

Panel Sizing SAW BLADES

LEUCO
Sawblade kerfs from 1.5 mm
Sawblade diameters up to 350 mm

The top line sawblade from LEUCO is the „Nonplus-ultra“ for all international machine manufacturers and LEUCO customers in the whole world in our branch.

Significant impulses

- Cutting width can be adjusted to customer specific decors
- Optimization of the panel size
- Reduction of tool cost
- Can be used for all well-established machines

Panel sizing HOGGER

LEUCO
Design of the chip space design

Significant impulses

- The design of the chip space avoids wear on the body of the tool as well as unbalance of the tool
- The width of the hogger is set individually according to the decor
- Optimized tip geometry reduces the cutting pressure and avoids chipping on the decor

Significant impulses

- Controlled chipflow minimizes the required dust extraction performance.
- LEUCO special: LEUCO tools are equipped with a chip rejecting cover, this avoids the wear of the machine parts for example bearings, gliding elements, chain etc. by chips, which can not be leaded into any direction.
- The shear angle of the tool reduces the cutting pressure. Reduced cutting pressure means less required motor performance as well as economical use of energy. In the cross working process horizontal panel splittings can be avoided and chipping will be stopped as far as possible.
- LEUCO pre-cutting tools are standard with 36 tips and can be used for all federates, which reduces the variety of tool types.

PROFILING PRE-CUTTER

LEUCO
Intelligent controlled chipflow on the length machine

Significant impulses

- LEUCO produces the tools for the individual profile of the laminate flooring manufacturer
- Profile quality and accuracy will be guaranteed by adjustable tools.

Individualisation, precision and reduction of setup time

The adjustment of the tool can be either outside or inside of the machine depending on the possibilities of the laminate flooring manufacturer

Reduction of setup time by an adjustment of the tool with an adjusting unit

LEUCO offers an integrated basic adjustment unit and a reusable high precision adjustment unit, which are both stepless adjustable

The integrated basic adjustment unit can be controlled by a measure clock

The high precision adjustment unit is independent from the tool and can be adjusted with 0.01 mm

Tool clamping hydro bushes with double pressure zone, reproducible runout accuracy after each adjustment

Depending on the complexity of the profile LEUCO offers optional diamond cutting knives for a constant tool radius, which guarantees a constant profile

Adjusting accuracy and speed with re-usable adjusting unit

PROFILING FINISH CUTTER

LEUCO
Finest runout accuracy in the industry

Significant impulses

- Runout accuracy decides on the quality of the finished edge
- Runout adjustable tools
- Adjustable runout of 0.002 mm, usual adjustable runout is 0.01 mm in the market
- Runout accuracy in "µ" can only be achieved by LEUCO and is licenced

LEUCO runout accuracy = 0.002 mm

PROFILING CLICK CUTTER

LEUCO
Chip space design

Significant impulses

- A clean machine, where bearing, chain etc. work without interruption is the condition for a constant profile quality for the click cutters
- Excellent design of the click cutters chip space from LEUCO leads the chipflow directly into the dust extraction
- This avoids wear of machine parts like bearing, chain etc. by chips

Chipflow without chip space design vs. Chip space design by LEUCO

Interface to the machine CLAMPING SYSTEMS

Clamping systems are the classical interface to machine and tool. The ideal clamping system fulfills the following requirements:

- High reproducible clamping accuracy
- Clamping safety
- Constant clamping force
- Independence against environmental conditions
- Easy operating
- Minimum runout and concentricity deviation
- Radial stability

These days HSK adaptor and hydrobushes are competing in the market. It will be analysed which of both adaptors will be the ideal clamping part. Independent of the machine type and production philosophy of the customer, LEUCO offers you the required clamping system.

HSK-adaptor Hydrobush

Interface to the machine DUST EXTRACTION / - HOODS

The dusthood kit-system consists of three basic dust hoods for the angles of +90° until -90° (01). The chipflow in the dusthoods will be customized to the individual profiling process step. This optimizes the chip extraction and leads to clean machines, avoids double chipping and tool wear.

The dust hoods are modular designed for a simple mounting into the machine. The symmetrical construction makes it independent of the tool rotation (02).

All dusthoods have a cover, which can be opened easily (03). The tool can be changed without problems, guaranteeing the view on the tool during the exchange. Production stops will be limited.

Even if the dusthoods are designed lightweight, LEUCO dust hoods are more resistant than others in the market. LEUCO builds the dusthoods with wearless aluminium parts (04). For the wear parts LEUCO uses an 8 mm thick steel (05). Other common wear parts in the market are currently

Wear parts of 8 mm thick steel

Tool administration COLOUR CODING SYSTEM

The philosophy of a colour coding system is the visualization of the tool from the tool rack to the motor spindle to simplify the tool handling in the manufacturing process. The colour coding simplifies the internal communication at the laminate floor manufacturer site and between the laminate floor manufacturer and LEUCO.

In detail

Each tool gets a Tool Card with a determined colour, letter and other information. Then the tool is clearly related to the production process and can be identified. The colour stands for a group of tools/ident numbers, which have the same function in the working process. Yellow is the colour for the pre-cutting tools for example, green is for the finishing, blue for the finishing in the manufacturing process. The colour coding explains if the tools are for length or cross cutting and for left or right side of the machine. If necessary the letters can be completed with additional informations e.g. panel thickness, profile or feed rate.

The principle of the tool colour coding is the same for all customers. For the final colour coding the manufacturing process of the customer will be analyzed. Production, stock and service will be taken into consideration. Therefore each colour code is individual. The colour code has proved its value in practice.

Tool administration KANBAN-SYSTEM

of tools. On the motor spindles signs with the corresponding colours and letters will be placed.

The classification of rack, tool and motor will be extremely simplified. This system can be applied without any tooling or production know-how if necessary. New staff employed by the laminate flooring manufacturer can easily find its feet.

DIVIDING

LENGTH CUTTING

CROSS CUTTING

INTERFACE

TOOL ADMINISTRATION SOFTWARE LEUCO LEASY

LEUCO Leasy is a single software for administration, purchasing and production planning. The determined colour code is like at the kanban-rack the basic for the software. It shows all processes, which a tool can make at the laminate flooring manufacturer's site from stock, through machine and into service. LEUCO Leasy offers transparency of the tools at any time. It is possible to get analyses from edge-

lives of each tools, can print tool cards automatically and supports the production planning. The operation of this software is simple and almost intuitive.

RESSOURCES

LEUCO offers sawblades with different cutting kerfs. The possibility to reduce the cutting kerf makes it possible to waste less resources and lower costs.

Save money with LEUCO.

PROFILING

Profiles are licensed and give the panels the individual touch of the laminate flooring manufacturer. A sign of quality is absolutely constant profile accuracy. Would You like to be related to a perfect profile?

Then you should choose LEUCO tools for profiling.

QUALITY

The more accurate the runout of the tool is, the more equal is the wear of the tool tips. And the higher the runout the higher is the quality of the edge, the only visible edge for your customer!

You should choose for quality with LEUCO.

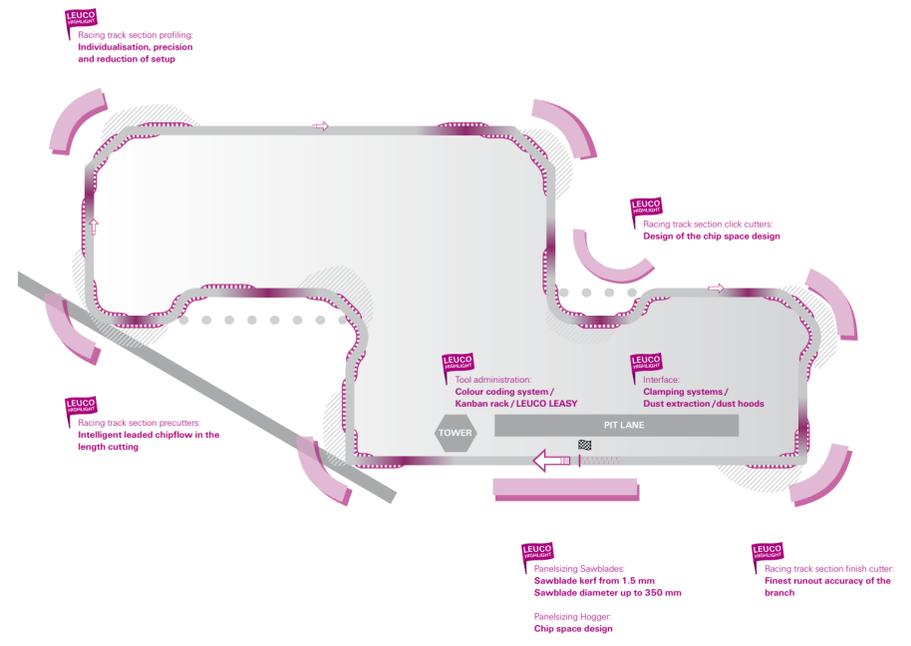
INTERFACE

The interfaces are the optimal conditions for the laminate flooring manufacturing: The clamping parts between tool and machine, dust extraction in the machine. The package of all interfaces of single highlights becomes the perfect process.

Take LEUCO into consideration throughout your whole process.

LEUCO

„THERE ARE SUBTLITIES WHICH BECOME IMPORTANT IN FORMULA 1. CERTAIN DETAILS MAKE THE DIFFERENCE AND REVEAL THE ESSENTIALS.“



With the best setup and tuning to pole position
 The volume and aggressiveness of the chips have a big influence on the manufacturing of laminate flooring. The use of the LEUCO Crew guarantees the customer a clean manufacturing and avoids unnecessary double-chipping. This guarantees longer edge lives and decreases machine wear while having an improved product quality. The optimised chipflow enables maximum feed rates in production.

Formula 1 needs innovation
 The formula 1 is surrounded by the magic of "the Newest, the Fastest and the Best". LEUCO faces this challenge. As a result of the dialog with the customer LEUCO develops regularly state-of-the-art and licensed tool- and procedure innovations. As the first one LEUCO was able to face the production requirements with guidance. LEUCO was the first to use the well functioning colour coding system and the tool administration software. LEUCO is one of the few suppliers able to fulfill all requirements, with

a portfolio from thin-kerf saw blades for the dividing of the middle layer up to click-profile cutter and circularity-adjustable finishing cutters.

Each racing team is individual
 We do not offer a standard scheme for the manufacturing of laminate flooring. Together with you we define the track according to your requirements. Each step of the process will be analysed and valuated before the development and determination of the tools starts. We follow consequently your demands shared with our tooling- and process know-how.

LEUCO is one of the leading tool manufacturers worldwide. You can benefit from this international race experience: We guarantee you tools adapted to the latest technology standards including their service and application engineering no matter where you are producing.

When will you start to overtake?



PRODUCTION OF LAMINATE FLOORING



„WE ONLY CAN BE SUCCESSFUL IF WE MAKE OUR CUSTOMERS SUCCESSFUL.

AND WE WANT TO BE SUCCESSFUL.”

Flooring = High performance and precision
 Tools for manufacturing of flooring can be compared to the „formula 1“ of the woodworking industry. No other branch achieves higher feedrates and edge lives considering such high quality standards for the finished product. Experts dominate the race track and the conditions. It is aware of the crucial points within the process. The laminate flooring manufacturing process offers the chance to take pole position.

The Crew
 The tool specialist is next to the machine manufacturer the most important partner for the laminate flooring industry. LEUCO knows the requirements and the settings. The development and application engineer crew defines cutting materials, optimized chipflow design and tooth geometry. It determines rotation speed, tool weight, runout, concentricity, as well as edge and profile quality. It discusses individual customer demands and offers connecting points to the machine e.g. clamping systems and extraction hoods.

COMPETENCE THROUGHOUT THE COMPLETE MANUFACTURING PROCESS

CONSULTING, ENGINEERING, PRODUCTION, ADMINISTRATION,

Flooring tools are the „Formula 1“ in the woodworking industry. Choose the best resources and decide yourself for the best crew in your team.

You will win the Grand Prix with LEUCO.



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