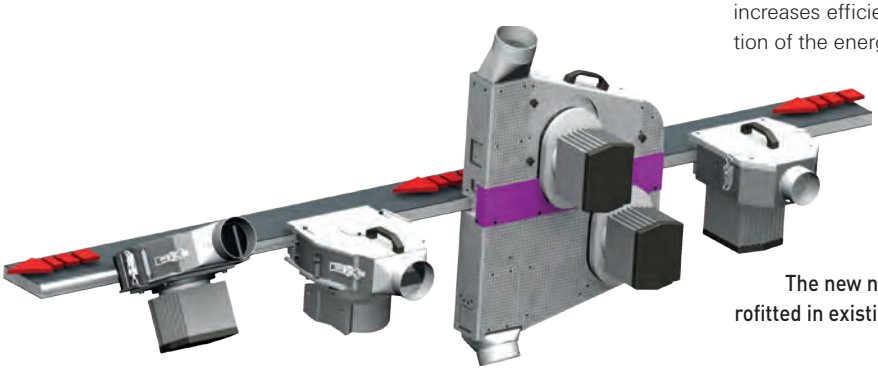
In contrast, common extractor hoods are set permanently to the greatest panel thickness. As a result, the gap width varies between a few millimeters and several centimeters. This variation has consequences, since the extraction output drops due to the usually unnecessarily wide gap, which causes the tool system to become dirty. This makes regular cleaning necessary. Thanks to the consistently narrow gap and resulting maximum efficiency of the double hogger hood from LEUCO, the equipment remains much cleaner and needs cleaning less frequently.

The two-piece design of the extractor also contributes to reduced chip discharge from this hood: Both the upper and lower housing halves have their own suction connection. They are placed so that the stream of chips generated by the hoggers is directed exactly into the suction openings. As a result, most of the chips are conveyed directly into the extraction system, interfering air flows and deposits in the hood housing are minimized. This reduces double hogging considerably – resulting in higher surface quality and longer tool lives.

Hood housing absorbs operating noise

Because of the tight fit around the processing area, the operating noise of the machine is less pronounced. The sandwich construction of the housing also helps: It consists of two sheet-metal shells with insulating material. This reduces the noise level better than the usual single sheet-metal shell. Combined, these improvements provide a damping factor of 2 to 3 dB, a noise reduction that can be heard clearly.

As a further benefit, the hood contributes to energy savings. Thanks to the narrower gap in the double hogger hood, the hood and hogger form an almost fully enclosed system. This increases efficiency and the hood can contribute to optimization of the energy needs of the extraction system.



The new noise-absorbing double hogger hood can be retrofitted in existing machine lines.

Synchronously adjustable jointing cutters from LEUCO

INCREASED EDGE LIFE THANKS TO UNIFORM CUTTING EDGE WEAR

LEUCO offers synchronously adjustable jointing cutters for sizing panel material. In a comparison with conventional cutters, edge life was increased by a factor of 3 or more in initial testing.

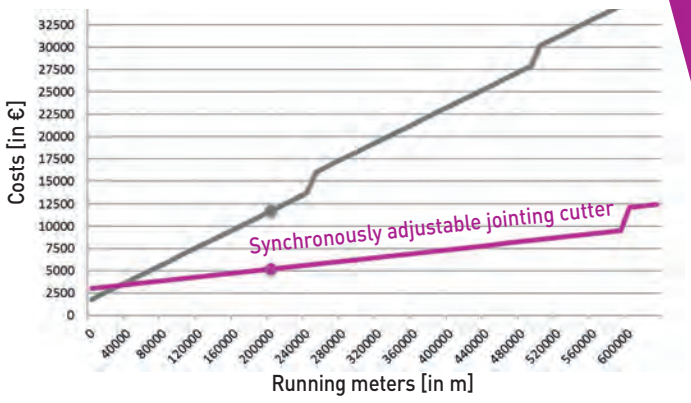
The cutter is beneficial above all in industrial facilities that produce series with identical and similar panel heights. In such shops, abrasive top layers always occur at the same location in certain cutting areas. As a consequence, these shops need to have their milling tools resharpened even though most of the cutting edges can still be used.

LEUCO now offer the synchronously adjustable jointing cutters as a solution. Its base body consists of two halves to which the diamond-tipped cutting edges are soldered. These halves can be moved towards one another by means of an adjusting mechanism. In this way, it is always possible to employ unused cutting edges.

During development, LEUCO conducted initial testing. This testing showed that, compared to conventional cutters, edge life was in-creased by at least a factor of 3 through adjustment. The higher cost to purchase the jointing cutters was amortized quickly. During testing, the higher cost was already justified at approximately 40,000 running meters in the case of panels with a highly abrasive top layer, especially facing material. The savings from tool and sharpening costs already amount to about 6,000 euros at 200,000 running meters.

In addition, setup times are also reduced, because production only needs to be interrupted briefly to adjust the jointing cutters compared to a complete tool change. The synchronously adjustable jointing cutter is available for hydraulic motors with size 30 and 40 shafts. The innovative adjustment technology can be employed on a wide variety of jointing cutters.

The higher cost to purchase the synchronously adjustable jointing cutters from LEUCO is amortized quickly. During testing, this higher cost was already justified at 40,000 running meters in the case of a highly abrasive top layer.

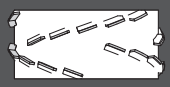


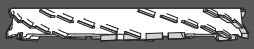
The synchronously adjustable jointing cutters from LEUCO is beneficial above all in industrial facilities that produce series with similar panel heights. The figure shows a version as DIAREX airFace

LEUCO p-System - A success story continues to grow

A REVOLUTION IN MAGENTA

- JOINTING
- CHAMFERING
- RABBETING
- GROOVING



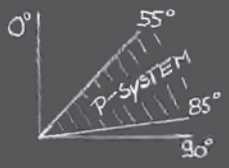


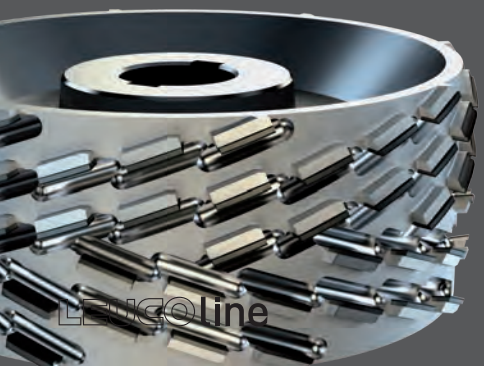

What was the world like 10 ago? Most woodworking tools had small shear angles and the expression "draw cut" was already used when the shear angle reached 30°. Until LEUCO introduced its p-System tools on the market and triggered a genuine revolution in woodworking by suddenly offering tools with a 70° shear angle.

LEUCO filed for its p-System patent exactly 10 years ago. Since then, all shear angles from 55° to 90° on diamond tools are protected by the LEUCO patent. The woodworking world was turned upside down. In the meantime, all tool makers who have been able to do so have developed tools with an angle up to that protected by the LEUCO patent. If an entire industry attempts to imitate a development to the extent allowed, the development cannot be wrong. The original, however, is only available from LEUCO and the major benefits of the p-System are only achieved fully within the patented range of angles. The patented range for p-System tools extends from 55° to 90°. The LEUCO p-System tools being used on the market have a shear angle of 70° and offer superior performance compared to tools from competitors with a near-patent angle of 54.9°.

System tools that can be used over a very wide spectrum. To name just one, the p-System grooving cutters that always cut sharp-edged grooves with a depth of cut starting at 0.5 mm. There are p-System dovetail cutters with which dovetail joints can be produced much more easily on a 5 axis machine. ...

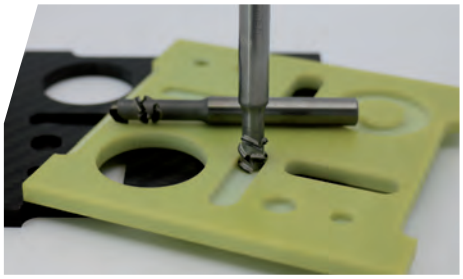
Previously unachievable quality of cut in solid wood and wood-based materials. There is no better quality of cut in woodworking. This frequently eliminates the common follow-up work.



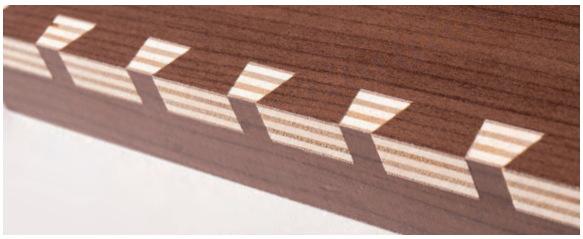


p-system®

All LEUCO p-System stocked tools have an axis angle of 70°.
LEUCO's patent covers axis angles from ≥ 55° to 90°.



Wide range of processable materials. In addition to wood and wood-based materials, carbon fibers, glass fibers, and aramid with long edge lives for these materials can be mentioned along with curiosities such as marble and mother-of-pearl, and even fabric coatings that previously could not even be processed until the introduction of p-System tools.

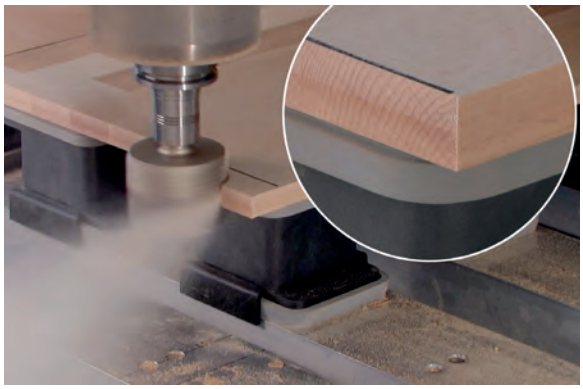


How you benefit from these advantages

In the past 10 years, a single tool has developed into the p-System, an extremely versatile tool system suitable for almost all woodworking tasks.

This list of specific benefits can never be presented in its entirety on a few pages. Contact our Sales department with your requirements. Many customers are already benefiting from the advantages of p-System tools, as shown clearly by the 100,000 p-System cutting edges installed. What processing problems can we solve for you? Talk to us!

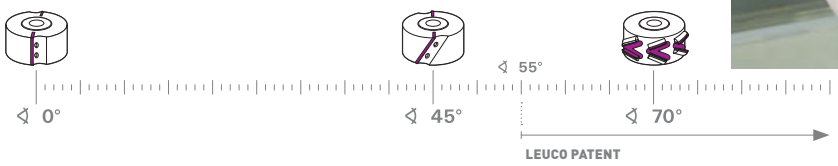
...Chipping at the exit point simply does not occur when cutting. Using p-System jointing cutters, even 30 mm of material can be removed occasionally without the need for a subsequent smoothing cut, because the p-System still provides finish-cut quality.



Identical quality of cut with or against the feed. When you think about this fact, you will recall many things that you previously had to produce with considerably more effort.

No chipping at the end of the material being cut, regardless whether solid wood cut on end or plates with glued edge bands. This frequently eliminates the need for a second tool or processing a second time.

Outstanding tool lives. Although the tool is very expensive because of the many diamond cutting edges, the much longer tool life makes it worthwhile for the customer. When has there ever been a tool that is more economical and provides better quality of cut per running meter than the originally used tool?



LEUCO p-System Cutters

VARIED CUTTERS FOR AUSTRIA'S TOP FURNITURE MANUFACTURER

On a new production line, the furniture manufacturer Voglauer processes a wide variety of materials: from wood core plywood to veneered and decorative chipboard. For this production line, Voglauer relies on LEUCO p-System cutters.

Voglauer has been operating a new production line since 2018. The reason for this investment can be traced to changing requirements for more individuality. The demand for individuality is enormous for hotel interiors in particular.

Versatile tools from LEUCO play an essential role in this concept. In addition to various diamond-tipped hoggers individually designed by LEUCO, Voglauer also uses the patented p-System from LEUCO for joining.

The p-System for all materials at Voglauer

After all, the Austrians have experienced very good results with this diamond-tipped tool system. "We also use the p-System on other machines", stated Martin Schrittwieser, Production Manager at Voglauer in Abtenau near Salzburg. "With the large shear angle of 70 degrees, we achieve high quality in all materials that we process. And we also have an additional benefit: We need fewer tool locations."

The p-System also allows processing of veneered materials in a through-feed with the same quality lengthwise and across the grain. Not an easy job with the different fiber structures. However, it is possible with the p-System.

The p-System tools cut knife-sharp edges with extremely low cutting pressure. In the through-feed machine at Voglauer, the cutters achieve above-average edge lives, which in turn eliminates setup time for tool changes.

Production at Voglauer also regularly involves small lot sizes in a wide variety of materials and material thicknesses. With the LEUCO p-System, even veneered parts with a veneer overhang are joined and milled in through-feed and stationary machines.

Martin Schrittwieser (Production Manager at Voglauer, at right) uses the LEUCO p-System, since he can process many materials with high quality and corresponding edge lives, thereby eliminating tool locations. Roman Edelhofer (LEUCO) discussing how the most varied requirements can be met with minimum expense by using flexible tools.

For many years, Voglauer has used LEUCO p-System cutters economically on CNC machines.

It was now the logical consequence to integrate LEUCO p-System tools with a 70 degree shear angle on the new line.

DP DIAREX combination shank-type router bits

CLOCKWISE AND COUNTER-CLOCKWISE ROTATION WITH A SINGLE CUTTER Z=2+2

LEUCO introduces two new combination shank-type router bits with clockwise/counter-clockwise rotation for sizing and joining of panel materials on CNC machines with console tables.

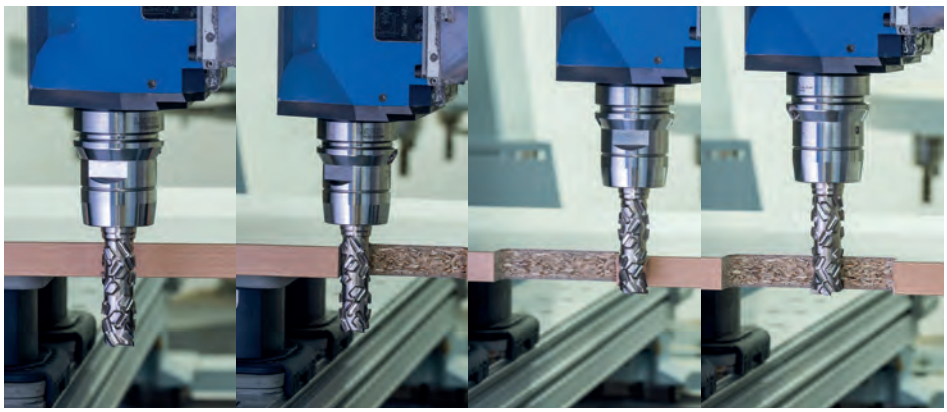
The shank-type router bits have both a counter-clockwise rotating and clockwise rotating cutting segment, each of which can be used by shifting along the Z-axis and changing the direction of rotation.

When routing workbench board corner connections in particular, this guarantees chip-free cutting of the visible edge by routing both sides with a conventional cut using only one router bit.

The customer thus no longer needs two separate tools, saves the time associated with a complete tool change and, in addition, gains a free location on the tool changer.

The proven DIAREX cutting edge geometry with large opposite shear angles ensures exceptionally clean edges even in the case of fragile coatings. Thanks to the compact design of the base body, the router bit provides high stability, ensuring smooth running.

The new router bit generation is available in two sizes from stock. One version for processing material thicknesses up to 19 mm, another for thicker material up to 32 mm.



Insert milling is a classic application for the new clockwise/counterclockwise router: Routing with the upper, clockwise-rotating cutting segment with a conventional cut. Then raising the spindle in the Z-direction, followed by reversing the direction of rotation to the counterclockwise direction. Routing with a conventional cut from the right side with the lower, counterclockwise-rotating cutting segment.

DIAMAX shank-type cutter program, what's new:

In response to numerous customer requests, two additional sizes are available from stock effective immediately: Ø8 x SL 22 and Ø10 x SL 32.

DP roughing/finishing cutter family grows

MORE SIZES FOR MORE OPPORTUNITIES

Roughing/finishing cutters combine the advantages of the high removal rate of a roughing tool with the high cutting quality of a finishing cutter. This saves time and costs compared to the two-step approach of roughing and then finishing.

These cutters allow processing of solid wood, glued wood, plywood, coated wood-based materials and sandwich wood-based materials in a quality close to that of finishing quality.

Especially when processing Multiplex in its wide variety of versions both without and with coatings, common VHW tools quickly reach their limits regarding edge life. LEUCO is probably the only manufacture whose product range includes a diamond-tipped (DP) roughing/finishing cutter in the size Ø16 x SL32 mm Z=4+4 as a highly economical solution.

Program expansion

On machines with console tables, it is now possible to process even thicker material using the cutter sizes Ø16 x SL36 mm and Ø18 x SL45 mm.

The range of DP roughing/finishing cutters available from stock is rounded out with a cutter in the size Ø12 x SL26 mm Z=2+2 that is also suited for use on nesting tables.

The DP-tipped roughing/finishing cutters have proven to be especially effective, especially when processing Multiplex. The program has been expanded two sizes for even more application possibilities.

High-Performance Finger Joint Cutters

SHORT FINGER JOINTING WITH 6/7MM AND 4/4.5 MM

When it comes to producing slats for furniture and windows, the perfect material yield is always the basis for innovation. This applies particularly to longitudinal and cross joints in short cuts of woods. Another starting point is the machine's productivity, which can be increased through higher cycle rates, feed speeds and RPMs.

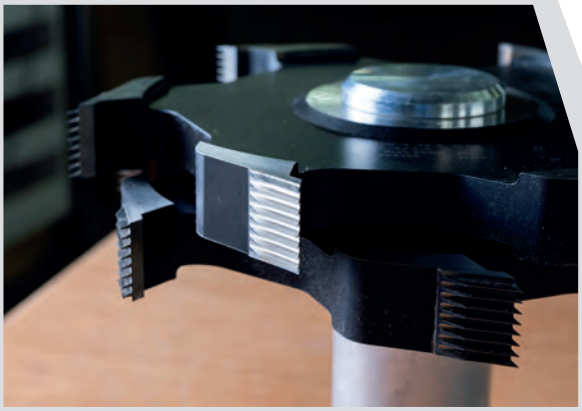
The finger joint cutters from LEUCO with short finger lengths of 4/4.5 mm or 6/7 mm and a higher number of cutting edges meet both requirements. Due to the low cutting pressure, it cuts broad cross joints, depending on the machine, into short slats starting at approx. 250 mm without risking a lever-effect at feed speeds up to 52 m/min. RPMs and finger jointing quality are the same as with milling cutters with less cutting edges.

Data at a glance

- Cutting material: high-alloy tool steel [HS Solid 24]
- Runout accuracy of 5µm thanks to high-precision manufacturing of the tool body

Advantages

- Double feed speed possible with the same RPM and finger joint quality
- Reduced risk due to stringing up short cuts of woods
- Less chipping when removing the cutter from the wood, even if the milling cutter is reaching the end of its service life.



The LEUCO High-Performance Finger Joint Cutter featuring short fingers and high feed rates

Practical G5 saw blade from LEUCO for joinery centers

EASIER SAWING IN EVERY DIRECTION

By using the G5 saw blade from LEUCO, joinery centers need only one tool when processing beams. The reason can be found in the innovative tooth geometry.

Thanks to LEUCO, joinery centers can eliminate downtime of their machining centers. This is because one saw blade with the G5 tooth geometry is suitable for ripping and cross cuts. After a quick change in direction, the same sawing equipment can continue its work.

Because of the G5 geometry, the saw blade has an extremely low cutting pressure. This has a positive impact. The quality in both cutting directions is very good and rapid feeding is possible with little force. In addition, the saw blade has an up to 30% longer service life.

Cutterhead with triangular turnover knife with rounded edges

LEUCO t3-SYSTEM, THE RIGHT CHOICE ENSURES HIGH-QUALITY

With the new t3-System, LEUCO has expanded its cutterhead program for offset- and chip-free joining, rabbeting and sizing of solid wood and wood-based materials. The first member of this family, the t3-System shank-type cutter, is suitable for use on CNC machines for solid wood processing and on joinery machinery.

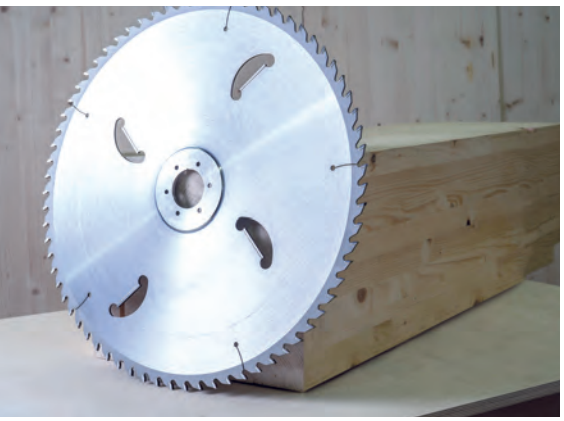
The triangular turnover knife with rounded edges allows the shear angle for the draw cut be set perfectly, thereby preventing formation of offsets at the overcuts. In addition, thanks to the triangular shape the shear angle can be set so that outstanding surface and edge processing can be achieved when joining and rabbeting; furthermore, the rear side of the cutter does not protrude. It is precisely this feature that distinguishes the t3-System from other spiral cutterheads. With square turnover knives, the outermost cutting edge always pulls towards the edge. This cutting direction results in poorly cut edges. This problem does not occur with the t3-System. The triangular turnover knives are positioned such that the shear angle always pulls in the correct direction.

The advantages

As a result, the t3-System shank-type cutter has a variety of uses. With its special arrangement of cutting edges, absolutely chip-free joining and rabbet surfaces can be produced. This is beneficial, for instance, then producing door rabbets. Spiral plunge-cutting also allows production of small cutouts. This, in turn, allows tenon and special joints to be created. The tool is ideal for cutting of free forms such as round curves or string wreaths in stair construction.

When the quality of the t3 cut is compared to that achieved with common spiral cutterheads, the exceptional edge and surface quality is especially obvious. For use in door and furniture manufacturing, for instance, this means less rework.

In long-time tests, the "t3-System" not only confirmed our quality expectations, it clearly exceeded them. The t3-System finds its field of use in applications ranging from demanding craftsmanship to industrial applications with high output requirements.



The LEUCO g5-System chop saw blade can be used on joinery centers from all known manufacturers. Image: 550 mm diameter for Weinmann systems.

The saw blade offers the benefit of a very low noise level and up to 30% longer service life.

The low cutting pressure results from the special geometry of the saw blade – a combination of a leading tooth and four consecutive key for fine machining.

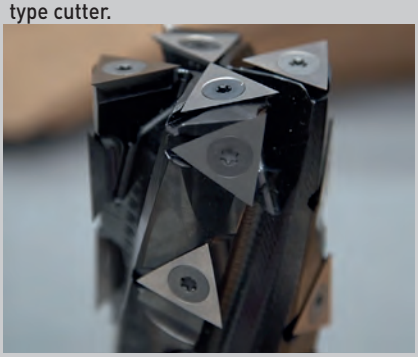
The G5 saw blade is thus a very good alternative to conventional machining using two different saw blades. This requires a tool change. Previously, the user had to anticipate up to 15 minutes of downtime to swivel in another unit or change the saw blade.

It is not necessary to rework the accurate cuts which can be used as visible edges. With this saw blade, customers can perform operations that previously required a milling cutter. In this way, they save machining time on the joinery center.

» It is not necessary to rework the accurate cuts which can be used as visible edges. With this saw blade, customers can perform operations that previously required a milling cutter. In this way, they save machining time on the joinery center.

The new t3-System shank-type cutter is used on CNC machines and joinery machinery.

The triangular turnover knives with rounded edges are the decisive feature for the high processing quality of the t3-System shank-type cutter.



Application examples: Chip-free spiral plunge-cutting, rabbeting and chamfering

The two managing directors of LEUCO, Frank Diez and Daniel Schrenk, in an interview

THE QUALITY OF OUR SOLUTIONS WILL BE EVEN BETTER

Being close to the customer – that is not an empty promise at LEUCO, but rather an important building block in our approach to offer innovations with genuine added value. The "möbelfertigung" department met with Frank Diez, President and Chairman of the Managing Board and Daniel Schrenk, his colleague on the Board, to discuss topics such as the general market situation, digitalization in the tool area and new products.

//möbelfertigung: *Mr. Diez, Mr. Schrenk, how has the 2019 business year been for LEUCO?*

FRANK DIEZ: We are once again in a considerably more difficult economic environment than in previous years. Accordingly, growth has been less than in previous years – demand dropped noticeably, especially in the second half of the year. This is related above all to the fact that machinery suppliers have had fewer large projects. A definite change in the market is noticeable.

//möbelfertigung: *Is the slowed growth general in nature or especially pronounced in specific areas?*

DANIEL SCHRENK: In our view, businesses with the kitchen design industry is still very good. The same is true for the office furniture and the construction industry sectors.

The flooring industry, for instance, which is experiencing significant competition for markets, is a very different situation.

Overall, new materials such as LVT, SPC and WPC play a major role; they require new tools. That we can again draw on our processing know-how is a welcoming differentiation feature. Thanks to new materials such as GFRP and CFRP, we have been able to show growth when all sectors are considered.

Viewed regionally, the situation in Germany is still good. The market is growing, albeit somewhat less dynamically than previously. LEUCO has also achieved good growth in China, which is that much more gratifying for us, given that the economic situation in China has its weak spots. Likewise, Eastern Europe has been positive for us. The situation is weaker in Southern Europe. Italy is an especially noteworthy case now that the subsidy policy has ended. In Eastern Europe, Russia in particular, basic industry in the form of sawmills is very important for us and strong.

Brexit will, of course, also affect us. Above all, because customers are increasingly uncertain.

//möbelfertigung: *You mention new kinds of material: How well have you succeeded in adjusting to them?*

DANIEL SCHRENK: It is occasionally a challenge. In both sales and application technology. Accordingly, we work with many, small specialist teams with very focused know-how.

//möbelfertigung: *It sounds as if everyone is expecting a recession. How do you view the current situation?*

FRANK DIEZ: There have been many indicators for years and only a few problems have been solved during this time. Moreover, many new ones have appeared. Nevertheless, the economy has been unusually stable for a long time. We have now reached the point where a noticeable slowdown is evident.

The entire subject of customs duty conflicts is one example of a problem that has existed for many years. It feels as if we have made no progress since the beginning of the debate.

In general, we observe lower investment in new equipment, which is confirmed by the VDMA. We take this into account in our strategic planning. Despite this, we intend to grow further – only somewhat more moderately. This is an ambitious

„In the German furniture industry, we expect further concentration and consolidation."

DANIEL SCHRENK

Frank Diez, Vorstands- und Geschäftsführungsvorsitzender von LEUCO, mf-Redakteurin Doris Bauer und LEUCO-Geschäftsführer Daniel Schrenk.

goal in the current situation. Nevertheless, we still see markets and regions where we can grow in 2020.

//möbelfertigung: *Which ones are those?*

DANIEL SCHRENK: In purely mathematical terms, we plan growth in all of our essential target markets. We see especially good chances in China and Central Asian countries. Vietnam is a market with a great deal of potential for us.

//möbelfertigung: *Where do you see exceptional opportunities but also challenges?*

DANIEL SCHRENK: Prices are first victim in a stagnating or slow economy. The main challenge here will be to buck the trend and grow in a profitable way. On the whole, our industry still has some pent-up demand compared to other industries. The key to success will be positive differentiation in the market in conjunction with responsible use of resources and costs.

//möbelfertigung: *Crowding out is also occurring in your business. What are the reasons for why a customer should work with LEUCO?*

DANIEL SCHRENK: One strength is direct sales based on a close dialog with the customer. Structurally, this is a challenging task, but it offers the advantage of being on board early when customers have new products or make new investments.

Technical innovations, above all, are the prerequisite for being successful.

//möbelfertigung: *Innovation is not an accident. What do you do to be innovative?*

DANIEL SCHRENK: Innovation at LEUCO results for the most part precisely from this basic observation of the market. At the same time, we conduct our own basic research and can thus claim to be in a position to introduce ideas to the market ourselves.

Then, we are also presented with requirements from large manufacturers of kitchen equipment and wood-based products, for example. Here, it is usually a matter of performance, cut quality and tool life.

The third area is production technology, to which we have devoted a great deal of thought – also with the aim of improving ourselves. The "p-System" originated from this, for instance.

//möbelfertigung: *How much innovation potential still remains in processing of wood-based materials?*

FRANK DIEZ: It can be stated definitively that not all problems are solved. Such an assertion would be foolhardy. For most of the tasks encountered in cutting of wood, wood-based materials and newly introduced materials, there are likely solutions that will make work easier.

Our objective is to make every application and solution more efficient and more economical, that is, simply better. Or to improve the work environment; dust and noise, for instance, can surely be reduced further. In addition, the subject of multi-functionality always presents nice and exciting tasks. We face challenges here and do not worry that there will be a shortage of tasks.

//möbelfertigung: *Is wood still the most important material for you?*

FRANK DIEZ: In terms of volume, definitely. But the many variations of plastic and new materials are growing constantly.

DANIEL SCHRENK: It is actually not so easy to answer, since most materials are generally processed on the same machines. The percentage of non-wood materials is growing in any case.

Continue on the following pages...

//möbelfertigung: *You already stated that the kitchen design and office furniture industries are doing well. Currently, a great deal of capacity is being built up there. How do you assess this situation?*

DANIEL SCHRENK: We assume that concentration and consolidation will continue. Large companies are actually investing quite a lot, while the smaller companies are having a difficult time keeping up technologically.

//möbelfertigung: *And what is the situation in the trades?*

DANIEL SCHRENK: In the construction trades, at least, the order books are still full and it does not appear that this will change in the near future. If, however, consumption decreases – and we assume this will happen in the medium term – activity in the trades will slow down.

//möbelfertigung: *What is the situation with your own investments? Are there currently larger projects?*

FRANK DIEZ: There are always investments, but we do not want to disclose in advance what we are planning. Most recently, we have improved both production and our processes significantly, and will continue along this path. As in the furniture industry, we strive for a high degree of automation.

For this reason, we have changed quite a bit at our production site in the USA. Expanding production in France is the next item on the agenda. We will expand in size and also in terms of machinery.

Our investment rate has generally been very high in recent years. At the same time, however, we also consider very carefully what provides real added value for us and our customers.

//möbelfertigung: *Looking back, how do you assess the "Ligna" 2019?*

DANIEL SCHRENK: The new concept, which was used for the second time in 2019, was well-received by exhibitors and visitors. Although the number of visitors attending the trade fair stagnated according to official figures, we clearly had more customers at our stand. Overall, we are very satisfied with our participation

FRANK DIEZ: However, marketing the trade fair under words such as networking and digitalization occasionally sounds like a lack of content. Actually, the focus was on automation. This was always the case in industry, but in recent years one had the impression that this was a completely new idea.

//möbelfertigung: *Was any one of your highlights especially well-received?*

FRANK DIEZ: I really don't wish to single out any particular innovation here. After all, our objective at trade fairs is generally to present ourselves as a competent partner who can make many things possible. That is why we also had robots on the stand: To demonstrate that we also deal with and are knowledgeable about such topics.

//möbelfertigung: *You have put a great deal of emphasis on the color magenta. Why and what were the reactions?*

DANIEL SCHRENK: Yes, our trade fair slogan was "Magentify Wood Processing". It simply means that together with our customers we look for solutions to produce more efficiently. The visitors understood the meaning. It is, of course, important to fill this slogan with life and not leave it standing in the room as a hollow phrase.

FRANK DIEZ: We were, of course, also asked about magenta by Telekom. LEUCO, however, used the color much earlier, in the early 1970s, which at that time was extremely courageous, and its use was continued consistently. The color stands for LEUCO and also for courage, which we always want to have.

„We strive for moderate sales growth even in a market environment that is becoming more difficult."

FRANK DIEZ

Frank Diez has been CEO of LEUCO AG since July, 2012. Daniel Schrenk (on the top right) joined him as Managing Director on January 1, 2014

„Everyone is speaking about new business models. Actually, there is not yet anything concrete in this regard.“

DANIEL SCHRENK

//möbelfertigung: *When it comes to digitalization, there is a lot of talk about new business models. Have you seen any concrete examples in your industry?*

FRANK DIEZ: There is much that can be imagined, but actually there is not yet anything concrete. I think that in general one must be prepared to develop in many directions.

//möbelfertigung: *What does digitalization mean for you?*

DANIEL SCHRENK: Digitalization has, in the meantime, become a hot buzz word, and everyone has a somewhat different understanding of what it means. We are currently concentrating on the issue of serialization and a digital twin across the entire product life cycle, from development in design and production to installation at the customer's site, including all service cycles. Serialization gives us the basis for further improvements, services, and ultimately also new business models.

//möbelfertigung: *There are now many IoT platforms for the wood-working industry. You yourselves are a partner of Tapio. How do you approach this situation?*

DANIEL SCHRENK: We state clearly that we are a partner of Tapio. Nevertheless, we are open to all other solutions, and work on becoming incorporated correctly into these systems. We have to take this approach in order to serve our customers in an optimal manner.

//möbelfertigung: *You mentioned that you like to be on board early in the case of projects where your customers are considering investments. Why?*

DANIEL SCHRENK: When we are involved at a very early point in planning, this is a great benefit for the customer above all, because all the details can really be taken into account. Generally, there is an impressive flow of information prior to a large investment in equipment; ideally, the material supplier is also involved.

FRANK DIEZ: This has been a typical approach at LEUCO for quite some time and surely also one of the reasons for success. After a large investment, the customer wants the equipment to run and not to start identifying everything that is not functioning. This means that everything should be prepared in the best way possible and this is why everyone involved should participate in the planning.

//möbelfertigung: *LEUCO has already succeeded in winning several well-known awards. How important are such prizes for you?*

FRANK DIEZ: They are always a welcome confirmation of good work. Naturally, our primary interest is not to win awards, but instead to generate added value for our customers. Nevertheless, we are very pleased to have them.

//möbelfertigung: *In 2019, LEUCO had an anniversary; the branch office in Switzerland celebrated its 50th anniversary. How did you celebrate?*

FRANK DIEZ: Extensively and with a great deal of joy. We used the occasion to celebrate appropriately with our employees in several events. There were actually several anniversaries: 50 years in Switzerland, 40 years in the USA and 10 in Belarus. This is also a symbol of the international approach of the company.

„50 years in Switzerland, 40 years in the USA, 10 years in Belarus – these anniversaries represent the international success of LEUCO.“

FRANK DIEZ

//möbelfertigung: *What does LEUCO have in mind for the year 2020?*

DANIEL SCHRENK: One of the highlights is definitely the "wood-working trades". We view the "Xylexpo" with moderate expectations.

Another high point in 2020 will surely be the establishment of a company in Vietnam.

The interview was conducted by Doris Bauer
Appeared in "möbelfertigung", issue 01/2020 published by F. Holzmann Verlag in the Vincentz Network

Two locations, one goal

INVESTING IN THE FUTURE

LEUCO is building onto its production hall in Beinheim (France) and expanding its Service Center in Horb (Germany). With the simultaneous start of construction in February, Frank Diez, Chairman of the Management Board, showed a clear commitment to both production locations. "We are delighted to be able to grow at both locations." An expansion is absolutely necessary because of spatial constraints. The Management Board decided to build additions at both locations. Together, the halls will offer 3,600 square meters of new space for production and service.

At the same time, special attention is being placed not only on the functionality of the new building, but also on responsible use of resources and energy.

On completion, LEUCO will have at both locations a modern high-performance production facility and Service Center that is directly connected to the existing infrastructures, generating synergies which will allow LEUCO to optimize efficiency and customer support.

Roland Günther (Production Manager), Frank Diez (Chairman of the Management Board), Daniel Schrenk (Sales and Marketing Manager) and Dirk Hoffmann (Head of Procurement Department), from the left, broke ground for construction of the new Service Center. In the future, the resharpening service and the production of new tools will be next to each other at the main production facility in Horb.

Pascal Wendel (Manager Industrial Engineering), Frank Diez (Chairman of the Management Board), Mark Meyer (Production Manager) and Luc Schildknecht (Production Manager), from left to right, began the work for the expansion project in Beinheim / France with the symbolic first spadeful of dirt.
At Beinheim in Alsace, LEUCO specializes in the development and production of saws, finger joint cutters and brazed carbide-tipped milling cutters. More than 1 million high-quality saw blades are produced here annually."

25TH ANNIVERSARY OF LEUCO JAPAN

In 2020 LEUCO Japan will celebrate its 25th anniversary. From the beginning, we have proceeded our business selling new tool sales and service directly to our customers, which was unique in the Japanese business environment.

We visited many new customers and developed new sales. We also request our customer to pay cash only, which was as well very rare in Japan at that time. It is a nostalgic memory, but at the same time, we are so glad that many of such customers have continued an excellent business relationship with us for 25 years.

2020 there are significant changes for LEUCO Japan:

→ We will replace old machines and install the newest available technology of machines to assure the highest resharpening quality and excellent precision.

→ We will strengthen our team by more training for new business fields, e.g. into the non-wood industry.

In the early days of LEUCO Japan, the market environment was very positive, with 2-3% GDP growth, and we had many business chances.

The woodworking market environment in Japan is challenging us more than in the beginning years of LEUCO Japan. However, we are very positive and will focus on our business without fear of changing and fully support the manufacturing industry in Japan. LEUCO Japan is continuously changing like creatures; what never changed is our mission to suggest innovative tooling solutions to the Japanese woodworking industry.

Finally, I want to tell my full appreciation on behalf of LEUCO Japan for everybody those who gave us support. Thank you very much.

Yasumi Arigaya
Managing Director LEUCO Japan

New subsidiary: LEUCO Vietnam Co, Ltd

LEUCO SHARPENING SERVICE IN MANUFACTURER QUALITY IN VIETNAM

In December 2019, LEUCO Group founded its 21st and newest subsidiary company: LEUCO Vietnam Co, Ltd.

LEUCO offers manufacturer-quality sharpening services for the Vietnamese furniture industry at its new location south-west of Ho Chi Minh City.

The upward trend in Vietnam is clearly visible and the economic development over the past ten years is remarkable, with an average annual economic growth of about 6%. The atmosphere of departure is clearly perceptible. There are a lot of buildings and renovation work going on and the skyscrapers are sprouting from the ground. The Vietnamese furniture industry is also characterized by its strong export orientation and the use of woodworking machinery from Germany and Italy. These characteristics are clear indicators of the use of precision tools. LEUCO new tools have been reliably distributed for many years by the authorized LEUCO dealer URI Trading. The sharpening service was handled by a continuous process via LEUCO subsidiary in neighboring Malaysia. Due to the growing volume and faster response time required for service tools, the process reached its limits.

Bundled their strength together for founding the new subsidiary, f.l.t.r.: Customer, Daniel Schrenk (LEUCO, Managing Director Sales & Marketing), Quoc Hung Tran (owner of URI Trading), Udo Leiber (LEUCO Asia, Managing Director Asia), Mark Lim (Managing Director of LEUCO Vietnam).

The new building of LEUCO Vietnam in Ho Chi Minh City

Managing Director Mark Lim is now pleased: "With our own local company for sharpening service, we are well equipped and committed to provide our customers in Vietnam the highest quality standards and excellent service in the future".

NEW MANAGING DIRECTOR AT LEUCO UKRAINE

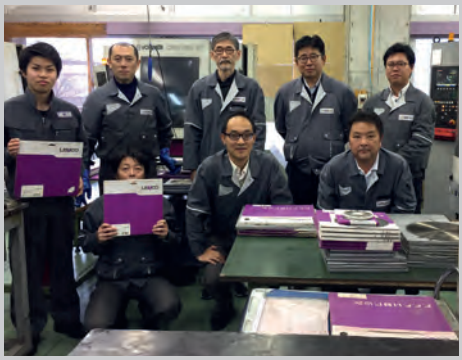
Effective 1 February 2020, **Viktor Dziubenko** will be the new managing director of LEUCO Ukraine.

Viktor Dziubenko is 36 years old and most recently was responsible for sales and logistics in the management of a large Ukrainian holding company. Before that, Viktor Dziubenko handled many projects in the furniture industry.

"In the past, I worked together with LEUCO Ukraine very well and since then value the exceptional relationships. LEUCO has a good reputation in Ukraine and worldwide. In Ukraine, we surely have the best technical personnel for woodworking tools on our team. Thus, my goal is to strengthen this position and bring the company's performance to the highest possible level," states Viktor Dziubenko.

LEUCO Ukraine was founded in 2007 and today employs 25 individuals in Kiev, focusing on sales of new tools and the sharpening service. Advisors are active at customers daily with solid tool know-how for optimizing production facilities. In addition, complex requirements are resolved quickly in the well-equipped Service Center.

Team Tochigi head office: f.l.t.r: Mr. Okuda (Application chief / Sales support), Ms. Kameyama (Accountant chief), Mr. Ushio (Sales), Mr. Uetake (Sales manager), Mr. Handa (Sales manager)



Team at Kansai branch: front row f.l.t.r: Mr. Takagi (Construction material manager), Mr. Arisaka (Sales manager), Mr. Tabata (Sales). Back row f.l.t.r: Mr. Fukuchi (HW Service staff), Mr. Tachibana (HW Service leader), Mr. Takano(Sales support), Mr. Arigaya (Managing director), Mr. Ishimaru (Sales).

Team Tochigi Service Factory: f.l.t.r: Mr. Yamada (Tochigi service factory manager), Mr. Chonan (DP service chief), Mr. Nonaka (DP service leader), Mr. Amagai (HW service leader), Ms. Suzuki (HW service staff)

LEUCO
MAGENTIFY WOOD PROCESSING

A LOOK AT LEUCO

LEUCO ranks among the leading international suppliers of complex tools solutions and intelligent services for the wood-working industry.

Our goal is to improve the opportunities for our customers and partners through forward-looking innovations and to open up the potential of wood and related materials as a recyclable raw material to benefit people.

In close contact with our industry, we design and develop tungsten carbide and diamond-tipped circular saw blades, hoggers, boring and shank-type tools, drill bits, turnover knives and clamping devices. Our goal is to streamline the processes of our customers in the construction, furniture and panel industry, in lumber mills and interior design companies while also opening up new opportunities in working with the growing variety of materials. Comprehensive consulting services, our sharpening service at manufacturer quality and future tool management solutions have made LEUCO a one-stop tool shop for our customers.

Today, around 1,200 employees work for LEUCO worldwide. With sales subsidiaries in Australia, Belgium, England, Japan, Poland, Singapore, Thailand, Ukraine and Belarus, as well as sales and production locations in China, France, Malaysia, Russia, Switzerland, South Africa, the U.S. and Vietnam, our company is represented on all five continents.

LEUCO
Magentify Wood Processing

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