



# Sawmill


Circular sawblades for experts



# Circular sawblades for sawmills

As individual as every single machining process

The demands placed on circular sawblades in sawmills are extremely high. A wide variety of wood types, high feed rates, long tool life and low waste are among the processing challenges. Leitz offers process-reliable solutions for special customer requirements with its customised tool range.

A background image showing several circular sawblades of different sizes and designs, some with teeth, and several cross-sections of wood logs. The sawblades are arranged in a way that shows their various shapes and sizes, highlighting their application in sawmills. The wood logs are cut into various shapes, showing the internal grain and texture of the wood.

Coated main blade to reduce adhesion and heat development

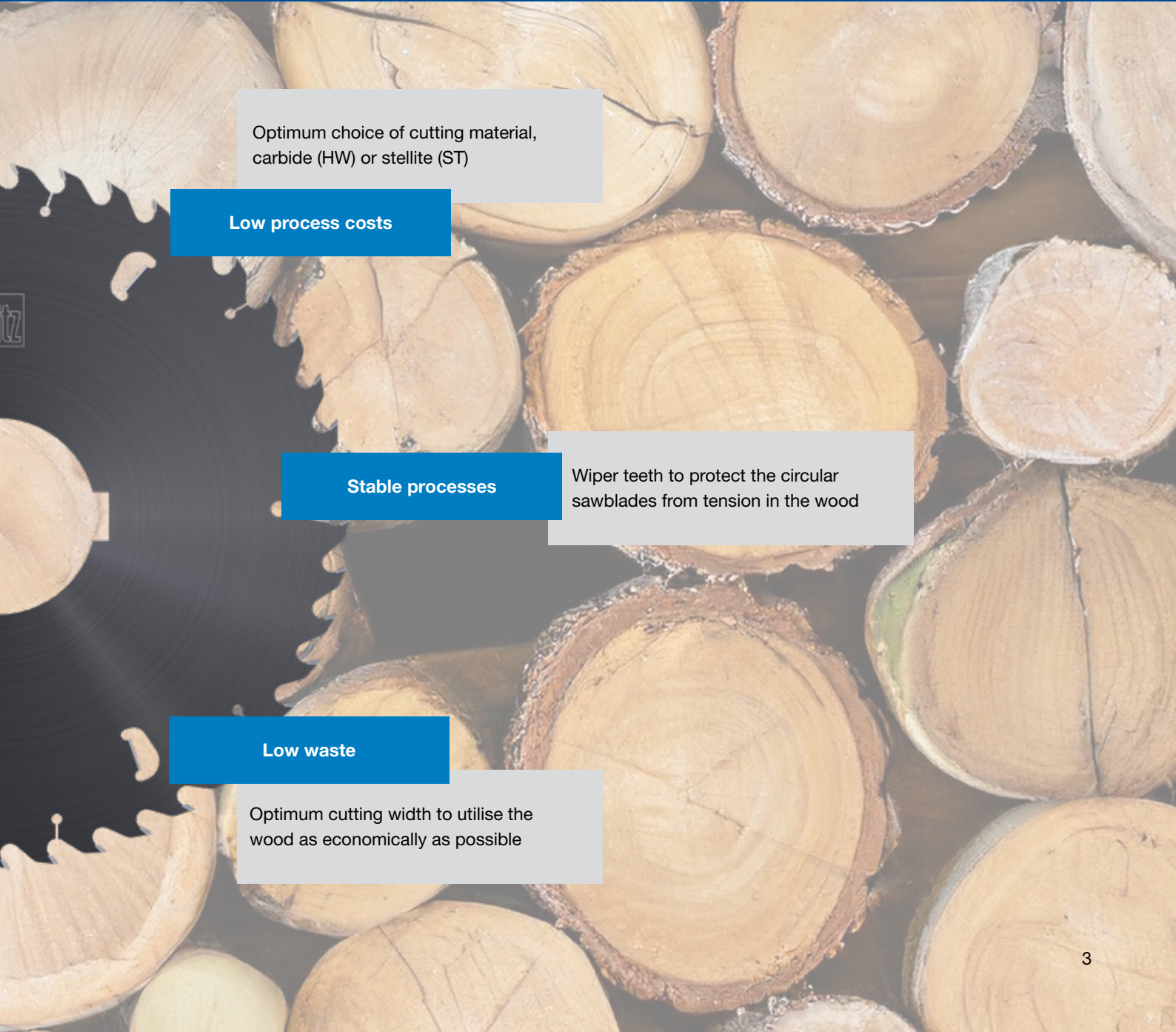
**High processing quality**

Application-optimised tooth shape for the best cutting properties

**Fewer rejects and rework**

**Long tool life**

Macro geometry for high resistance of the teeth against wood inclusions

The background of the page is a close-up photograph of numerous wood cross-sections. The wood is light-colored with visible growth rings and some darker, possibly charred or treated, edges. The sections are arranged in a somewhat circular pattern, creating a textured, organic background.

Optimum choice of cutting material,  
carbide (HW) or stellite (ST)

**Low process costs**

**Stable processes**

Wiper teeth to protect the circular  
sawblades from tension in the wood

**Low waste**

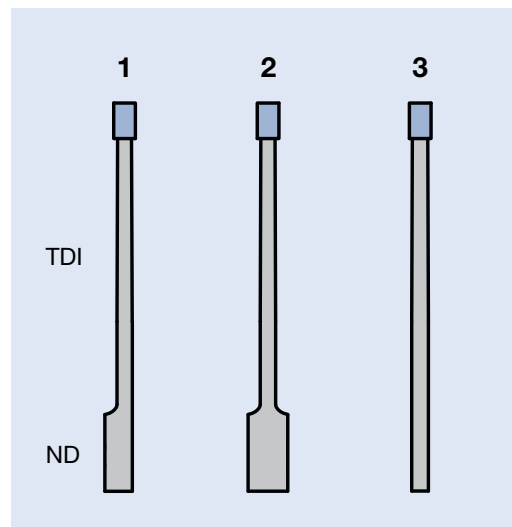
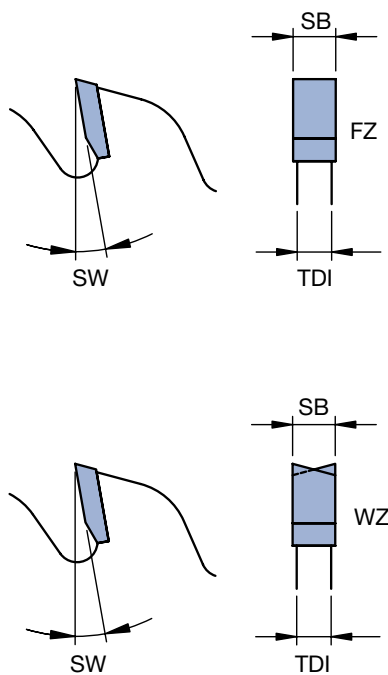
Optimum cutting width to utilise the  
wood as economically as possible

# Pre-cut

## Longitudinal machining with carbide-tipped circular sawblades

The carbide-tipped circular sawblades are used on a pre-cutting unit (with or without hogger) for processing commercially available softwood and hardwood (dry or wet).

### Application-optimised design of tooth shape and main blade



**Type 1:** one-sided recessed

**Type 2:** recessed on both sides

**Type 3:** smooth finish

### YOUR BENEFITS

- Higher cutting performance
- Customised tool design
- Improved cutting quality

### AT A GLANCE

- Coated main body for less adhesion (resinification)
- Optimised geometry for maximum process reliability
- Recessed main body for more stability



**Carbide-tipped pre-cutting circular sawblade – longitudinal cut**

Example dimensions; various special dimensions and designs up to 850 mm diameter available on request

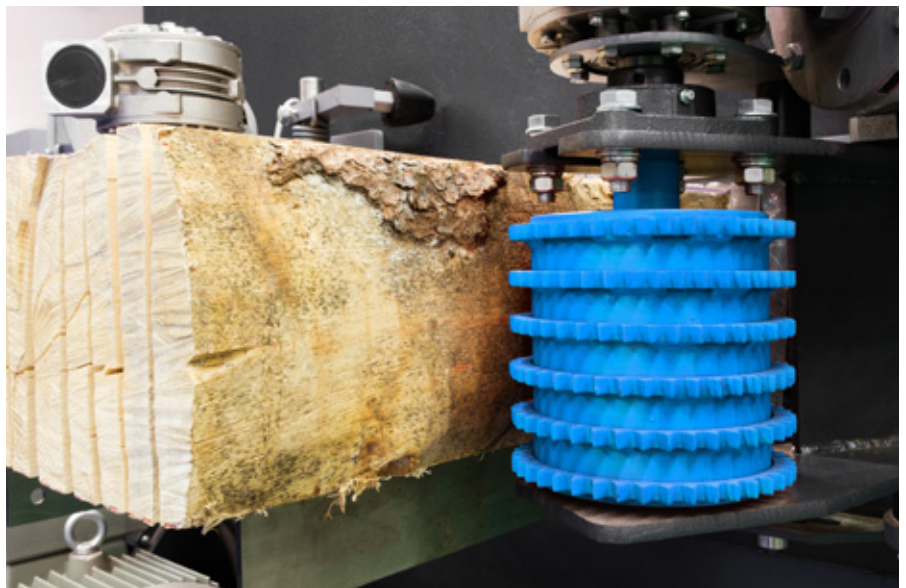
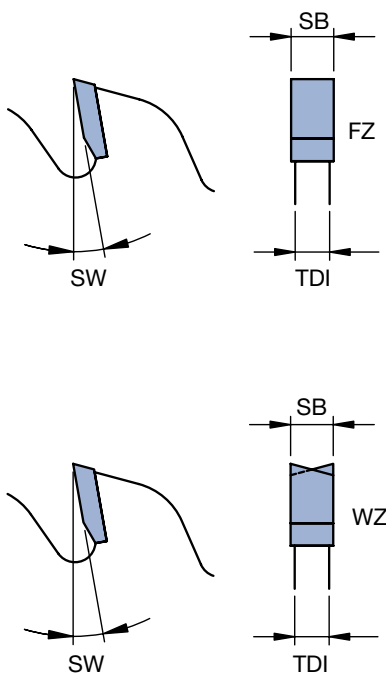
D mm	SB mm	TDI mm	ND mm	BO mm	NLA mm	DKN mm	Z	ZF	Type	ID LH	ID RH
505	5.2	3.8	6.8	120	4/14/156		18	FZ	1	480000230	480000229
530	3.8	2.5	6.0	125	4/18/165 8/16/160		36	FZ	1	480000046	480000045
580	4.0	3.6	5.8	145	8/12/165	21x156	36	FZ	2	480000210	480000210
640	5.8	4.4	–	120	8/13/156		28	FZ	3	480000165	480000165
648	5.4	3.8	6.8	160	8/11/185		14	WZ	1	480000003	480000002

# Re-cut

## Longitudinal machining with carbide-tipped circular sawblades

The carbide-tipped circular sawblades are used on a multi-blade unit for processing commercially available softwood and hardwood (dry or wet).

### Application-optimised design of the tooth shape

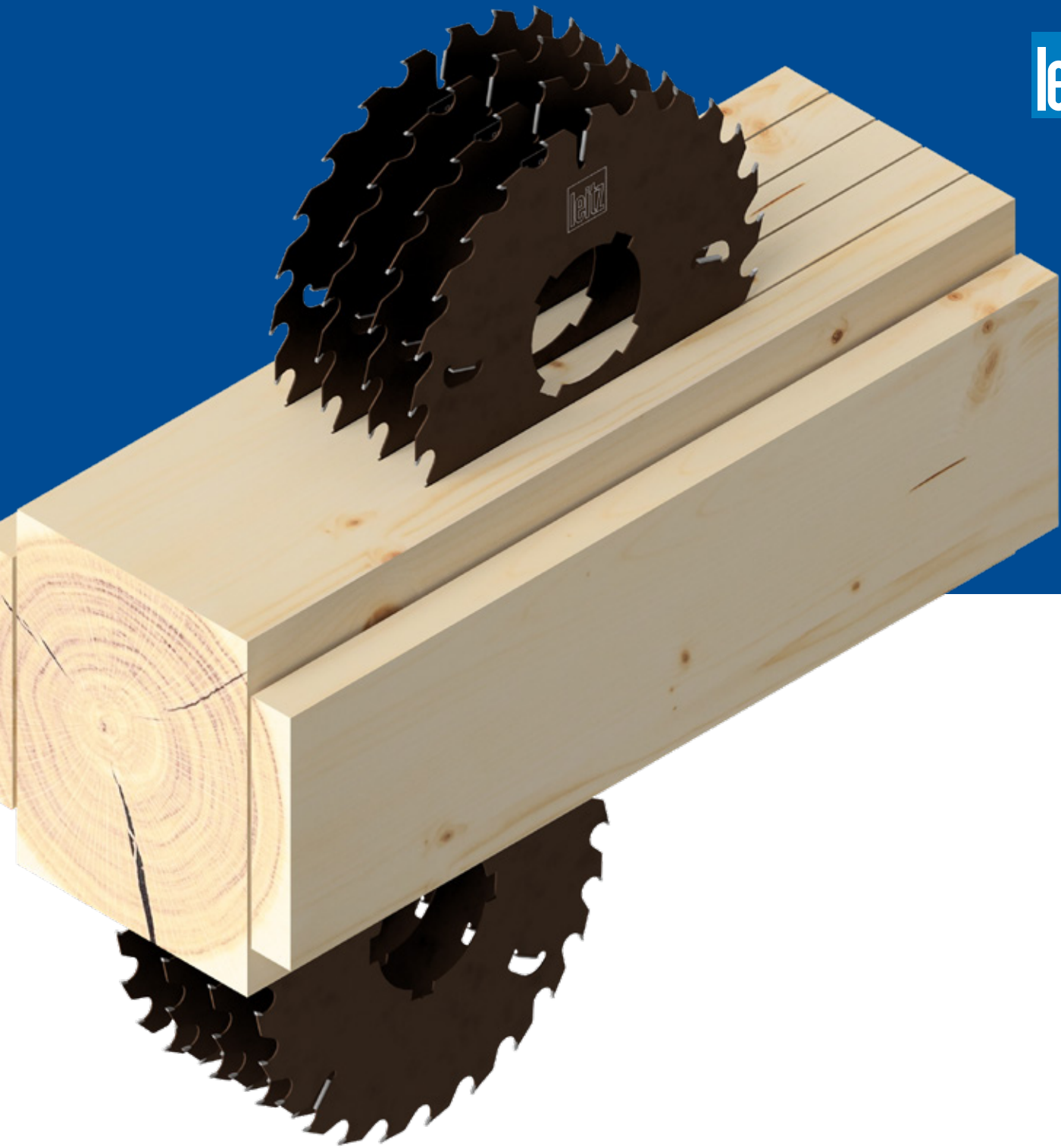


### YOUR BENEFITS

- Higher cutting performance
- Customised tool design
- Improved cutting quality

### AT A GLANCE

- Coated main body for less adhesion (resinification)
- Optimised geometry for maximum process reliability
- Innovative carbide for long tool life



**Carbide-tipped re-cut circular sawblade – longitudinal cut**

Example dimensions; various special dimensions and designs up to 850 mm diameter available on request

D mm	SB mm	TDI mm	BO mm	NLA mm	DKN mm	Z	ZF	ID
360	3.6	2.2	150		37x169	20	WZ	480000117
400	4.4	3.0	85		19x96	12	FZ	480000198
410	4.8	3.4	125	12/6.6/140		20	FZ	480000203
500	4.7	3.4	150		37x170	28	FZ	480000184
540	2.8	1.8	150	DKN	37x170	45	FZ	480000572
555	5.6	4.0	120	4/13.4/156		24	FZ	480000172

# Coordinated systems for pre- and further processing

Design, appearance and finishes

## Previous processing

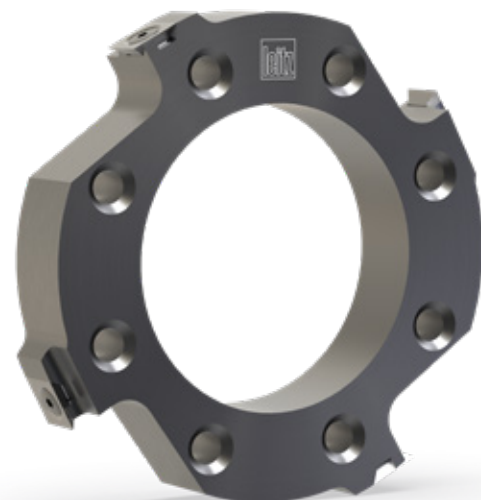
### Sizing spacers & saw segments

When processing round timber into sawn timber via the cutting line in the sawmill, there are different approaches. Powerful combinations of hogsers and circular sawblades are often used on modern systems. The tree edge is thus completely removed and made accessible for further use via the extraction system.



### Finishing cutter

Some systems are also equipped with a finishing cutter unit, particularly in the pre-cut. These cutters protect the saw spindle in case of tension in the wood. Unexpected movements in the process allow the tool to intervene before the saw spindle can be damaged. Profiling does not take place.





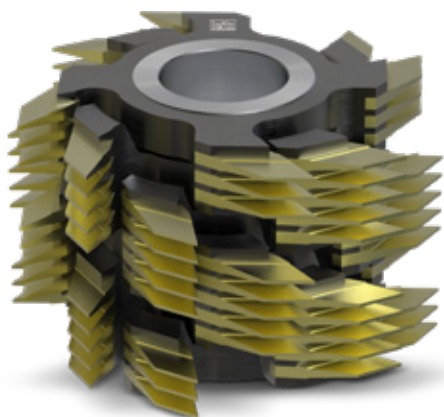
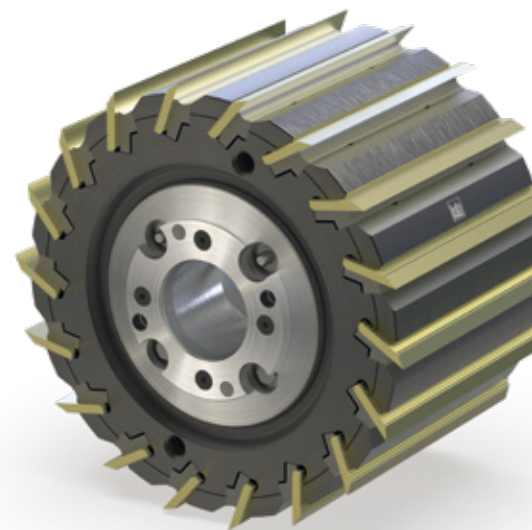
Wood construction catalogue:



## Subsequent processing

### Planerheads

The first operation after cutting the raw wood is planing. It is primarily the most important step in woodworking. Here, the shape and material thickness are determined, and surfaces and reference surfaces are created. When planing, the selection of the right tool and the appropriate machining strategy are decisive for the results in all subsequent machining processes.

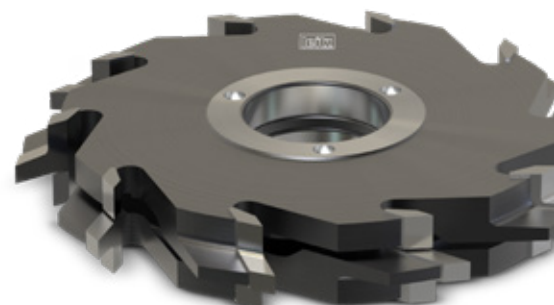


### Minifinger joint cutter

The dimensionally stable jointing of several short wooden parts to form a large component creates wooden construction elements that would not occur in nature in the required shape, size or load-bearing capacity. Particularly important is the quality and stability of the corresponding type of joint. The production of high-quality flat or upright minifingers requires tools that are optimally matched to the material, adhesive and final use.

### Profile cutter

The tipped profile cutters from Leitz are particularly robust and stand for the highest machining quality, long service life, low-maintenance operation and a significant reduction in set-up times.



# Leitz Service

Tool service in manufacturer quality

## Arguments for your success

**Tools as good as new – this is based on the philosophy of maximum tool life and perfect machining quality throughout the entire life cycle of Leitz products. The Leitz tool service plays a decisive role in this. Taking the highest quality standards into account, Leitz is able to regrind tools of all types and from all manufacturers and deliver them back to the customer in manufacturer quality for use again – and that means around the globe in over 150 countries.**

## Your benefits due to ...



### QUALITY

... in good hands

- Uniform service and quality standards worldwide
- Absolute precision throughout the whole service process
- Handling by qualified Leitz personnel
- Complete service process documentation



### RELIABILITY

... with us as your partner

- Local personal contact partner
- Reliable tool collection and delivery
- Transparent pricing



### KNOWLEDGE

... through our know-how

- Our own service education center for international employee and customer training
- Continuous updating of qualifications for our employees with special focus on technology and production
- Consultation service in almost all areas of the wood and wood-based materials processing industries



### PRODUCTIVITY

... is our incentive

- Quick accessibility, fast reactivity
- Understanding of your production processes
- Short set-up times due to programming aids and application data (Plug-and-Play)
- Optimal use from your tools over their entire life cycle



**100**

Service locations worldwide



**1000**

Service employees worldwide



**15 Mio**

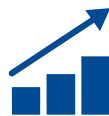
Tools per year



**FLEXIBILITY**

**... through our solutions**

- Most modern machines and technologies
- Individual customer care through various service models (e.g. Complete Care)
- Re-grinding tooling from all manufacturers
- Flexible pricing models (square meters, running meters, number of products, ...)



**EFFICIENCY**

**... through our processes**

- Simple and short administration processing
- State-of-the-art electronic data collection systems via smartphone or tablet
- Comprehensive and transparent working steps



**SUSTAINABILITY**

**... for the environment**

- Raw material and optimized wear – as little as possible, as much as necessary
- Paperless administration and production
- Careful handling of valuable resources

# Leitz worldwide

Partner in your market



**38**

National companies



**100**

Service locations worldwide



**150000**

Satisfied customers



**3000**

Employees



[www.leitz.org](http://www.leitz.org)

