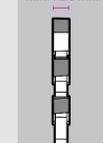


**Manufacturing of the upper layer  
SPLITTING SAW MACHINE**

**LEUCO**  
Thinkerf Sawblade delivers a smooth cutting process

- Significant impulses**
- High quality material for the saw body of the thinkerf sawblades prevents the wobbling while cutting
  - Cutting kerfs from ± 1.25 mm
  - Special coating of the tool body reduces the friction und resin deposition (optional)

min. 1.25 mm



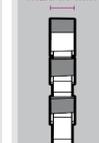
- Tip design and cutting material have an influence on the cutting quality
- The cutting material is selected according to the type of wood and has an effect on the edge life
- Different kerfs are available which offer the possibility to optimize the wood consumption and the thickness of the single strips

**Manufacturing of middle layer  
SPLITTING SAWBLADES**

**LEUCO**  
The cutting quality of the multiprip-sawblades minimizes the edgechipping when the saw leaves the material

- Significant impulses**
- Special tip geometry increases the cutting quality
  - Multiprip-sawblades cut width of 1.7 mm and less
  - The sawblades can be used on all types of machines

max. 1.7 mm



**Hogger  
SCORING HOGGER** A B C D

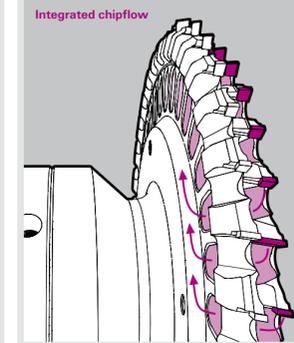
**LEUCO**  
Intelligent leaded chipflow

- Significant impulses**
- Leaded chipflow minimizes the required dust extraction performance
  - The shear angle of the tool reduces the cutting pressure. Reduced cutting pressure means reduced motor performance as well as economical use of energy

**Pre-hogger  
„HOLLOW“-HOGGER** E F

**LEUCO**  
Intelligent leaded chipflow

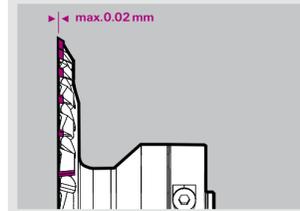
- Significant impulses**
- Integrated chipflow through the inside of a tool set



**Finish cutter  
FINISH HOGGER** G H I J

**LEUCO**  
Finest runout accuracy in the parquet flooring industry

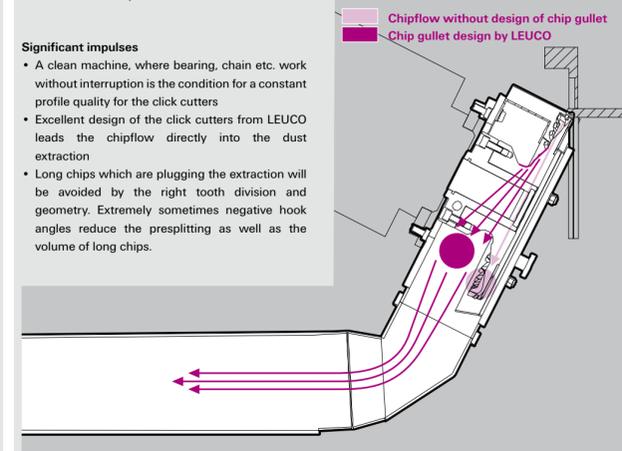
- Significant impulses**
- Runout accuracy decides on the quality of the finished edge
  - LEUCO finish hoggers have a runout accuracy of 0.02 mm
  - Finest runout accuracy is only achievable by highest precision in the production of the finish hogger
  - Runout accuracy over the whole tool life of the hogger will be guaranteed by the use of the premium service



**Profile cutters  
CLICK CUTTERS** K L M N

**LEUCO**  
Reduction of chipflow

- 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 from LEUCO leads the chipflow directly into the dust extraction
  - Long chips which are plugging the extraction will be avoided by the right tooth division and geometry. Extremely sometimes negative hook angles reduce the presplitting as well as the volume of long chips.



**Profiling  
PROFILE CUTTER** O P Q R

**LEUCO**  
Individuality, precision and reduction of setup time

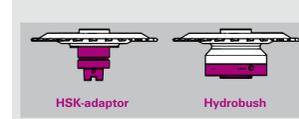
- Significant impulses**
- LEUCO produces the tools for the individual profile of the parquet flooring manufacturer
  - Profile quality and accuracy will be guaranteed by adjustable tools
  - The adjustment of the tool can be either outside or inside of the machine depending on the possibilities of the parquet 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 hydrobush with double pressure zone, reproducible runout accuracy after each adjustment
  - Depending on the complexity of the profile LEUCO offers optional diamond cutting knives for



**Interface to the machine  
CLAMPING SYSTEMS**

**LEUCO**  
a constant tool radius, which guarantees a constant profile

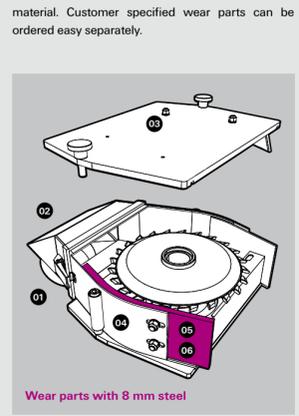
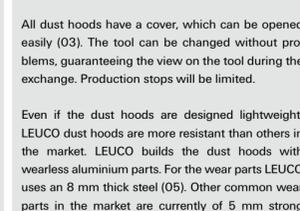
- Significant impulses**
- LEUCO produces the tools for the individual profile of the parquet flooring manufacturer
  - High reproducible clamping accuracy
  - Clamping safety
  - Constant clamping force
  - Independence against environmental conditions
  - Easy operating
  - Minimum runout and concentricity deviation
  - Radial stability



**Interface to the machine  
DUST EXTRACTION / - HOODS**

**LEUCO**  
The dust hood kit-system consists of three basic dust hoods for the angles of +90° until -90° (01). The chipflow in the dust hoods 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.

- Significant impulses**
- 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 dust hoods 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.



**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 parquet manufacturer site and between the parquet manufacturer and LEUCO.

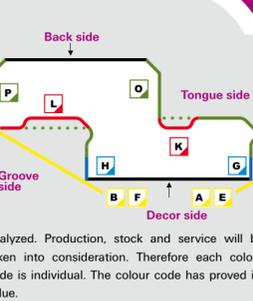
**In detail**  
Each tool gets a Tool Card with a determined colour, letter and other information. Then the tool is clearly related to the production process and can be identified.

**Tool administration  
KANBAN-SYSTEM**

Together with the colour coding normally a kanban-rack will be installed. In the rack the tools will be placed the same way as described in the colour coding system. As a result the administration of the tools will become easier, orders for new tools, service of tools and stock of tools.

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 profiling, blue for the finishing and red is for the clickprofiling tools. The letters explain, 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 information for ex. 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.



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 parquet manufacturer can easily find its feet.

**Tool administration  
TOOL ADMINISTRATION SOFTWARE LEUCO LEASY**

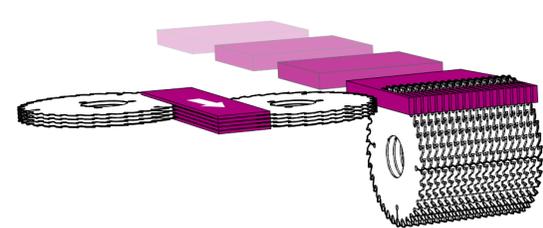
The colour coding and the Kanban rack achieve profits in the production. With the stock administration software "LEUCO Leasy" LEUCO again is a pioneer concerning tool administration.

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 parquet 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.



DIVIDING



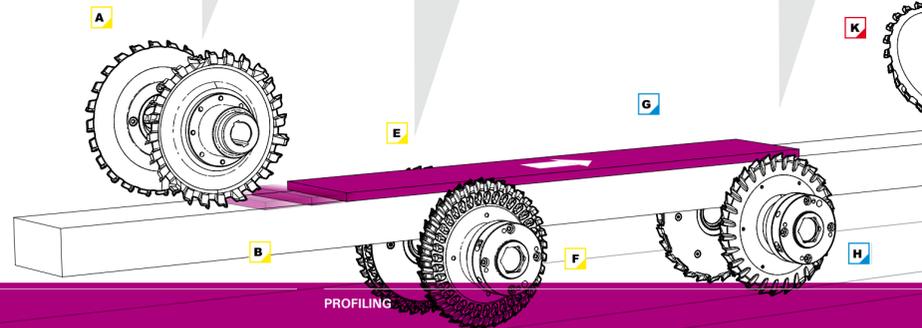
RESOURCES

01

Excellent cutting quality means less waste and less rework. The optimised kerf means optimal consumption of wood. You can use your resources optimal by using LEUCO sawblades.

Save with LEUCO.

LENGTH CUTTING



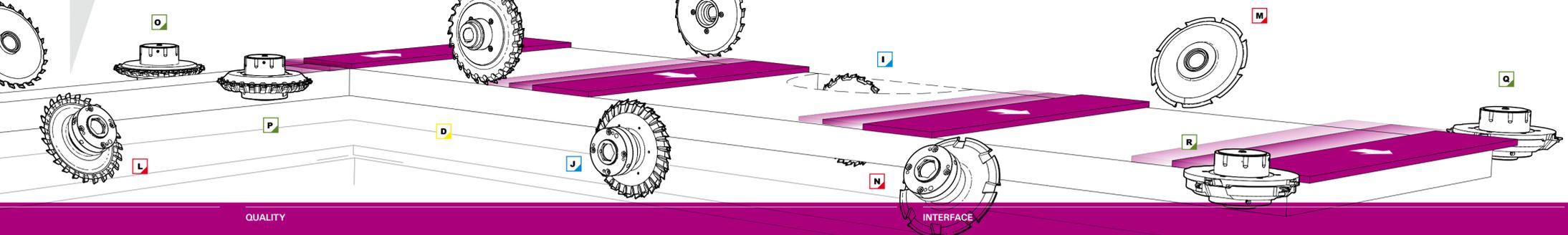
PROFILING

02

Profiles are licensed and give the panels the individual touch of the parquet 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.

Make a name for yourself with perfect profiles by LEUCO.

CROSS CUTTING



INTERFACE

04

The interfaces are the optimal conditions for the parquet 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.

QUALITY

03

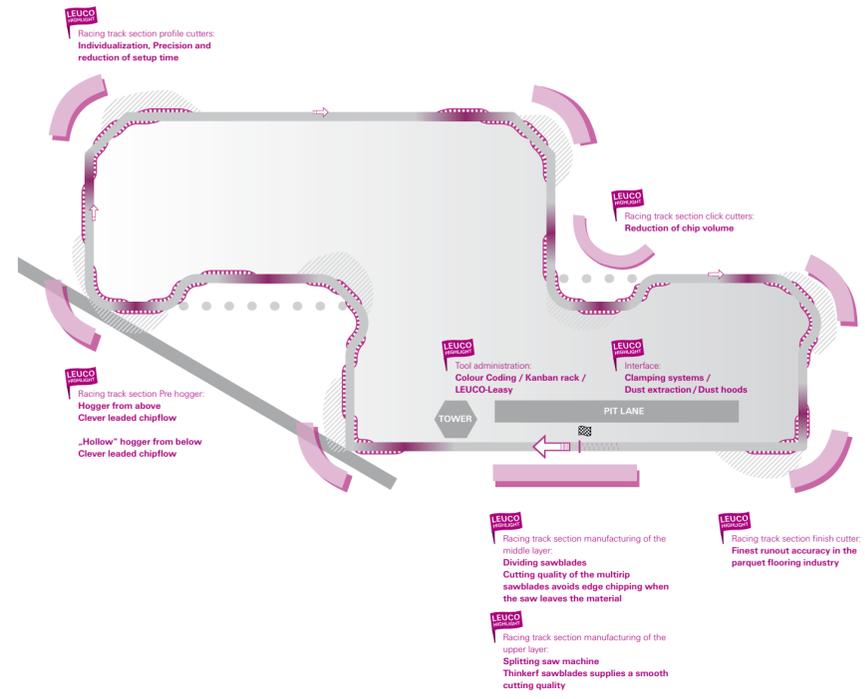
The more accurate the runout of the tool is, the more equal is the wear of the tool tips. And the higher the runout the higher is the quality of the edge, the only visible edge for your customer!

You should choose for quality with LEUCO.

LEUCO

05

**„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 chip have a big influence on the manufacturing of parquet flooring. The use of the LEUCO Crew guarantees at the customer a clean manufacturing and avoids unnecessary double-chipping. This guarantees longer edgelives and decreases machine wear while having an improved product quality. The optimised chipflow makes that maximum feedrates can be achieved in production.

**Formula 1 needs innovation**  
 The formula 1 is surrounded by the magic of "the Newest, the Fastest and the Best". LEUCO wants to face this challenge. As a result of the dialog with the customer LEUCO develops regularly state of the art and licensed tool and procedure innovations. 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, where the thinkerf-sawblade for the dividing of the middle layer and the click-profile cutter are part of the portfolio.

**Each racing team is individual**  
 We do not offer a standard scheme for the manufacturing of parquet flooring. Together with you we determine the track according to your requirements. Each step of the process will be analyzed 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 profit from this international race experience. We guarantee you tools adapted to the newest technology standards including their service and application engineering no matter where you are producing.

**When will you start to overtake?**

**PRODUCTION OF PARQUET FLOORING**



**„WE ONLY CAN BE SUCCESSFUL WHEN 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 edgelives 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 parquet flooring manufacturing process offers the chance to take pole position.

**The Crew**  
 For the Parquet manufacturer the tool specialist is next to the machine manufacturer the most important partner. LEUCO knows the requirements and the settings. The development and application engineer crew defines cutting materials, optimized chipflow and tip geometry. It determines rotation speed, tool weight, runout and concentricity as well as edge and profile quality. It discusses individual demands and coordinates interfaces towards the machine like clamping systems and dust extraction hoods.

**COMPETENCE THROUGHOUT THE COMPLETE MANUFACTURING PROCESS**

CONSULTING, ENGINEERING, PRODUCTION, ADMINISTRATION, SERVICE

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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 Choose Success!

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