



Fibre cement

Tool and processing solutions
for experts



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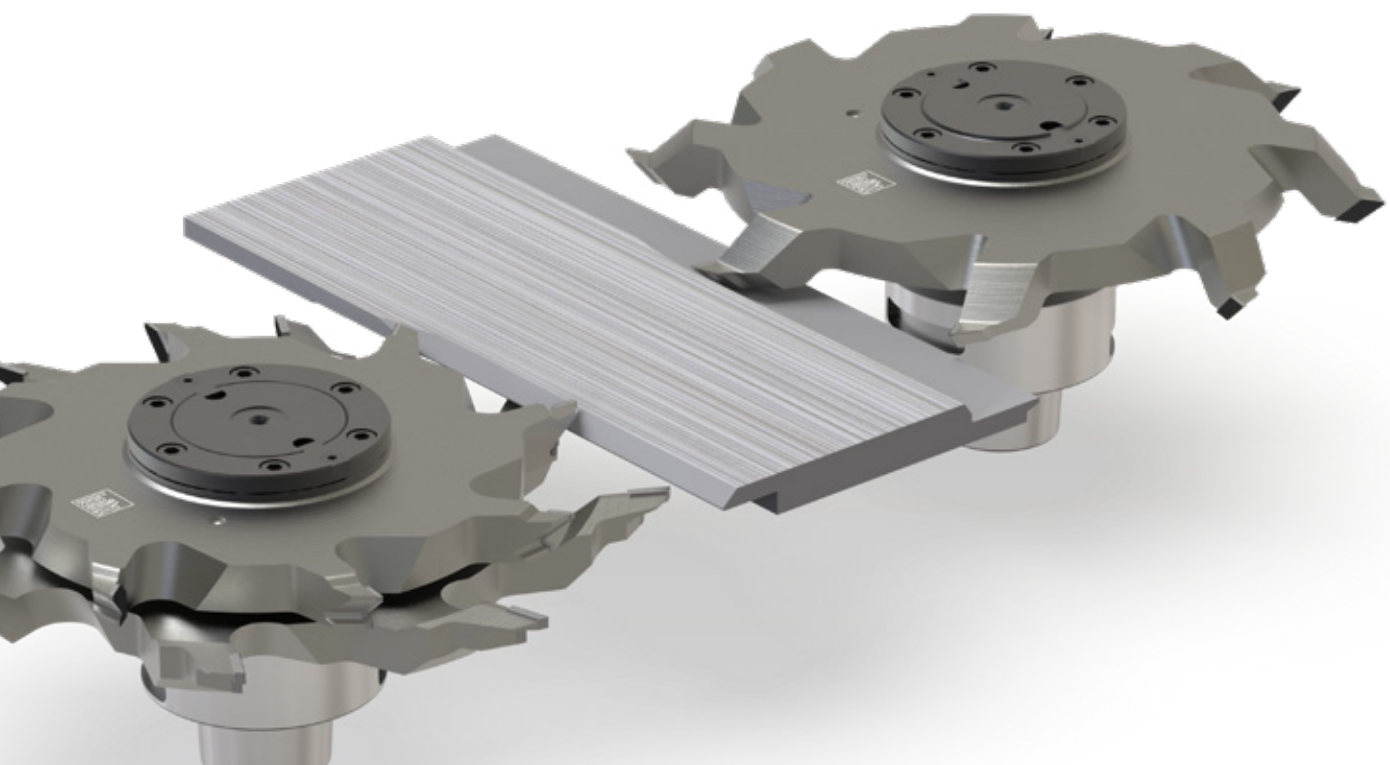


Introduction

Fibre cement – long-lasting, sustainable and individual. As ordinary as fibre cement products are, their production and processing is challenging.

For manufacturing and processing industries, precisely this aspect is of key importance, therefore makes them absolute specialists. The more specialized the knowledge of the material fibre cement, the higher the demands on the tooling and processing solutions used. Particularly with regard to existing quality specifications to the finished product, the comprehensive consideration of tool solutions, technical conditions and processes is the basis for economic success.

However, this success can only be ensured in the long term by using individually adapted technology and service concepts. For Leitz, the success of its customers and a long term partnership is the main focus. As a leading supplier of technically high-quality tool solutions, it is our goal to increase efficiency, productivity, quality and sustainability for our customers. This is made possible by our more than 140 years of experience in tool manufacturing and our particularly deep knowledge of our customers needs and that of the market. All of this and a worldwide Leitz service network with more than 100 of our own service stations as well as our certified quality promise, make Leitz the partner for your success.



Fibre cement

Innovative working material, economically processed

More productivity, quality & sustainability in wet & dry processing

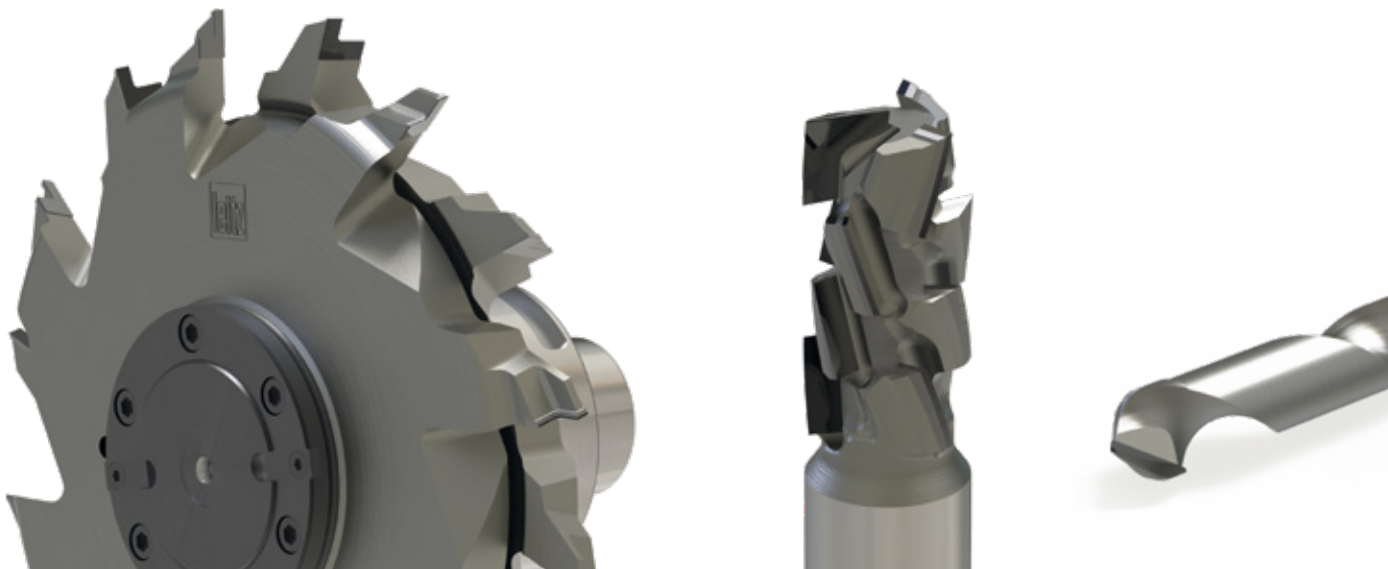
Whether for facade cladding, roofing or interior finishing – fibre cement materials have been the first choice for fire protection, weather resistance and durability.

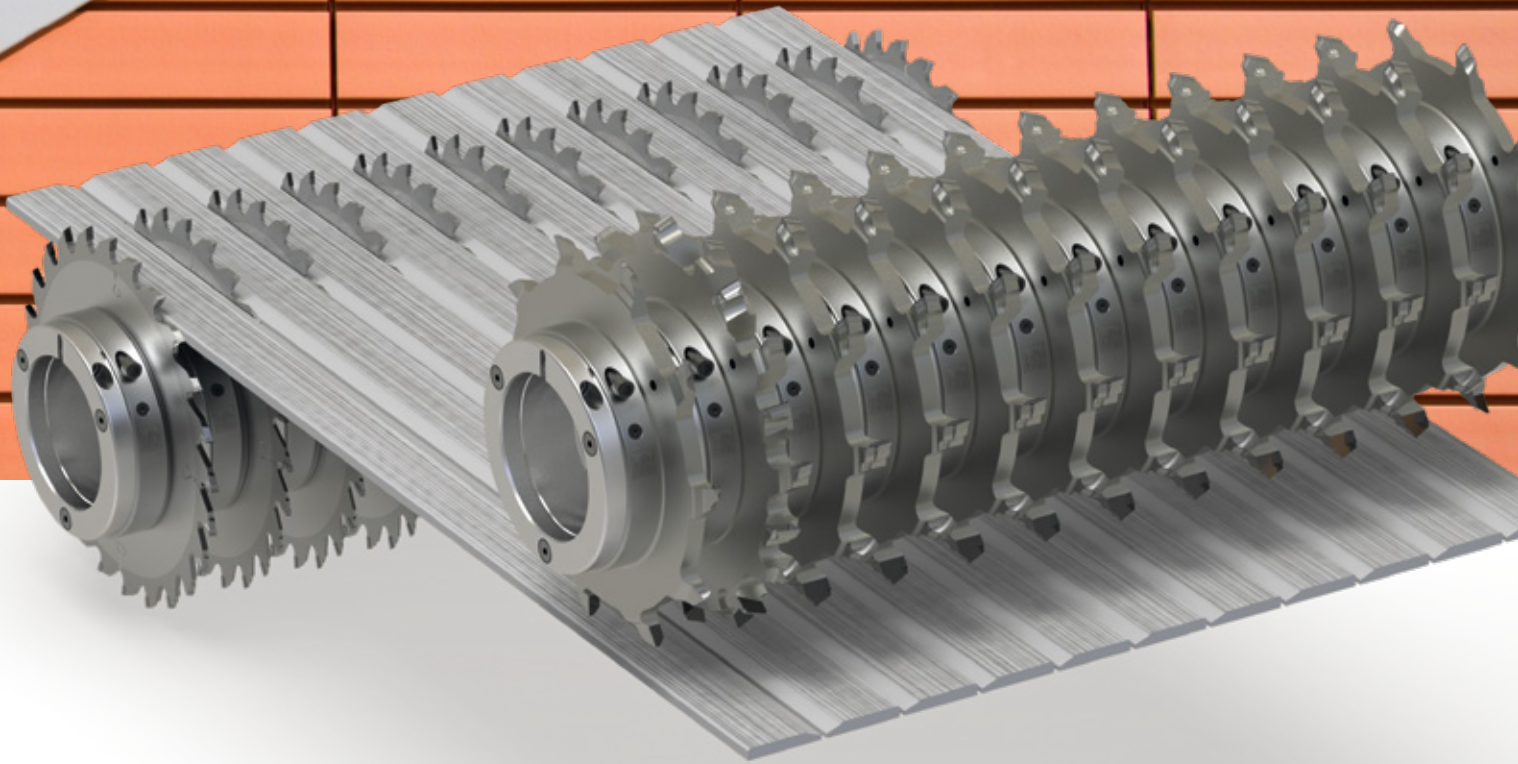
With its knowledge of processes and production focuses, Leitz offers individual product solutions, including state-of-the-art extraction technologies, for the modern and high-quality processing of fibre cement materials.

Splitting & profiling

Splitting and profiling of fibre cement materials to perfection

Whether in the continuous process in special or standard machines – Leitz offers its extensive knowledge of the efficient design of production processes. Depending on customer requirements, individual tool solutions are created which offer added value in the mechanical processing of fibre cement materials.





Sizing & grooving

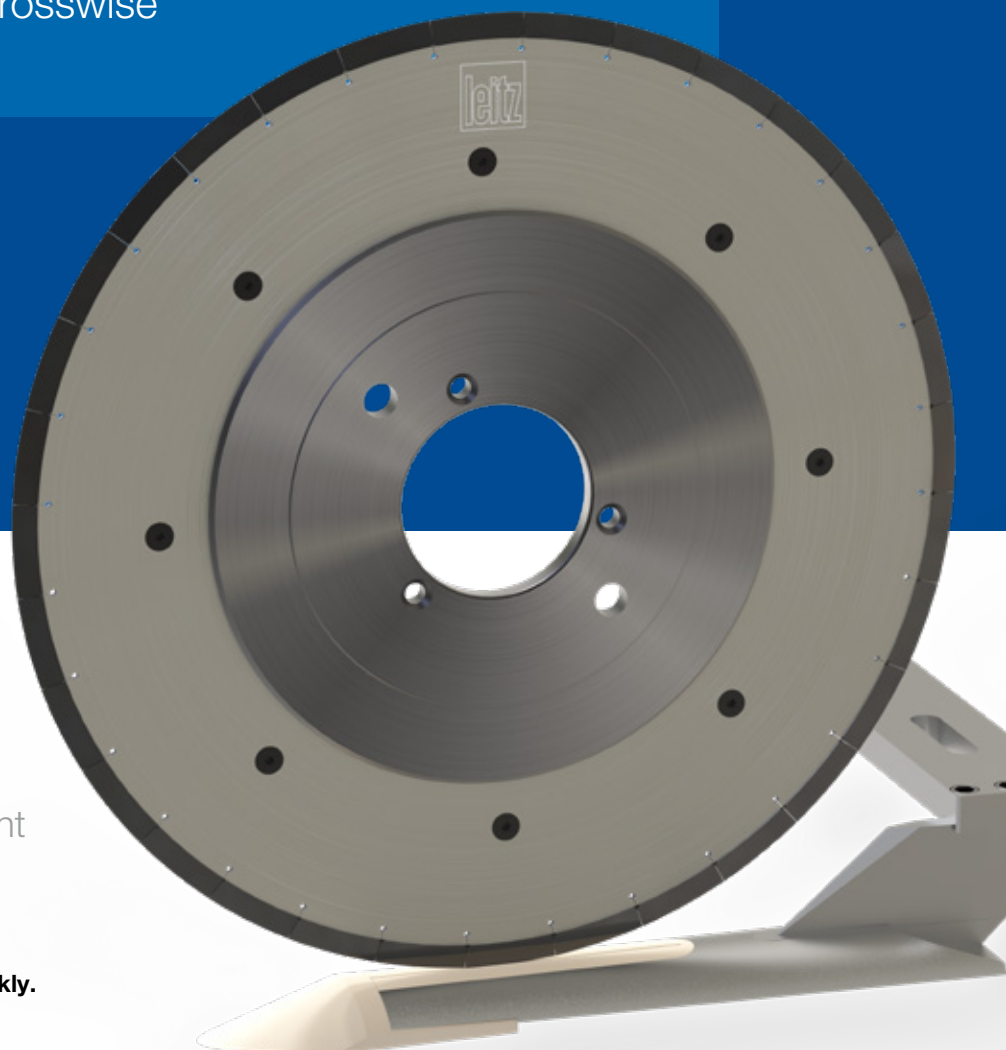
CNC-processing of fibre cement panels

Especially for small batch sizes or individual designs, machining on CNC machining centres offers many advantages. Leitz offers tool solutions for efficient machining on CNC machines in its extensive standard program.



Wet processing

Cutting, lengthwise and crosswise



Diamaster EvolutionCut Circular Knife

Processing of wet
panel blanks from fibre cement

In the production of fibre cement panels, carbide-tipped circular knives for cutting the raw panels wear out particularly quickly. The consequences are a stop of the line and time-consuming tool changes.

In this situation, diamond-tipped circular knives from Leitz help manufacturers to save time and money. EvolutionCut ensures long system lifetimes at high feed rates and this with consistently perfect machining quality.

YOUR BENEFITS

- Long lifetime
- Less machine downtime
- Less processing costs
- Perfect cutting quality
- High machining security

AT A GLANCE

- Resharpenable 8 times
- Tool set with pressure shoe and flange
- Replaceable wear parts for the pressure shoe
- Diamond cutting material

30 times



LONGER TOOL LIFE
IN COMPARISON TO
TUNGSTEN CARBIDE
CIRCULAR KNIVES

8 times



RESHARPENABLE



-95%

LESS SET-UP TIME –
60 DAYS OF NON-STOP
WORK

Your benefits due to ...



EFFICIENCY & PRODUCTIVITY

Maximum tool life with minimal set-up time

- Significant reduction in machine downtimes
- Less tool changes
- Longer tool life due to durable diamond cutting edges



QUALITY

Perfect cutting results in different material thicknesses

- High cutting quality due to extra-sharp cutting edges
- Consistent machining results over the entire life cycle
- Less scrap due to high processing reliability

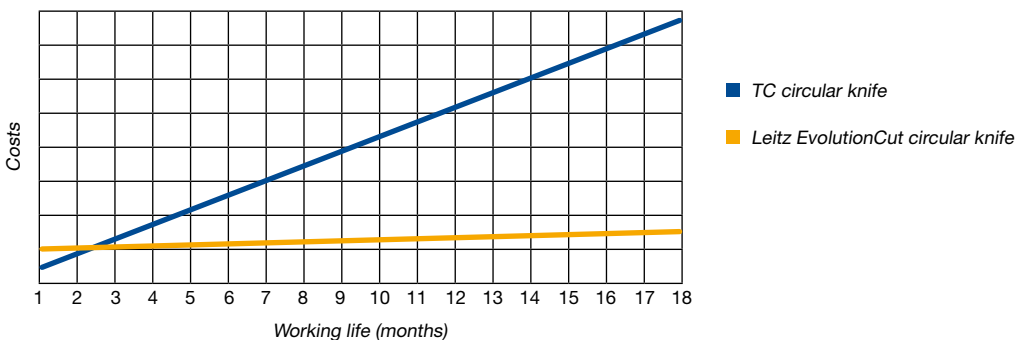


SUSTAINABILITY

A plus for users and environment

- Minimised risk of accidents due to vibration-damping properties of the system
- Saving of valuable resources through the use of durable diamond cutting materials
- Can be resharpened several times due to the enlarged resharpening zone

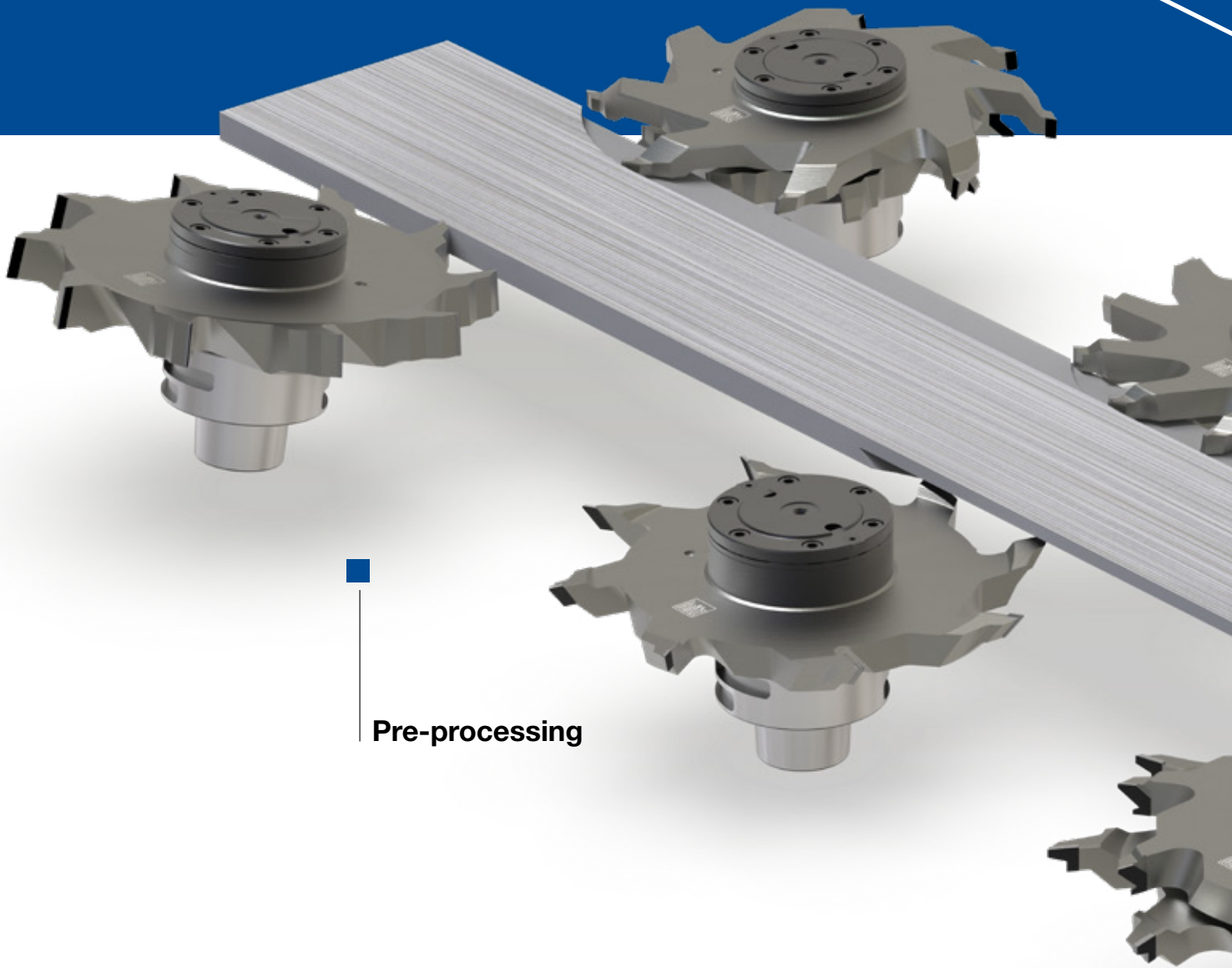
Cost-benefit comparison between tungsten carbide and diamond circular knives



Dry processing

Example process flow – profiling of fibre cement panels

Lengthwise



Pre-processing

processing

Fibre cement panels in continuous flow on double-end tenoner



■
Finishing

Dry processing

Profiling, lengthwise and crosswise

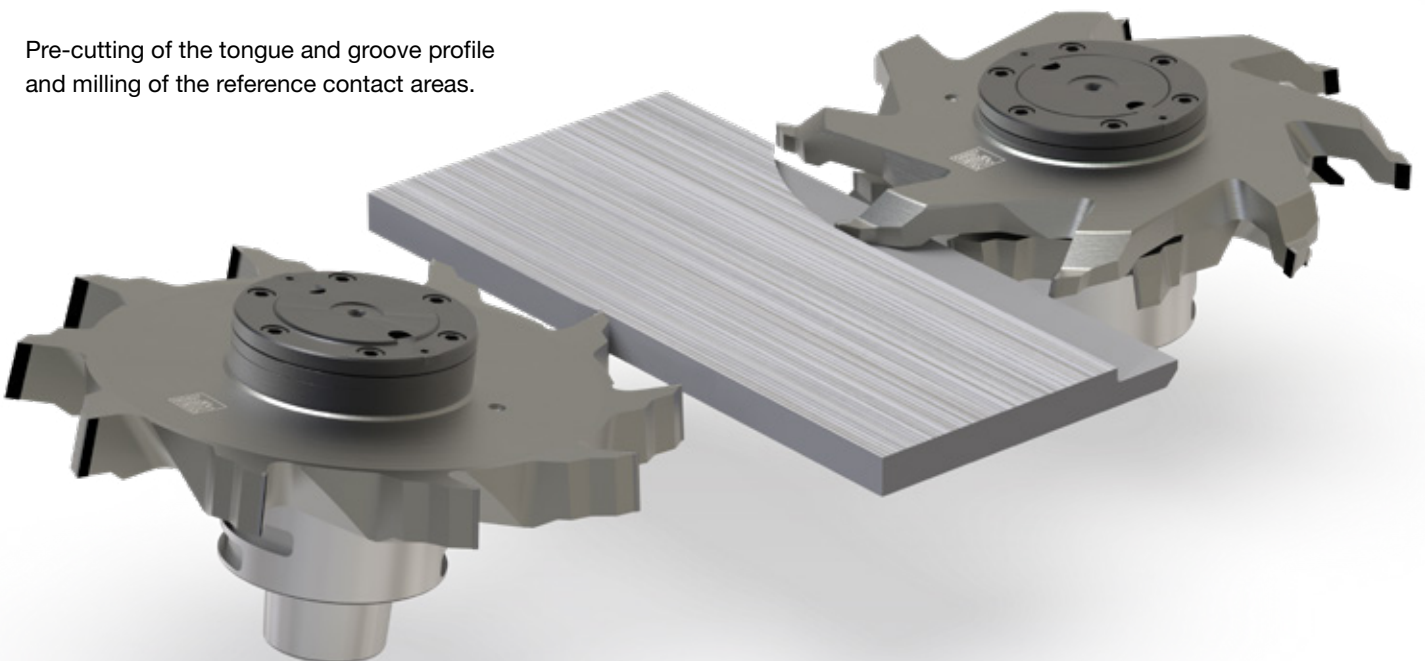
Process steps on continuous machines

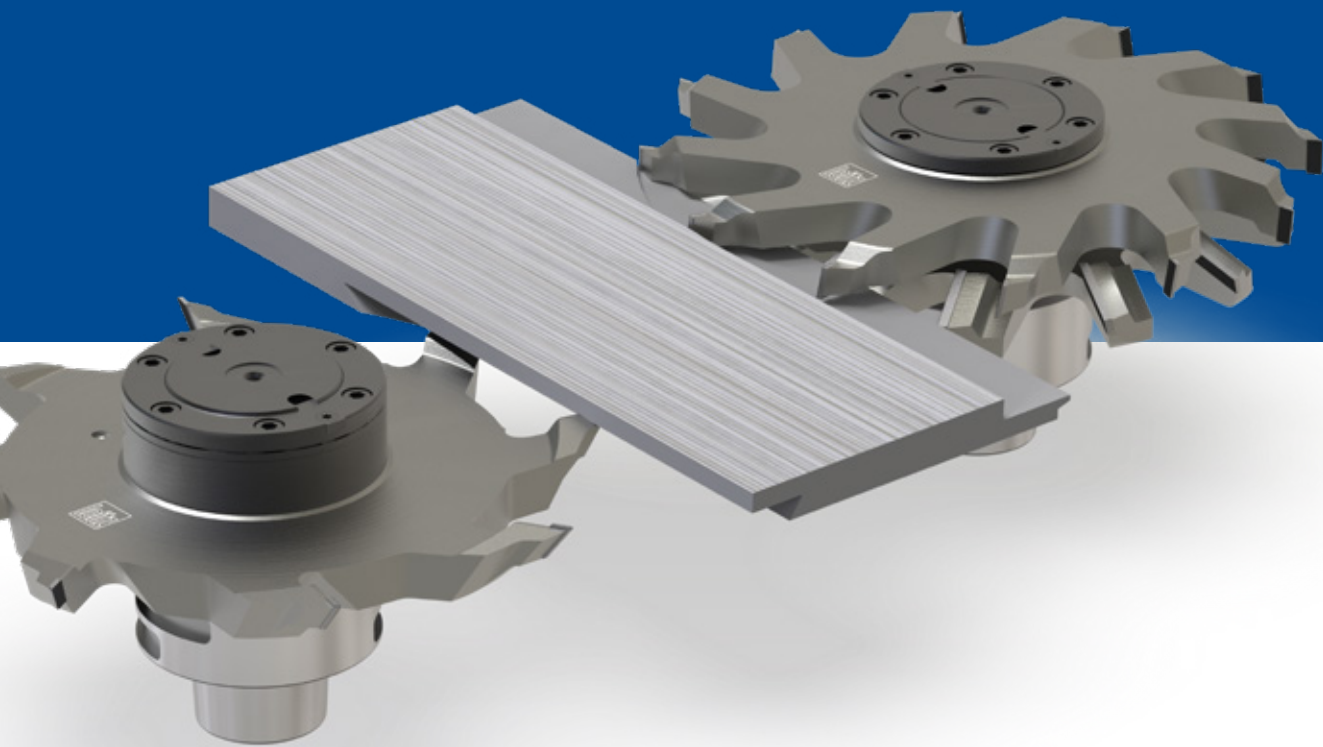
Pre-processing and finishing

When profiling fibre cement panels in a continuous process, for example on double-end tenoners, the economic efficiency of the overall process is of primary importance. The process chain is divided, for example, into so-called pre- and finish-processing. Depending on the profile and quality requirements, the tools are designed, distributed and precisely coordinated on several spindles and according to these specifications.

Pre-processing

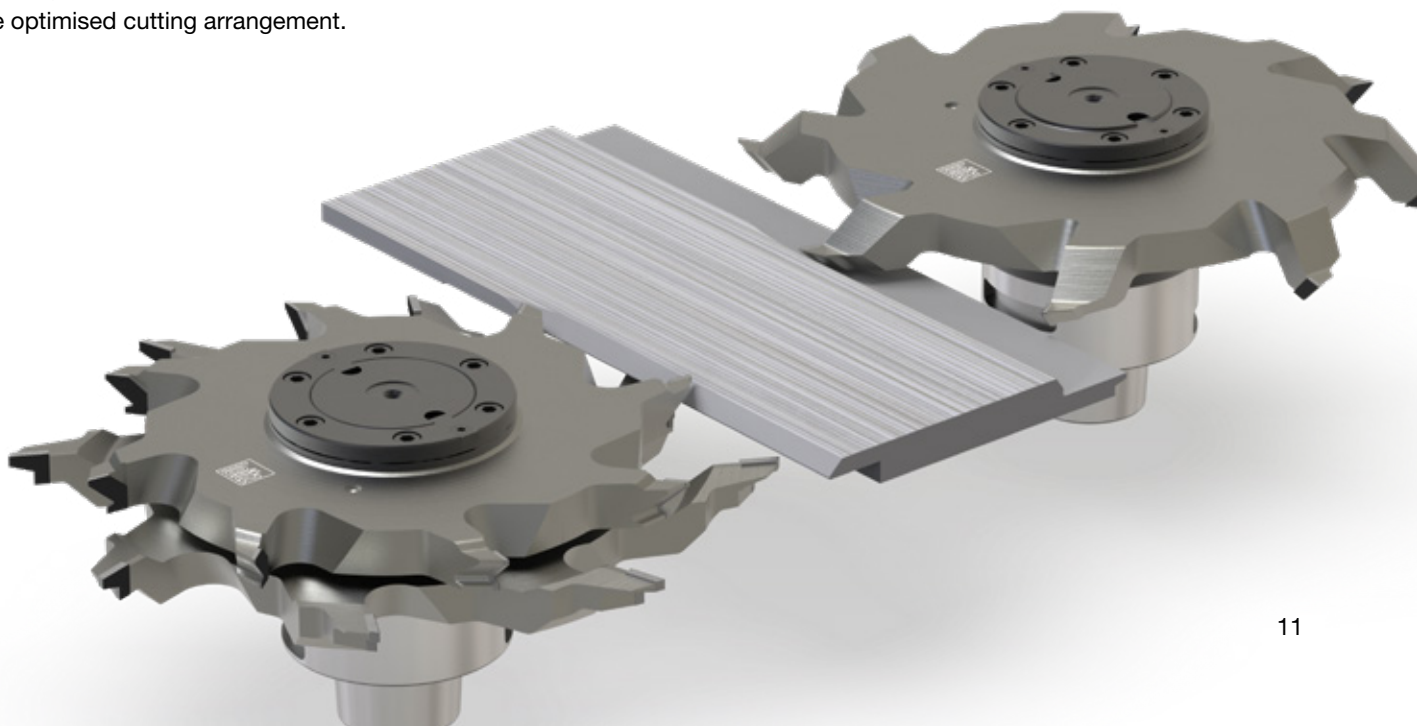
Pre-cutting of the tongue and groove profile and milling of the reference contact areas.





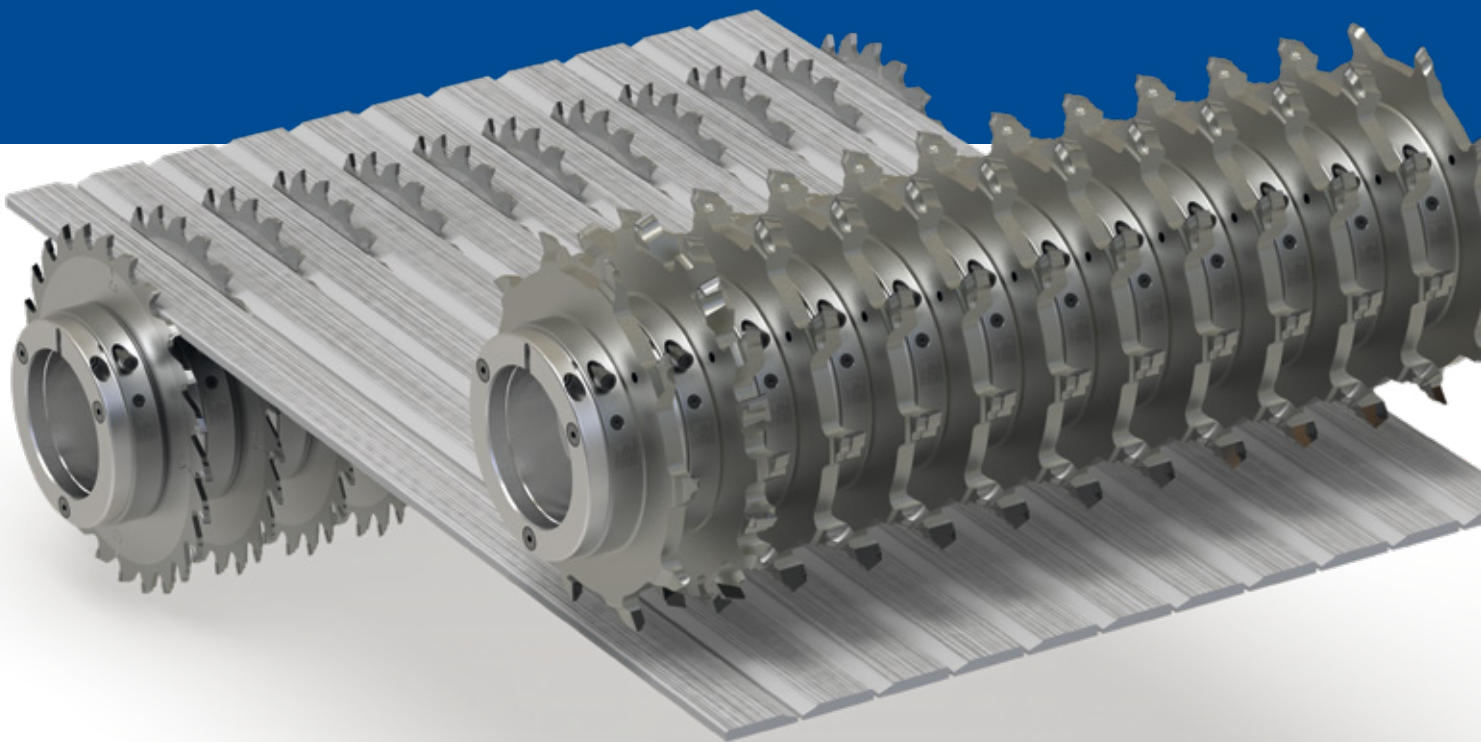
Intermediate processing and finishing

Pre-processing achieves a higher finish quality for the final processing. At the same time, the tool life is increased due to the optimised cutting arrangement.



Dry processing

Splitting



Profiling & cutting on special machines

With profile cutter or saw shaft set

Splitting a fibre cement board into several panels is realised on a special machine. This can, for example, consist of a spindle at the top and a spindle at the bottom. The use of multiple profile tools on one spindle makes the processing of fibre cement in one process pass particularly efficient. The top spindle is used for profiling. The bottom spindle cuts the panel into individual panels.

Dry processing

Sizing



Router cutter Diamaster PRO³

For sizing and grooving in the nesting process

Router with spiral cutting edge arrangement and alternating shear angles, for tear-free cutting edges on both sides. With real Z3 over the entire cutting length and DP plunging edge for perfect machining quality and considerably longer tool life.

Router cutter Diamaster PRO³

D mm	GL mm	NL mm	S mm	DRI	ID
12	65	19	12x42	RH	191030
12	70	24	12x42	RH	191031
12	75	28	12x42	RH	191032
14	90	33	16x50	RH	191033

Router cutter Diamaster PRO³, inch dimensions

D mm	D in	GL mm	GL in	NL mm	NL in	S mm	S in	DRI	ID
12.7	1/2"	70	2 3/4"	24	15/16"	12.7x42	1/2" x 1 5/8"	RH	191057
12.7	1/2"	75	2 15/16"	28	1 1/8"	12.7x42	1/2" x 1 5/8"	RH	191058

Other dimensions available on request.

YOUR BENEFITS

- Perfect quality on edge and cutting surface
- Higher feed rate
- Longer tool life

AT A GLANCE

- Real Z3 technology
- Resharpenable several times
- Available ex stock
- Diamond tipped

Dry processing

Sawing



Panel sizing sawblade TR/TR Excellent

For sizing of single boards and stacks of boards

Circular sawblade with DP tipping for long tool life. Excellent design with irregular tooth pitch and filled laser ornaments for less vibration and noise.

Panel sizing sawblade TR/TR, Diamaster PLUS

Machine	D mm	SB mm	TDI mm	BO mm	NLA mm	Z	ZF	SW °	ID
	300	4.4	3.2	30	KNL	60	TR/TR	15	190706
Homag	308	3.2	2.4	60	2/14/100	96	TR/TR	10	190746
Holz-Her, Mayer, Schelling	350	4.4	3.2	30	KNL 2/13/94	72	TR/TR	15	190707
Homag	350	4.4	3.2	60	2/14/100 2/14/125	72	TR/TR	15	190708
Homag	380	4.4	3.2	60	2/14/100 2/14/125	72	TR/TR	15	190709
Homag	380	4.8	3.5	60	2/14/100 2/14/125	72	TR/TR	15	190710
Mayer, Schelling	400	4.4	3.2	30	KNL 2/13/94	72	TR/TR	15	190711
Homag	450	4.8	3.5	60	2/14/125 2/19/120	72	TR/TR	15	190712

Other dimensions available on request.

YOUR BENEFITS

- High processing quality
- Programme for sizing single and panel stacks
- Long tool life

AT A GLANCE

- Resharpenable several times
- For all conventional panel sizing saws
- Available ex stock



Table & sizing sawblade DZ/TR

For perfect cutting

Circular sawblade with DP tipping and robust tooth shape for long tool life even in highly abrasive materials such as fibre cement. Excellent design with filled laser ornaments for vibration damping and noise reduction.

Table and sizing sawblade DZ/TR, Diamaster PRO

D mm	SB mm	TDI mm	BO mm	NLA mm	Z	ZF	SW °	ID
180	3.2	2.2	30		36	DZ/TR	10	190747
250	3.2	2.2	30	KNL	48	DZ/TR	10	190748
303	3.2	2.2	30	KNL	60	DZ/TR	10	190673
303	3.2	2.2	30	KNL	96	DZ/TR	10	190674
350	3.5	2.5	30	KNL	72	DZ/TR	10	190749

Other dimensions available on request.

YOUR BENEFITS

- High cutting performance
- Long life time
- Less noise

AT A GLANCE

- Filled laser ornaments
- Resharpenable several times
- Available ex stock
- Diamond tipped

Dry processing

Sawing



Portable circular sawblade

For cutting to length and cutting to size

Circular sawblade with DP tipping for long tool life. Tool body with cooling holes for dust-free cutting surfaces.

Portable circular sawblade, battery-powered portable circular saw

D mm	SB mm	TDI mm	BO mm	Z	ZF	SW °	ID
160	2.2	1.6	20	4	FZ	5	190752
165	2.2	1.6	20	4	FZ	5	190753
190	2.2	1.6	30	4	FZ	5	190754

Portable circular sawblade, corded portable circular saw

D mm	SB mm	TDI mm	BO mm	NLA mm	Z	ZF	SW °	ID
160	3.2	2.4	20		4	P	5	190302
184	3.2	2.4	20		4	P	5	190696
190	3.2	2.4	20		4	P	5	190303
190	3.2	2.4	30		4	P	5	190745
225	3.2	2.4	30		6	P	5	190304
300	3.2	2.4	30	KNL	8	P	5	190305

Other dimensions available on request.

YOUR BENEFITS

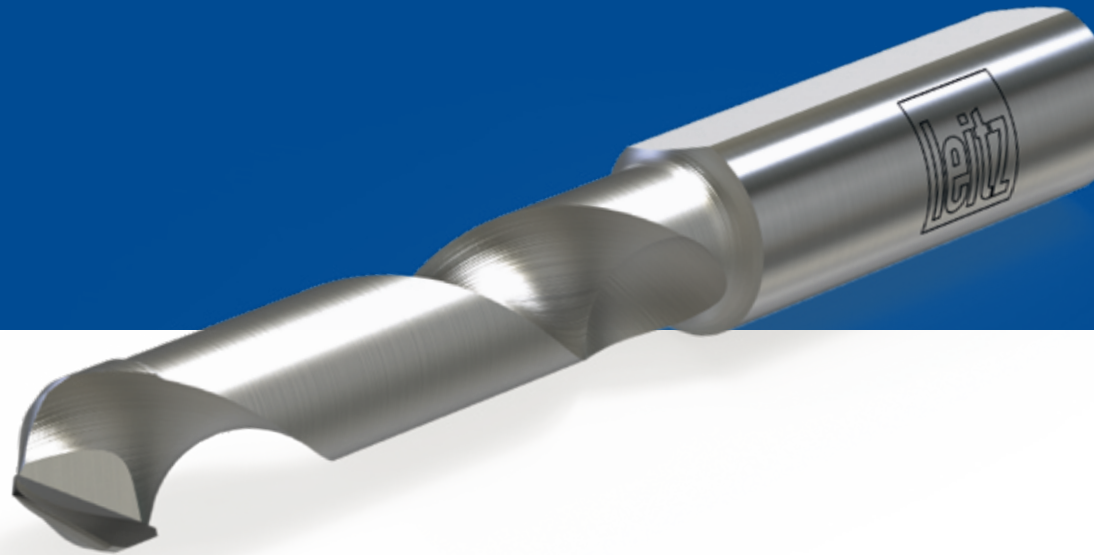
- Lower feed forces
- Reduced cutting width
- Long life time

AT A GLANCE

- Special cutting geometry
- Tool body with cooling holes for dust-free cutting surfaces
- Available ex stock

Dry processing

Boring



Through-hole drill DP

For maximum use

DP-tipped through-hole drill for maximum tool life, especially in abrasive materials such as fibre cement. With large gullet area for optimum chip removal from the drill hole.

Through-hole drill DP

D mm	GL mm	NL mm	S mm	Z	ID LH	ID RH
5	70	30	10x27	1	091186	091185
6	70	30	10x27	1	091188	091187
8	70	30	10x27	1	091192	091191
10	70	30	10x27	1	091194	091193

Other dimensions available on request.

YOUR BENEFITS

- Breakout-free boreholes
- High tool stability
- Perfect chip removal
- Long life time

AT A GLANCE

- Special cutting geometry
- Large gullet area
- Resharpenable several times
- Diamond tipped

Chip collection

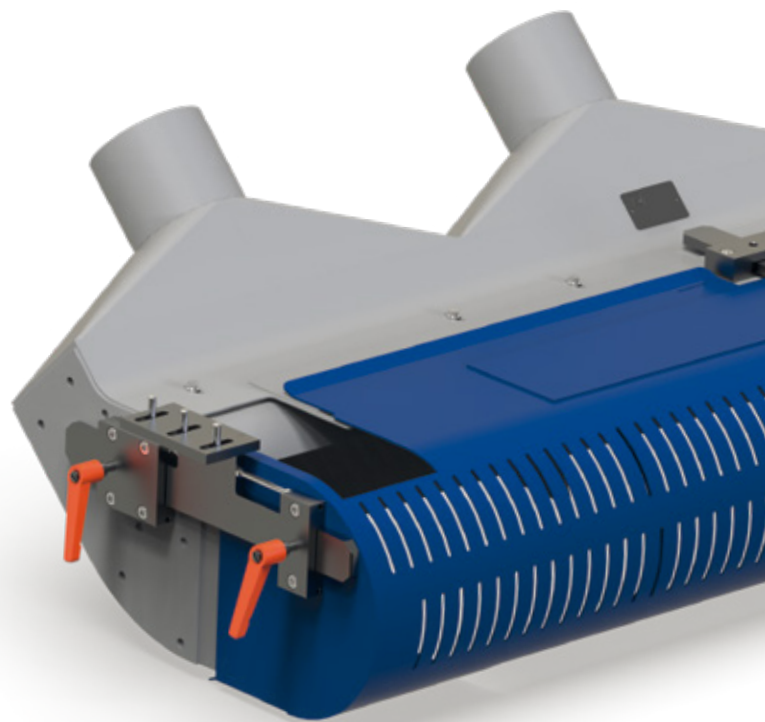
DFC®-Extraction hoods with ceramic wear protection

DFC®-Extraction hoods with ceramic wear protection

More quality, cost-effectiveness, and safety through efficient chip collection

In machining, extraction hoods have an enormous influence on the entire production process. It is important that tool and extraction hood perfectly match each other.

Leitz DFC®-Extraction hoods are individually designed and precisely adapted to the application. Thereby, all processing options such as profile variants or different material thicknesses are taken into account. Specific ceramic reinforcement reduces wear to an absolute minimum.



YOUR BENEFITS

- Individual design and adjustment
- Optimum adjustment to profile, material thickness and processing
- Less wear on the tool
- Long lifetime due to ceramic reinforcement
- Less noise

AT A GLANCE

- Quick mounting on site
- Dust Flow Control Technology (DFC®)
- Easy changing of wear parts
- For almost all industries and machining tasks

Up to 98 %

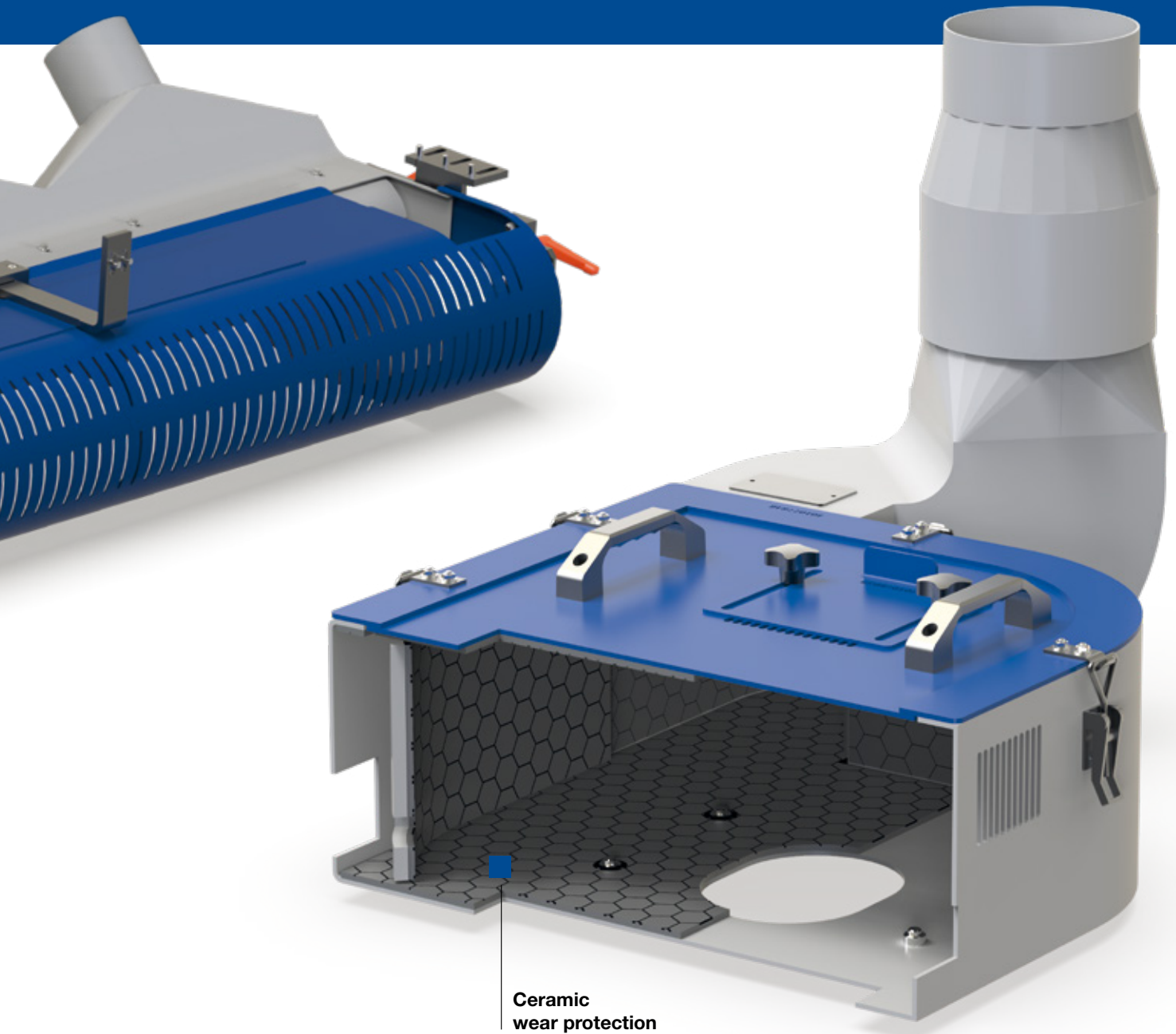
CHIP COLLECTION

-5 dB(A)

LESS NOISE THROUGH
NOISE-REDUCING
DESIGN OF THE
DFC®-EXTRACTION
HOOD

-40 %

FASTER INSTALLATION
DUE TO PRECISE
PLANNING IN ADVANCE



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



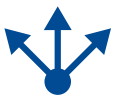
1000

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



NORTH- & CENTRAL AMERICA

- 3 national companies
- 7 service locations



SOUTH AMERICA

- 1 national company
- 1 production plant
- 3 service locations



EUROPE

- 24 national companies
- 5 production plants
- 65 service locations



ASIA

- 8 national companies
- 1 production plant
- 19 service locations



AUSTRALIA / OCEANIA

- 2 national companies
- 5 service locations

BO	=	bore diameter	ID	=	ident number	S	=	shank dimension
D	=	cutting circle diameter	KNL	=	combination pinhole consists of 2/7/42 2/9/46,35 2/10/60	SB	=	cutting width
DFC	=	Dust Flow Control (optimised chip clearance)	LH	=	left hand rotation	SW	=	cutting angle
DP	=	polycrystalline diamond	NL	=	cutting length	TDI	=	diameter of tool body
DRI	=	rotation	NLA	=	pinhole dimensions	TR/TR	=	trapezoidal teeth/trapezoidal teeth
DZ/TR	=	inverted V teeth/trapezoidal teeth	RH	=	right hand rotation	Z	=	number of teeth
GL	=	total length				ZF	=	tooth shape (cutting edge shape)



Your local contact:
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www.leitz.org.



www.leitz.org

