XPS, EPS and PU hard foam

Tool and processing solutions for experts

Content

Introduction

Insulating materials – a term that is reflected in numerous products that surround us in our daily lives. As ordinary as these products appear, as challenging is their manufacture.

For manufacturing and processing industries, precisely this aspect is of key importance, therefore makes them absolute specialists. The more specialized the knowledge about materials such as XPS, EPS and PU hard foam, the higher the requirements of the tool 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.

Processing insulation panels

XPS, EPS & PU hard foam

Achieving the ideal machining result with flexibility & productivity

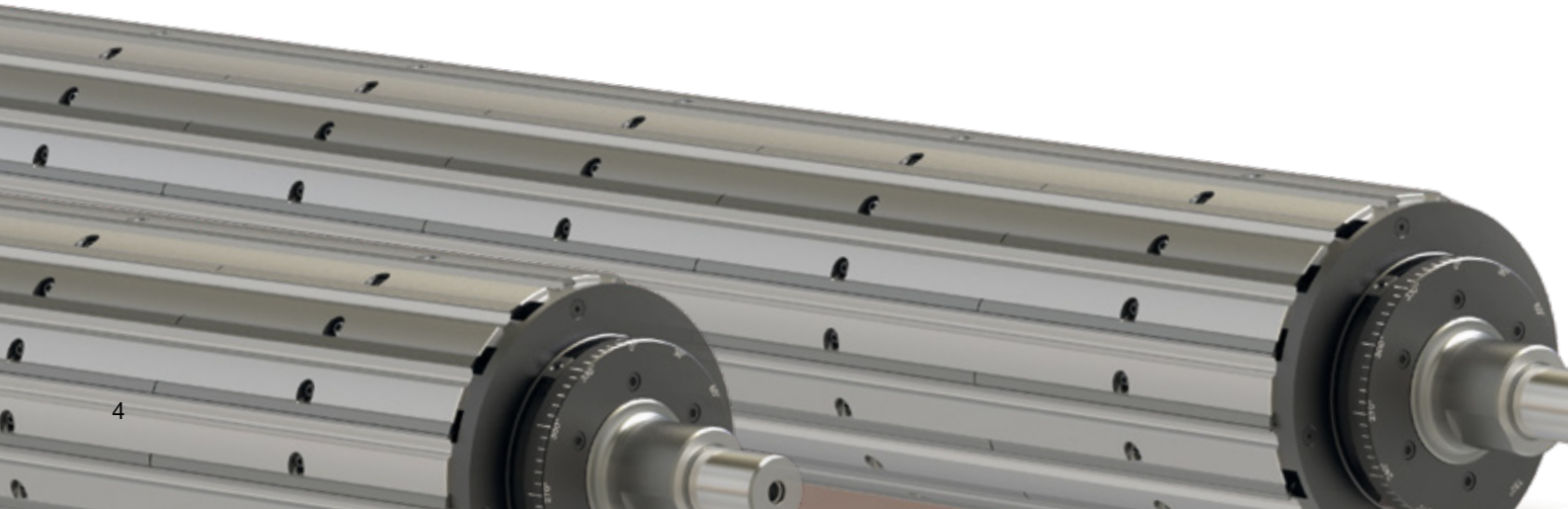
The applications for foamed insulation materials range from roof and facade insulation to perimeter insulation and impact sound insulation. The diversity of application types, compositions, material thicknesses or compressive strengths pose challenges to manufacturing and processing companies when it comes to achieving perfect results.

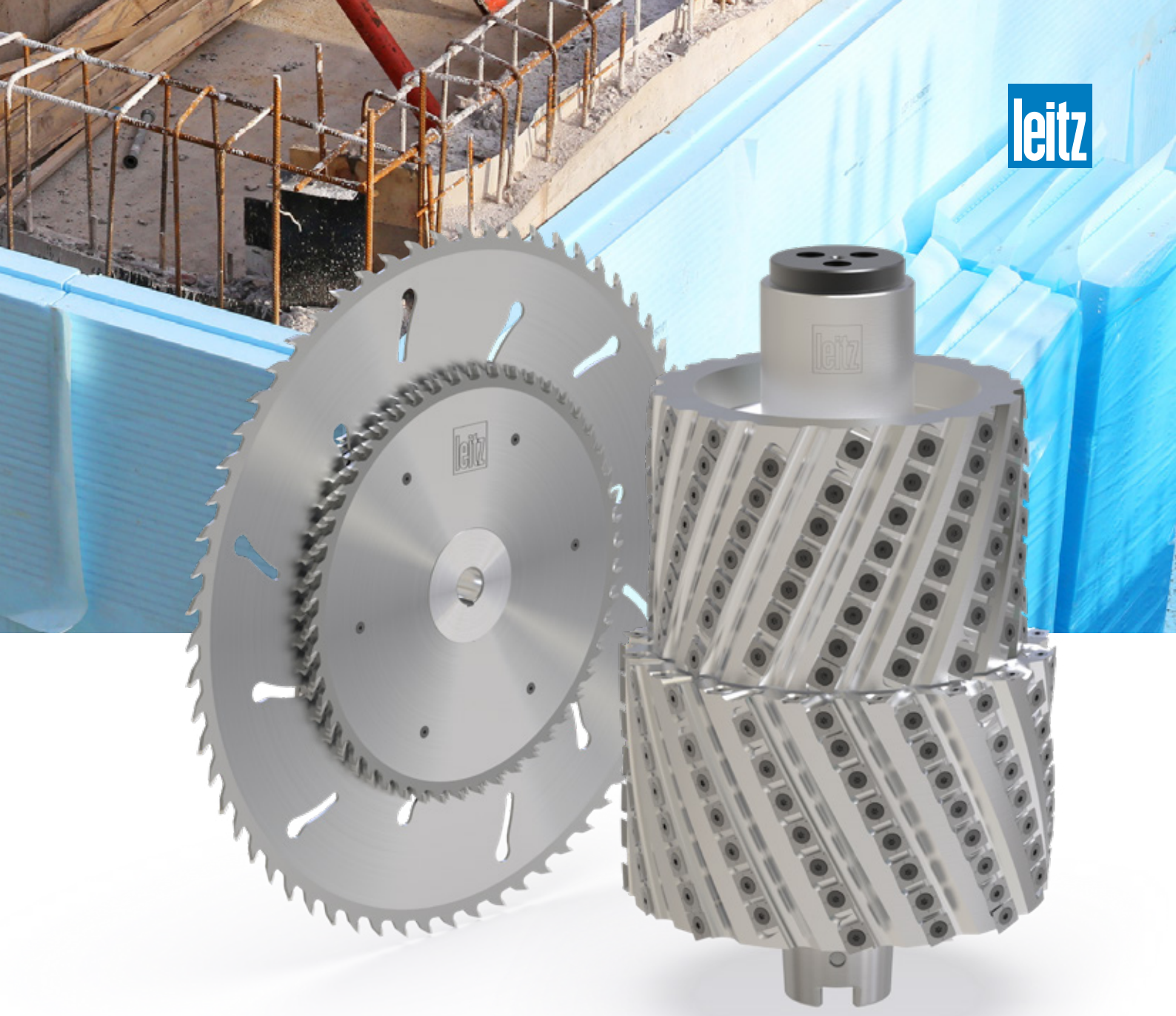
Leitz offers tried and tested tool systems in its product range that are convincing in their performance. Leitz‘s particularly deep process and material know-how makes it possible to find high-performance and result-oriented tool solutions for every requirement.

Jointing & thickness calibration

Smoothness is the key

During jointing and thickness calibration, the surface and final thickness of the insulation boards are defined. Different quality levels for construction and industrial applications, such as exterior insulation or bathroom design require different processing quality levels. Above all, the uniform visual structure of the end product is particularly important for further use.

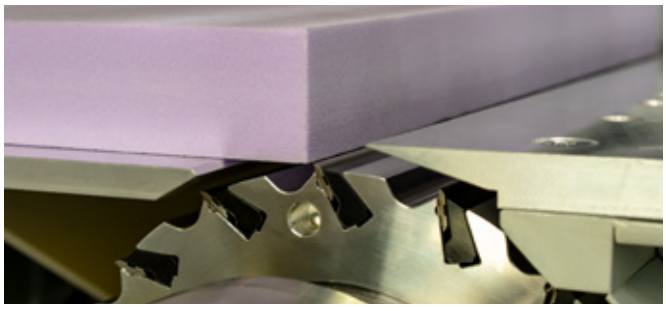




Length, cross & centre cut

Side processing of high-density foams to perfection

During lengthwise and crosswise machining, the insulation boards are machined to the desired finished size. The shape of the edges can vary greatly – from smooth to stepped rebate to tongue-and-groove joints. In the centre cut, the insulation board is cut to the finished size for multiple lengths. Perfect cut surfaces and tear-free edges are particularly important here, which is of great importance for further use.



Examples for machining insulation materials – CentroFix (photo left side) for thickness calibration and HeliCut (photo right side) for lateral processing.

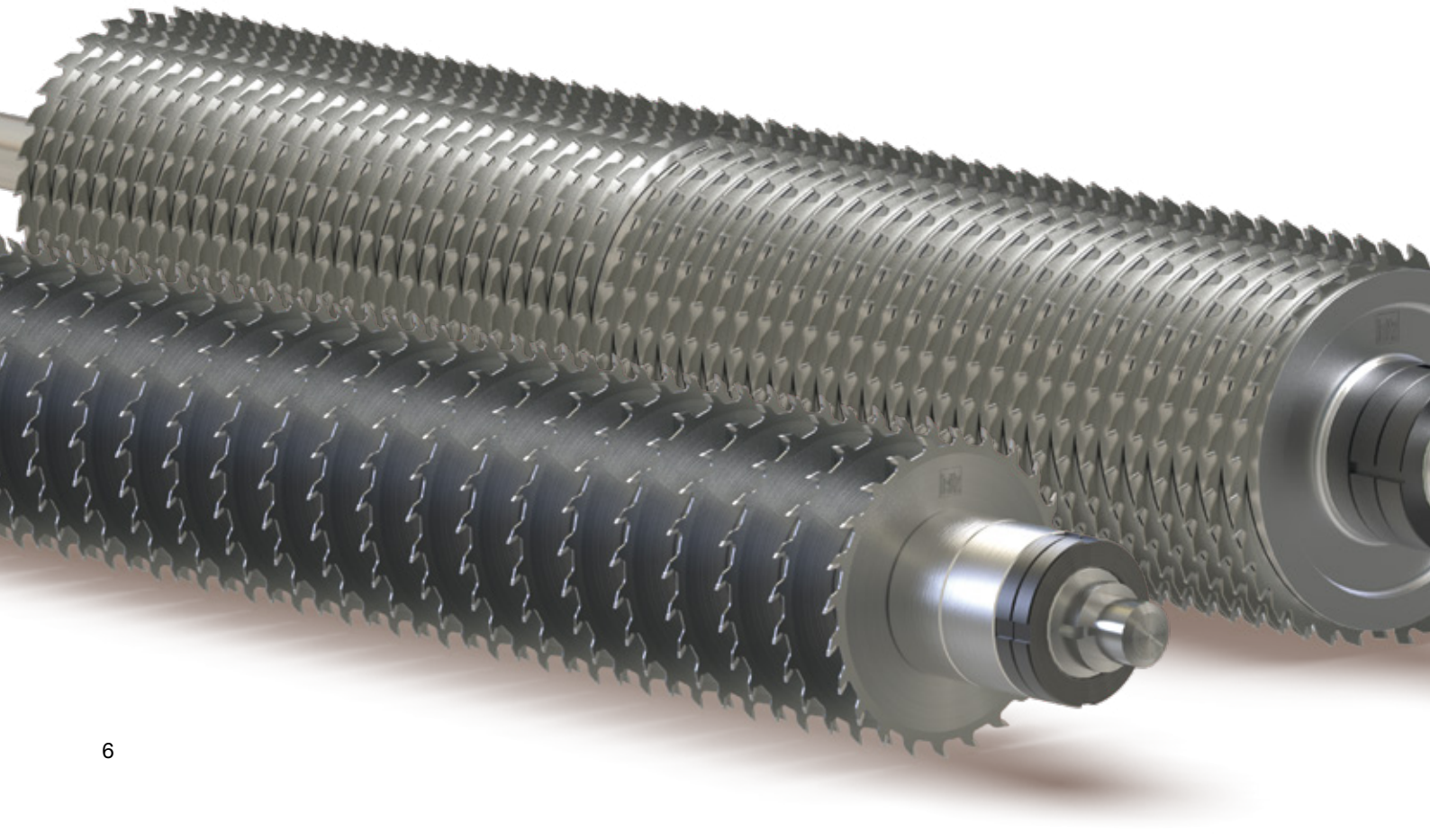
Processing insulation panels

XPS, EPS & PU hard foam

Grooving, shaping, shredding

From the semi-finished product to the individual product

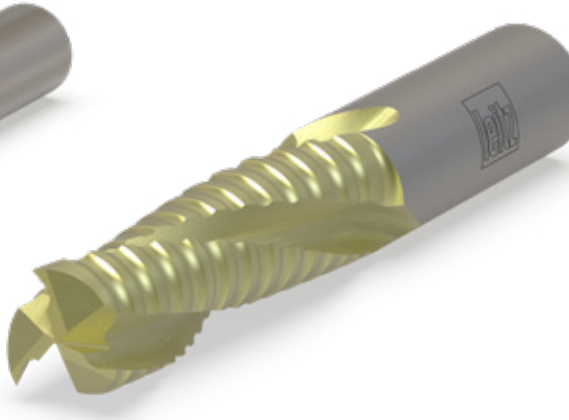
Depending on the requirements and process design, individual tool solutions are needed for subsequent processing. With specific applications such as the insertion of grooves, the cutting of decorative molds or the re-processing of residual materials into the manufacturing process enables subsequent processing to be carried out quickly and cost-effectively.



CNC-machining

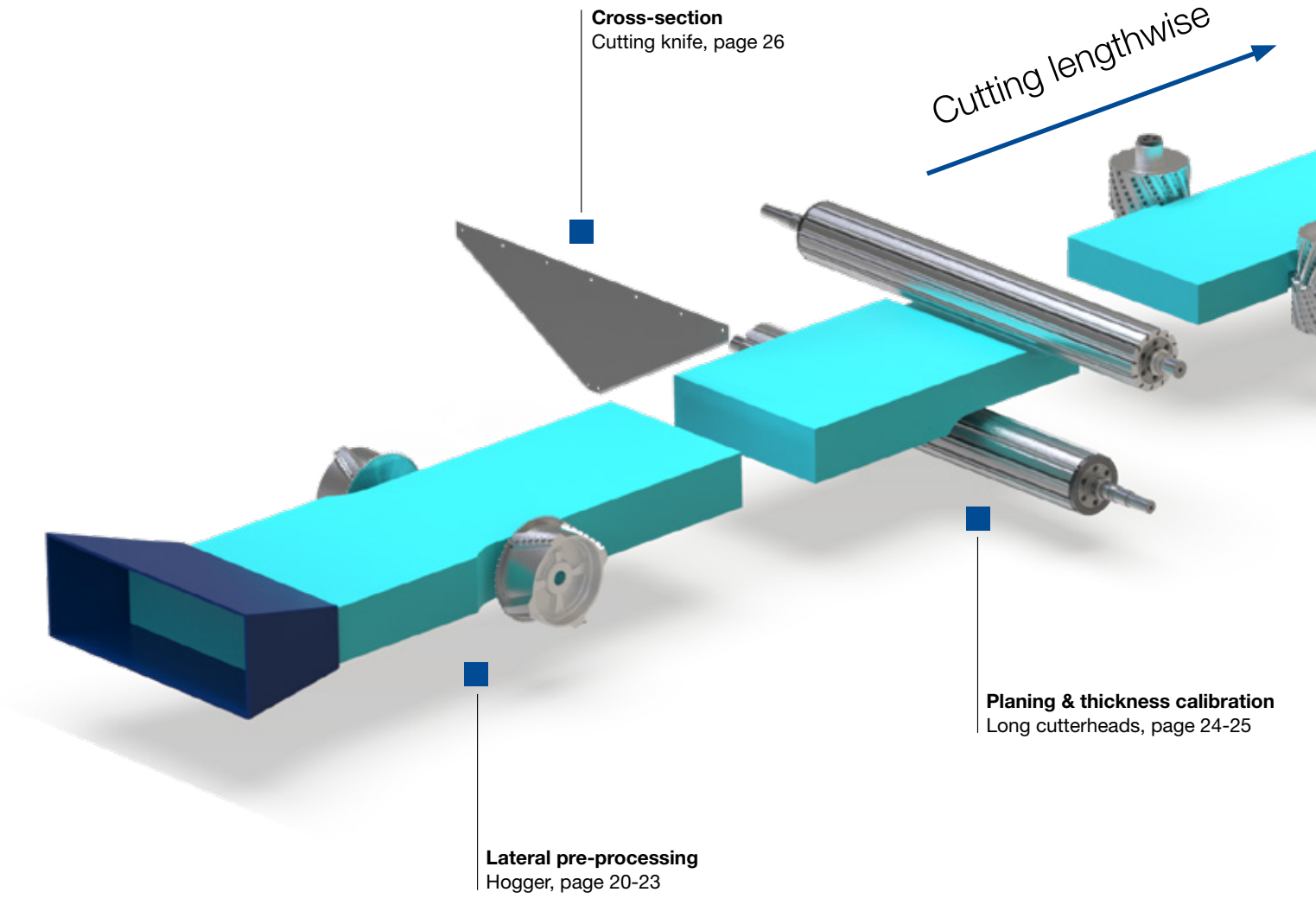
Contouring and sizing

CNC machines are ideal for cutting pockets, cut-outs and special shapes. High chip volume and the appropriate cutting strategy are decisive factors for an efficient manufacturing process. This guarantees the best dimensional accuracy with high cutting quality.



Length & cross cutting

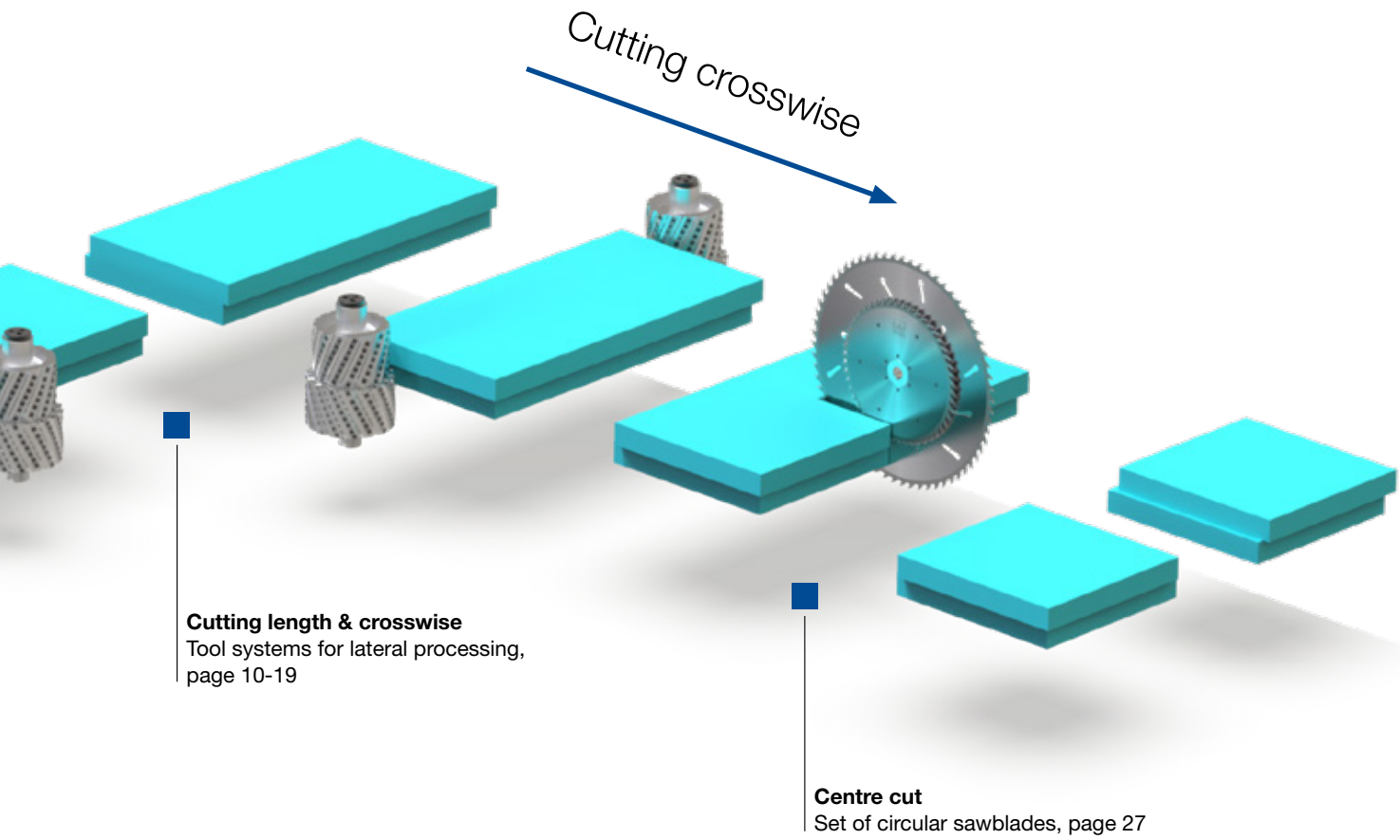
Process sequence for machining XPS



Cross-section
Cutting knife, page 26

Planing & thickness calibration
Long cutterheads, page 24-25

Lateral pre-processing
Hogger, page 20-23



Cutting length & crosswise
Tool systems for lateral processing,
page 10-19

Centre cut
Set of circular sawblades, page 27

Length & cross cutting

Lateral processing

Tool set HeliCut exchangeable knife system

New, flexible, long lasting

The HeliCut-System is the perfect tool solution for a wide range of materials such as XPS, EPS and PU hard foam. This opens up significantly more advantages compared to conventional tool systems, which, however, also offer the basic requirements for this type of processing.

The HeliCut exchangeable knife system with shear angle convinces with best cutting surfaces and tear-free edges. The lightweight basic body made of aluminium enables easy handling and protects the motors and adaptors. The closed design of the tool generates significantly less noise and reduces energy consumption. In addition, the tool is very service-friendly due to exchangeable knives with four tool lives.

YOUR BENEFITS

- High cutting quality
- Simultaneous panel edging and rebating
- Constant diameter
- Four tool lives
- Significantly less noise and lower energy consumption

AT A GLANCE

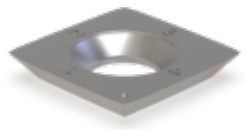
- Best suited for larger material thicknesses
- Aluminium tool body
- Smooth edging and stepped rebate by adjusting of the tool height
- Tongue and groove profile can be realized
- Design Ø 230/200 Z 16 (individually adaptable)
- For machines with vertical spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

FURTHER INFORMATION
You will find the tool use recommendations on page 18

Tool set HeliCut stepped rebate, centre rebate

Material thickness mm	D1 mm	D2 mm	SB mm	Z	BO mm	ID on sleeve	ID on arbor with HSK-C80 adaptor
Up to 120	230	200	140	16	50	**132750**	**132753**
Up to 220	230	200	240	16	50	**132751**	**132754**
Up to 320	230	200	340	16	50	**132752**	**132755**

Other dimensions available on request.



Spare knives HeliCut

BEZ	ABM mm	QAL	BEM	VE STK	ID
Turnblade knife	15x15x2.5	HW	HeliCut 15	10	**009549**
Turnblade knife	15x15x2.5	HW-MF	HeliCut 15	10	**009543**
Turnblade knife	11x11x1.5	HW	HeliCut 11	10	**602515**

Spare parts

BEZ	ABM mm	ID
Countersunk screw Torx® 20	M5x18	**114030**
Screw driver, Torx®	Torx® 20	**006091**

Four tool lives – one knife

Rotating the turnblades to give a cutting new edge is very easy and can be done by the customer on site. After four tool life cycles, the turnblade can be replaced on the tool.

Length & cross cutting

Lateral processing

HW-tipped circular sawblade set

Precise and proven

The TC tipped circular sawblade set is a proven tool system that is convincing in its performance and can be variably adapted to different product requirements.

The tool achieves fine chip removal at high feed rates and delivers the best cutting areas as well as tear-free edges. The cutting areas have a uniform surface structure without colour differences. This is made possible by an optimal number of teeth, good cutting layout and the low cutting pressure. The tool system can be resharpened several times.

YOUR BENEFITS

- High cutting quality
- Long tool life
- Simultaneous panel edging and rebating
- Fine trimming
- Short processing times
- Proven cutting technology

AT A GLANCE

- Smooth edging and stepped rebate by adjusting of the tool height
- Tongue and groove profile can be realized
- Multiple resharpening possible
- Design Ø 230/200 Z 28 (individually adaptable)
- For machines with vertical spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

FURTHER INFORMATION
You will find the tool use recommendations on page 18

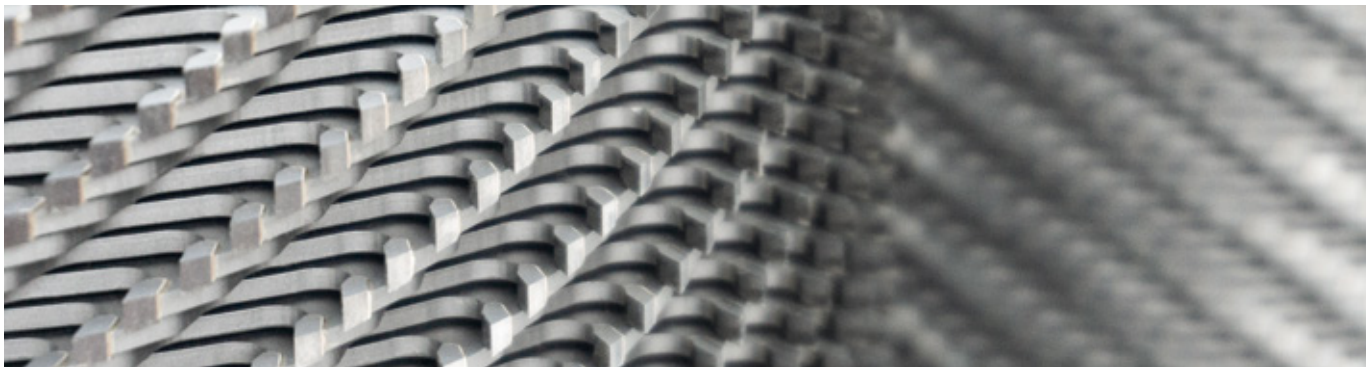
HW-tipped circular sawblade set, stepped rebate, centre rebate

Material thickness mm	D1 mm	D2 mm	BO mm	SB mm	Z	ID on sleeve	ID on arbor with HSK-C80 adaptor
Up to 120	230	200	50	135	28	**742800**	**742803**
Up to 220	230	200	50	235	28	**742801**	**742804**
Up to 320	230	200	50	335	28	**742802**	**742805**

Other dimensions available on request.

Spare circular sawblades

D1 mm	SB mm	BO mm	Z	ZF	ID
200	3.5	120	28	FZ	**166646**
230	3.5	120	28	FZ	**166647**



The HW-tipped circular sawblade set guarantees a high cutting quality with a long tool life.

Length & cross cutting

Lateral processing

CentroFix tool set exchangeable knife system

Easy and efficient

The tool set with exchangeable knife system CentroFix or CentroFix Plus guarantees best cutting surfaces and edges.

CentroFix: Centrifugal clamping system for quick, easy, **axial** knife change.

CentroFix Plus: Centrifugal clamping system for quick, easy, **axial and radial** knife change.

YOUR BENEFITS

- High cutting quality
- Quick and easy knife change
- Simultaneous panel edging and rebating
- Short processing times
- Constant diameter
- Energy-saving

AT A GLANCE

- Best suited for larger material thicknesses
- Turnblade knife system
- Aluminium tool body
- Smooth edging and stepped rebate by adjusting of the tool height
- Design Ø 230/200 Z 18 (individually adaptable)
- For machines with vertical spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

FURTHER INFORMATION
You will find the tool use recommendations on page 18

Tool set CentroFix / CentroFix Plus stepped rebate, centre rebate

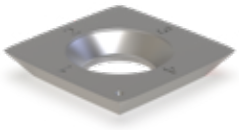
System	Material thickness mm	D1 mm	D2 mm	BO mm	SB mm	Z	ID on sleeve	ID on arbor with HSK-C80 adaptor
CentroFix	Up to 120	230	200	50	140	18	**130300**	**130303**
CentroFix	Up to 220	230	200	50	240	18	**130301**	**130304**
CentroFix	Up to 320	230	200	50	340	18	**130302**	**130305**
CentroFix Plus	Up to 120	230	200	50	140	18	**130306**	**130309**
CentroFix Plus	Up to 220	230	200	50	240	18	**130307**	**130310**
CentroFix Plus	Up to 320	230	200	50	340	18	**130308**	**130311**

Other dimensions available on request.
Additional precise cutting in the rebate area possible.

Spare knives CentroFix HS / HW-F

SB mm	H mm	DIK mm	SET STK	QAL	ID
70	12	2.7	4	HS	**610289**
120	12	2.7	4	HS	**610204**
170	12	2.7	4	HS	**610210**
70	12	2.7	2	HW-F	**610602**
120	12	2.7	2	HW-F	**610610**
170	12	2.7	2	HW-F	**610620**

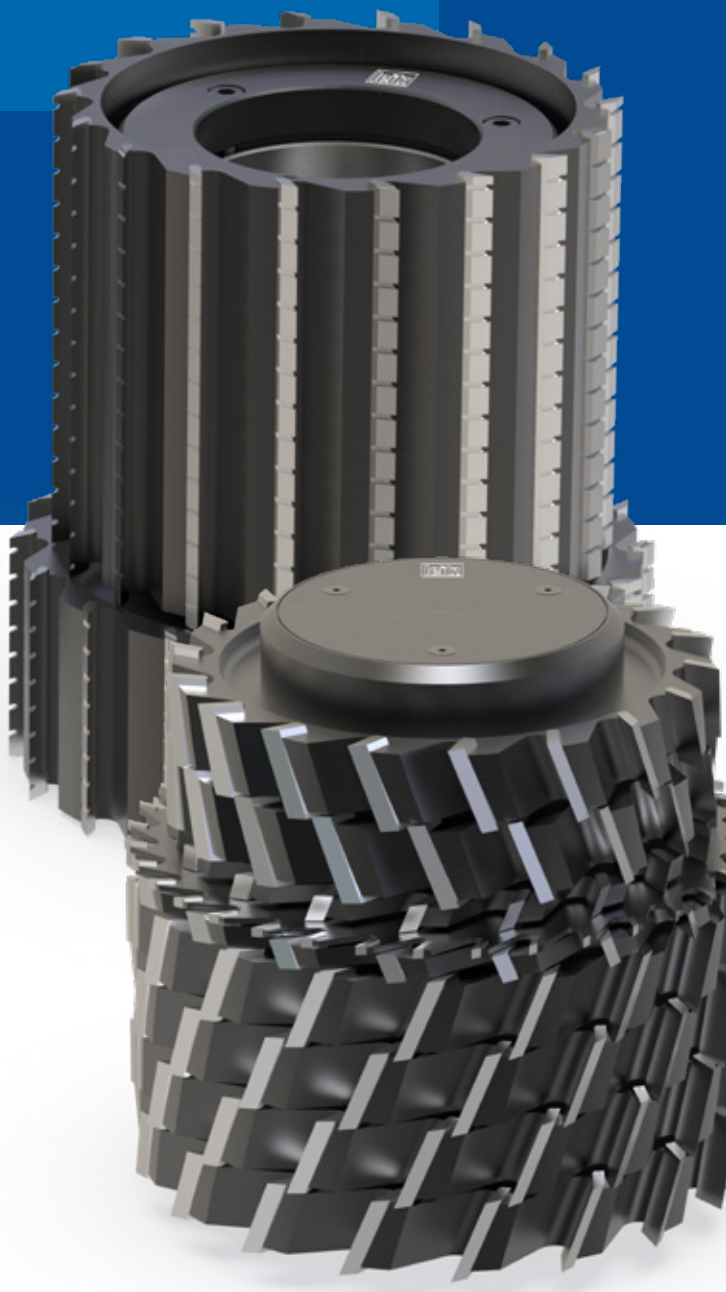
Spare knives HeliCut



BEZ	ABM mm	QAL	BEM	VE STK	ID
Turnblade knife	11x11x1.5	HW	HeliCut 11	10	**602515**

Length & cross cutting

Lateral processing



HW-tipped cutterset with continuous cutting edge & chipbreaker

Conventional and easy

HW-tipped cutterset with continuous cutting edge & chipbreaker. It is ideally suited for machining XPS, EPS and PU hard foam panels.

HW tipped tool set with shear angle

Robust and reliable

This tool set with cutting angle and circular sawblades in the rebate area ensures the best cutting surfaces and edges for XPS and EPS panels.

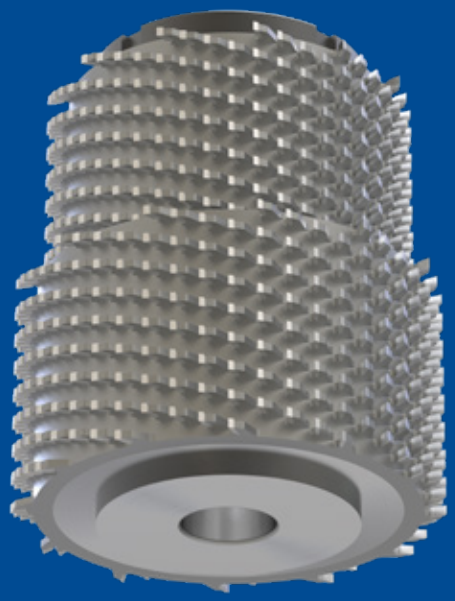
YOUR BENEFITS

- High cutting quality
- Long tool life
- Simultaneous panel edging and rebating
- Individually combinable

AT A GLANCE

- With and without precise cutting
- Steel basic body
- Smooth edging and stepped rebate by adjusting of the tool height
- Multiple resharpening possible
- Design Ø 230/200 Z 18 (individually adaptable)
- For machines with vertical spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

Tool with clamping arbor on HSK adaptor



Tool with sleeve without anti-rotation device

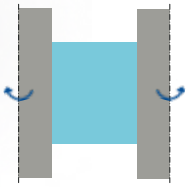
Clamping systems

For the perfect joint

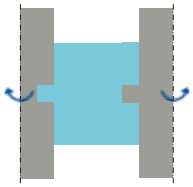
In order to be able to use tools on throughfeed machines, clamping systems are needed that adapt to the shape of the spindle or to a corresponding transmission shaft. For this purpose, Leitz offers a corresponding product range of clamping sleeves, quick clamping elements or hydraulic clamping systems. These guarantee a safe and concentric transmission of force to the tool.

Examples of edge formation

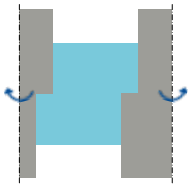
Single tool
smooth edge



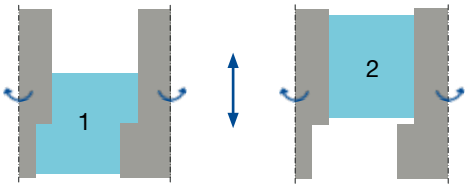
Single tool
tongue & groove



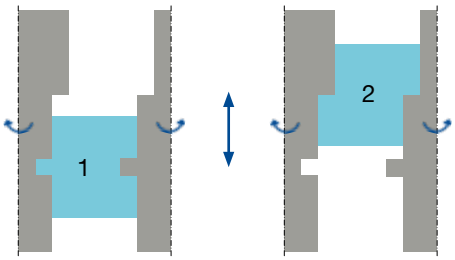
Single tool
stepped rebate



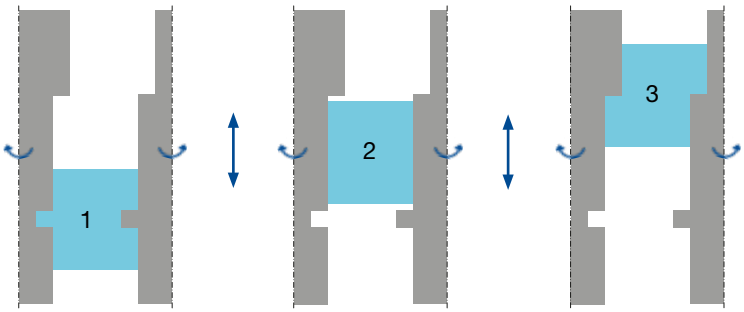
Combination tool
stepped rebate (1), smooth edge (2)



Combination tool
tongue & groove (1), stepped rebate (2)



Combination tool
tongue & groove (1), smooth edge (2), stepped rebate (3)

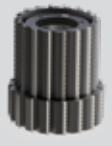


Different edge formation possible through vertical height adjustment of the combination tool.

Length & cross cutting

Overview of tool systems

Cutting parameters for machining XPS, EPS & PU hard foams

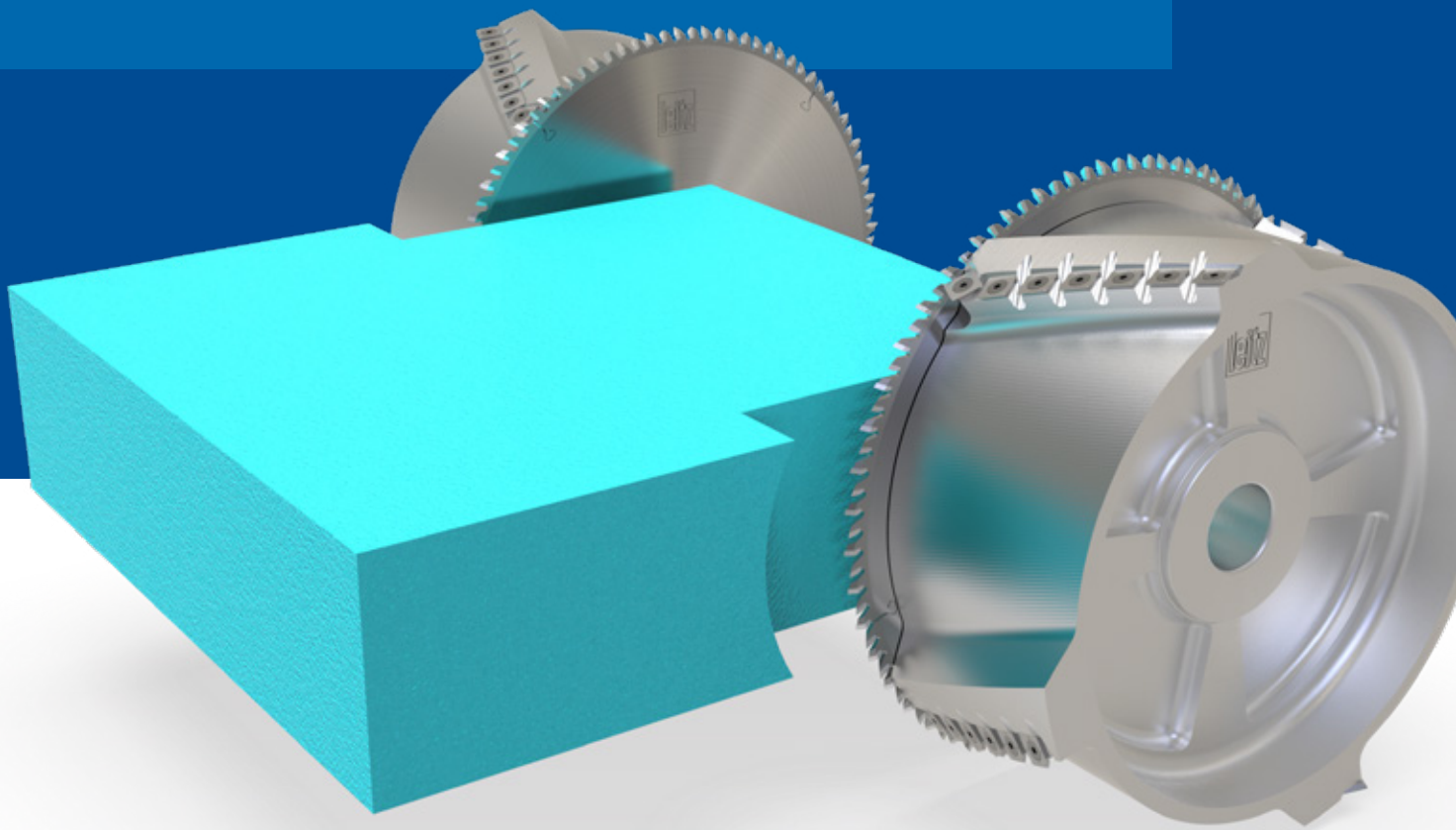
Product illustration	Tool system / stepped rebate set	XPS	EPS	PU hard foam	
	Tool set HeliCut exchangeable knife system	v_c = 40-50 m/s f_z = 0.2-0.4 mm Compressive strength = 300-500 kPa $v_f \leq$ 25 m/min.	v_c = 40-80 m/s f_z = 0.2-0.8 mm $v_f \leq$ 35 m/min.	v_c = 40-80 m/s f_z = 0.2-1.0 mm $v_f \leq$ 50 m/min.	
	HW-tipped circular sawblade set	v_c = 40-50 m/s f_z = 0.2-0.4 mm Compressive strength = 200-700 kPa $v_f \leq$ 70 m/min.	v_c = 40-80 m/s f_z = 0.2-0.8 mm $v_f \leq$ 60 m/min.	v_c = 40-80 m/s f_z = 0.2-1.0 mm $v_f \leq$ 100 m/min.	
	CentroFix tool set exchangeable knife system	v_c = 40-50 m/s f_z = 0.2-0.4 mm Compressive strength ≤ 500 kPa $v_f \leq$ 30 m/min.	v_c = 40-80 m/s f_z = 0.2-0.8 mm $v_f \leq$ 40 m/min.	v_c = 40-80 m/s f_z = 0.2-1.0 mm $v_f \leq$ 50 m/min.	
	HW tipped tool set with shear angle	v_c = 40-50 m/s f_z = 0.2-0.4 mm Compressive strength ≤ 500 kPa $v_f \leq$ 30 m/min.	v_c = 40-80 m/s f_z = 0.2-0.8 mm $v_f \leq$ 40 m/min.	v_c = 40-80 m/s f_z = 0.2-1.0 mm $v_f \leq$ 60 m/min.	
	HW-tipped cutterset with continuous cutting edge & chipbreaker	v_c = 40-50 m/s f_z = 0.2-0.4 mm Compressive strength ≤ 500 kPa $v_f \leq$ 30 m/min.	v_c = 40-80 m/s f_z = 0.2-0.8 mm $v_f \leq$ 40 m/min.	v_c = 40-80 m/s f_z = 0.2-1.0 mm $v_f \leq$ 60 m/min.	

The above information are parameters for the optimal machining of the specified materials. The information on tools and machining parameters are standard values without any claim to completeness and general validity. Machine-related or process-related boundary conditions can lead to deviating application parameters.

	Weight-reduced	Constant diameter	Resharpe-nable	Shear cut	Exchange-able knife system	Service-friendly	Cutting arrangement	Cutting quality
	●●	●		●	●	●	●	●
	●		●				●	●●
	●●	●			●	●		●●
			●	●			●	●
			●				●	●

Length cutting

Lateral pre-machining



Hogger HeliCut

Perfect cutting areas and recyclable chips

The HeliCut hogger impresses with perfect cutting areas, high chip removal volume and produces optimum chip sizes for recycling. The chips can thus be returned to the manufacturing process without any problems.

The lightweight tool body made of aluminium enables easy handling and is kinder to the machine motors and adaptors. The HeliCut knife handles large chip volumes perfectly. The closed design of the tool generates significantly less noise and reduces energy consumption. The tool is very service-friendly due to the interchangeable knife system with four tool lives.

YOUR BENEFITS

- High cutting quality
- Recyclable chips
- Significantly less noise and lower energy consumption
- Easy knife change without removing the tool
- Four tool lives

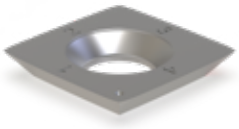
AT A GLANCE

- Suitable for larger material removal
- Design Ø 285, Ø 335 Z 2/2 (individually adaptable)
- Aluminium tool body
- Applicable in nearly all XPS / EPS panels and PU hard foams

Cutterset HeliCut Z 2/2

BEZ	D mm	SB mm	BO mm	ID
Cutterset HeliCut right	285	124	40 with keyway	**132756**
Cutterset HeliCut left	285	124	40 with keyway	**132757**
Cutterset HeliCut right	335	124	40 with keyway	**132758**
Cutterset HeliCut left	335	124	40 with keyway	**132759**

Other dimensions available on request.



Spare knives HeliCut

BEZ	ABM mm	QAL	BEM	VE STK	ID
Turnblade knife	15x15x2.5	HW	HeliCut 15	10	**009549**
Turnblade knife	11x11x1.5	HW	HeliCut 11	10	**602515**

Spare circular sawblade for hoggerset HeliCut

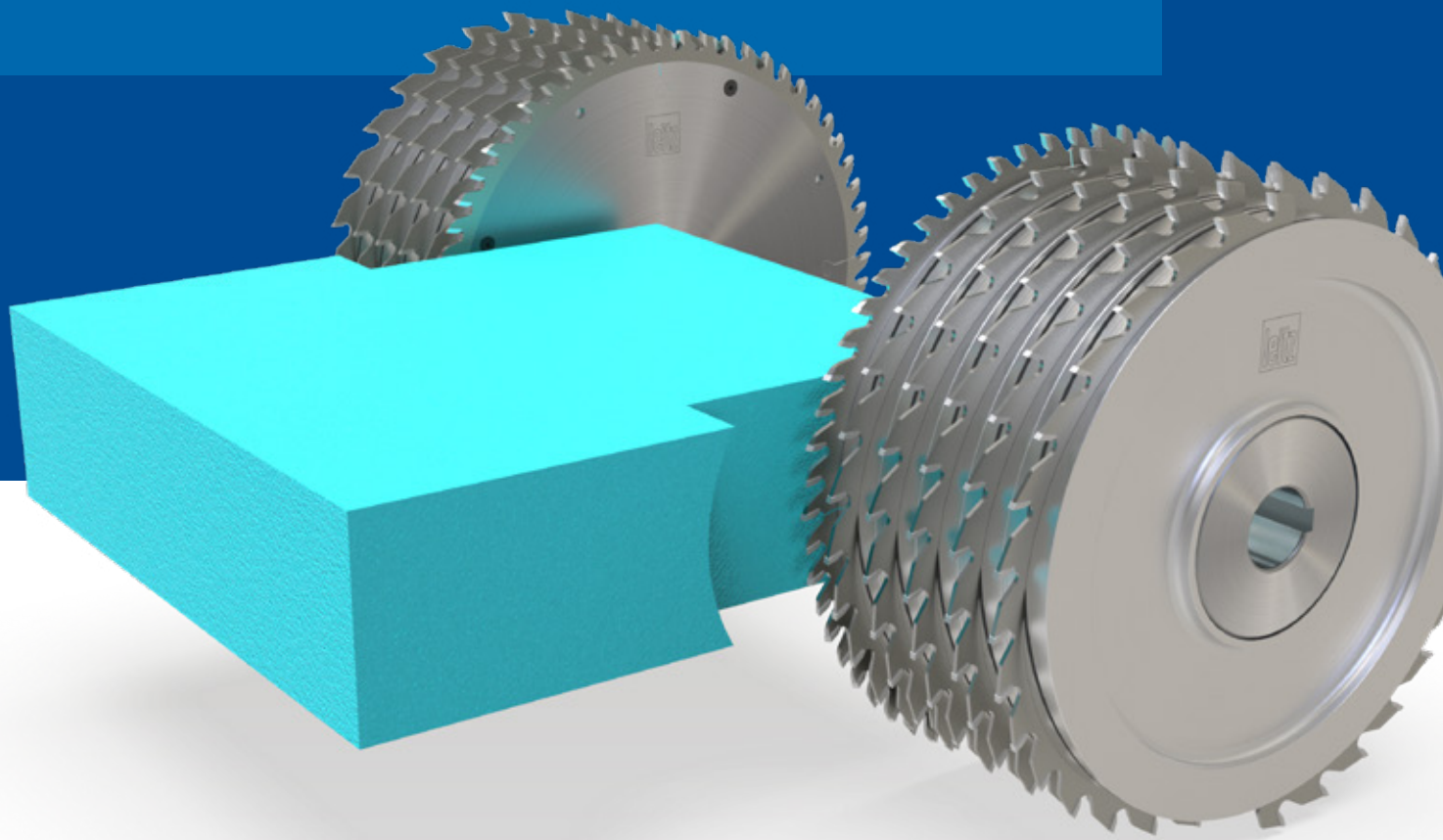
BEZ	D mm	SB mm	BO mm	Z	ZF	ID
Circular sawblade left/right	285	4.0/2.8	70	46 (48)	WZ	**166648**
Circular sawblade left/right	339	4.0/2.8	70	58 (60)	WZ	**166649**

Spare parts

BEZ	ABM mm	ID
Countersunk screw Torx® 20	M5x18	**114030**
Screw driver, Torx®	Torx® 20	**006091**

Length cutting

Lateral pre-processing



Hogger preset on sleeve

Perfect surface finish and recyclable chips

For the first cut of the freshly produced foam elements in longitudinal direction, the segmental cutting set from Leitz is the solution for efficient and fast processing of almost all XPS/EPS boards and PU rigid foams.

The segment hogger set consists of basic hoggers and a circular sawblade mounted on a sleeve. The cutting width is variable and can be assembled in 30 mm stages, depending on the desired cutting width. The chips produced here can be returned to the manufacturing process without any problems. The tool system with the perfect cutting edges, high chip volume and recyclable chips.

YOUR BENEFITS

- Long tool life
- Recyclable chips
- High cutting quality
- High cutting volume

AT A GLANCE

- Cutting width can be extended in 30 mm stages
- Segments can be exchanged
- Multiple resharpening possible
- For machines with horizontal spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

Hogger set on sleeve

BEZ	D mm	SB mm	BO mm	ID
Hogger set on sleeve right hand	285	124	40 with keyway	**132760**
Hogger set on sleeve left hand	285	124	40 with keyway	**132761**
Hogger set on sleeve right hand	335	124	40 with keyway	**132762**
Hogger set on sleeve left hand	335	124	40 with keyway	**132763**

Basic and additional hogger

BEZ	D mm	SB mm	BO mm	Z	ID
Hogger right hand	285	30	70	2x14	**064902**
Hogger left hand	285	30	70	2x14	**064903**
Hogger right hand	335	30	70	2x16	**064904**
Hogger left hand	335	30	70	2x16	**064905**

Circular sawblade segment for hogger set

BEZ	D mm	SB mm	BO mm	Z	ID
Circular sawblade segment	281	4.2	205	14	**064978**
Circular sawblade segment	335	4.2	254	16	**064979**

Spare circular sawblade for hogger set

BEZ	D mm	SB mm	BO mm	Z	ZF	ID
Circular sawblade left/right	285	4.0/2.8	70	48	WZ	**166650**
Circular sawblade left/right	339	4.0/2.8	70	60	WZ	**166651**

Length cutting

Planing & thickness calibration

Long planerhead CentroFix, CentroFix Plus & HeliCut

The specialists for planing and thickness calibration

When planing and calibrating the thickness of XPS, EPS, PET and PU rigid foams, a uniform optical structure is required. Leitz offers tool systems optimally matched to this requirement.

For the processing of XPS and EPS, high toothed long planerheads are recommended in order to produce surfaces with as fine pores as possible. The CentroFix and CentroFix Plus long planerheads from Leitz are optimally designed for this purpose. The tool systems achieves the best cutting results and are simple to service. The knives can be easily removed axially (CentroFix) or axially and radially (CentroFix Plus).

For PET and PU rigid foams, high-toothed long planerheads are not necessary, as these materials do not melt during processing. The CentroFix long planerhead with Z 6 or the HeliCut exchangeable cutter system with Z 4+4 are ideal for this purpose. The HeliCut‘s exchangeable blades can be turned or changed even with the shaft installed.

YOUR BENEFITS

- High cutting quality
- Long tool life
- Individual tool design
- Recyclable chips

AT A GLANCE

- Exchangeable turnblade knife system
- For machines with horizontal spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

Machining of XPS and EPS – CentroFix / CentroFix Plus long planerhead

BEZ	D mm	L mm	Z	ID LH	ID RH
Long planerhead CentroFix[1]	180	710	12	**130900**	**130904**
Long planerhead CentroFix[1]	180	1335	12	**130901**	**130905**
Long planerhead CentroFix[1]	200	710	16	**130902**	**130906**
Long planerhead CentroFix[1]	200	1335	16	**130903**	**130907**

Other dimensions available on request.

Long planerhead CentroFix Plus[1]	180	710	12	**130908**	**130913**
Long planerhead CentroFix Plus[1]	180	1335	12	**130909**	**130914**
Long planerhead CentroFix Plus[1]	200	710	16	**130910**	**130915**
Long planerhead CentroFix Plus[1]	200	1335	16	**130911**	**130916**
Long planerhead CentroFix Plus[1]	210	1652	16	**130912**	**130917**

Other dimensions available on request.

Processing of PET and PU rigid foams – CentroFix / HeliCut long planerhead

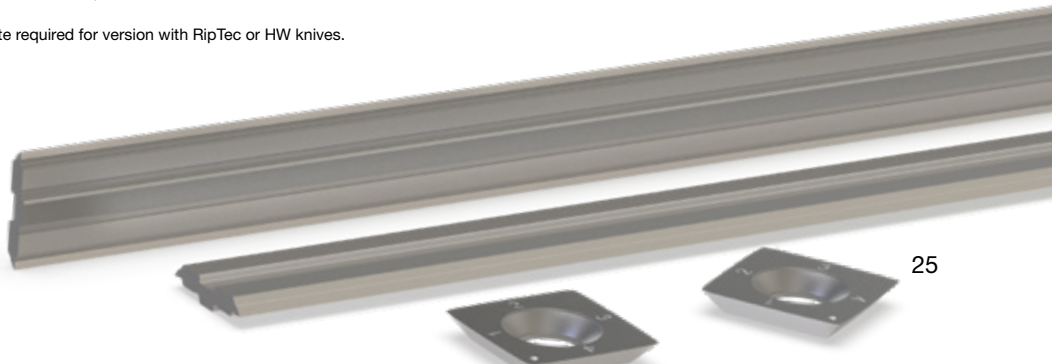
BEZ	D mm	L mm	Z	ID LH	ID RH
Long planerhead CentroFix[1]	180	710	6	**130918**	**130920**
Long planerhead CentroFix[1]	180	1335	6	**130919**	**130921**

Other dimensions available on request.

Long planerhead HeliCut	180	710	4+4	**130922**	**130924**
Long planerhead HeliCut	180	1335	4+4	**130923**	**130925**

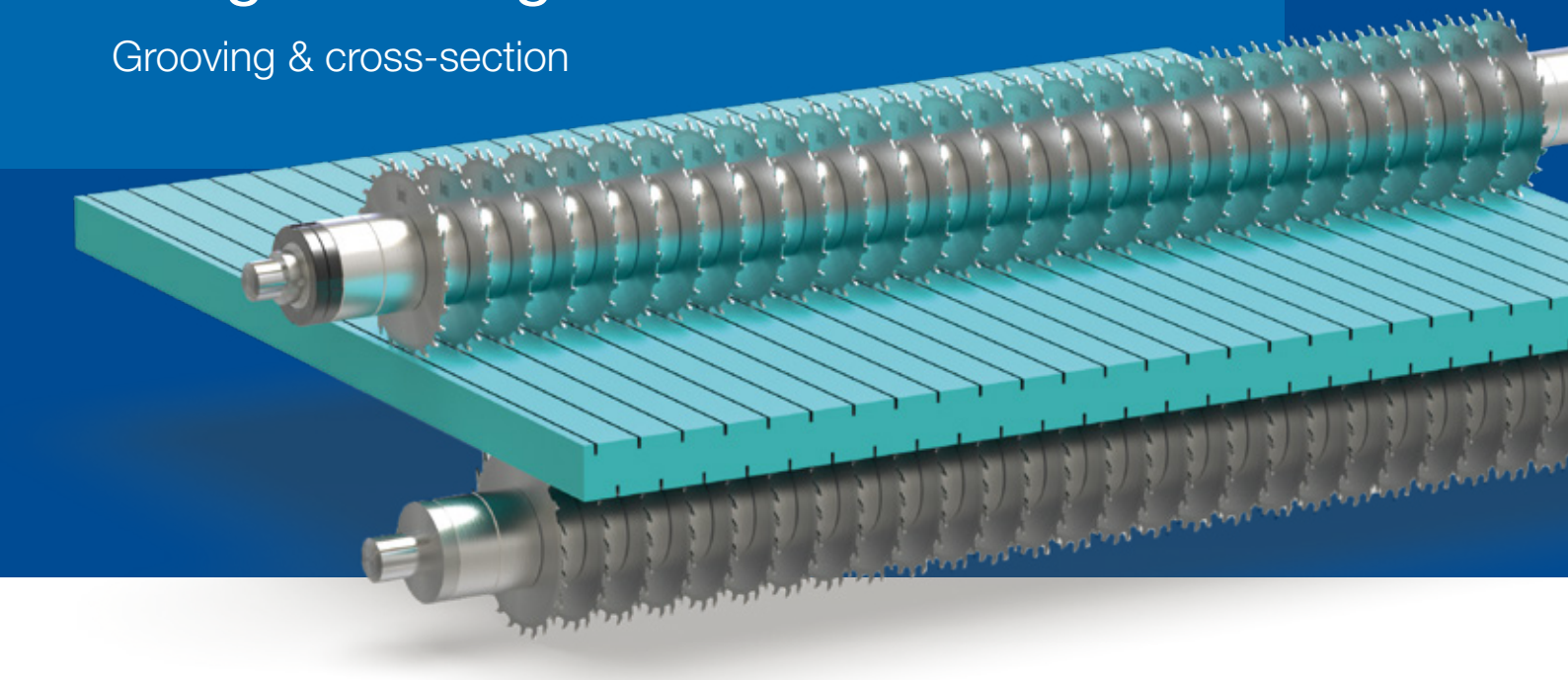
Other dimensions available on request.

[1] Additional stop plate required for version with RipTec or HW knives.



Length cutting

Grooving & cross-section



Grooving long planerhead

The perfect system for individual grooves

When grooves are necessary to extend the function of the finished product, individual solutions are required when it comes to depth, width, spacing and shape. Leitz offers flexible solutions for such requirements, such as special, modular designed HW tooling systems. Coordinated spacer rings guarantee exact groove spacing.

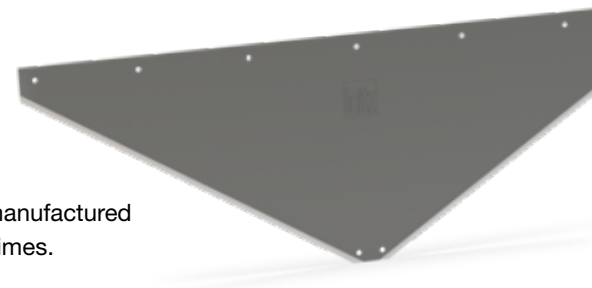
Long planerhead for producing grooves

D mm	SB mm	Number of grooves	Width of panel mm	ID
180	2.0	17	600	**742806**
180	2.0	35	1250	**742807**
180	5.0	13	600	**742808**

Other dimensions available on request.

Cutting knife

Splitting into individual panels



The cutting knife provides an optimal cutting result in the material XPS. It can be manufactured individually according to customer requirements and can be resharpened several times.

Cutting knife

L mm	H mm	DIK mm	ID
850	330	1.63	**749400**
1100	350	1.63	**749401**
900	300	1.63	**749402**

Other dimensions available on request.

Cross cutting

Centre cut

Circular sawblade set

The specialist for the centre cut

The centre cut in cross cutting is required to achieve multiple lengths from the panel. The edge formation is smooth edge and stepped rebate. Leitz offers the possibility of using tooling systems that are constantly adapted to the changes in product requirements.

Circular sawblade set for rebate 15 mm

Material thickness mm	D1 mm	D2 mm	BO mm	ID
100	550	300	40 with double keyway	**742809**
120	600	310	40 with double keyway	**742810**
160	700	375	40 with double keyway	**742811**

Other dimensions available on request.

YOUR BENEFITS

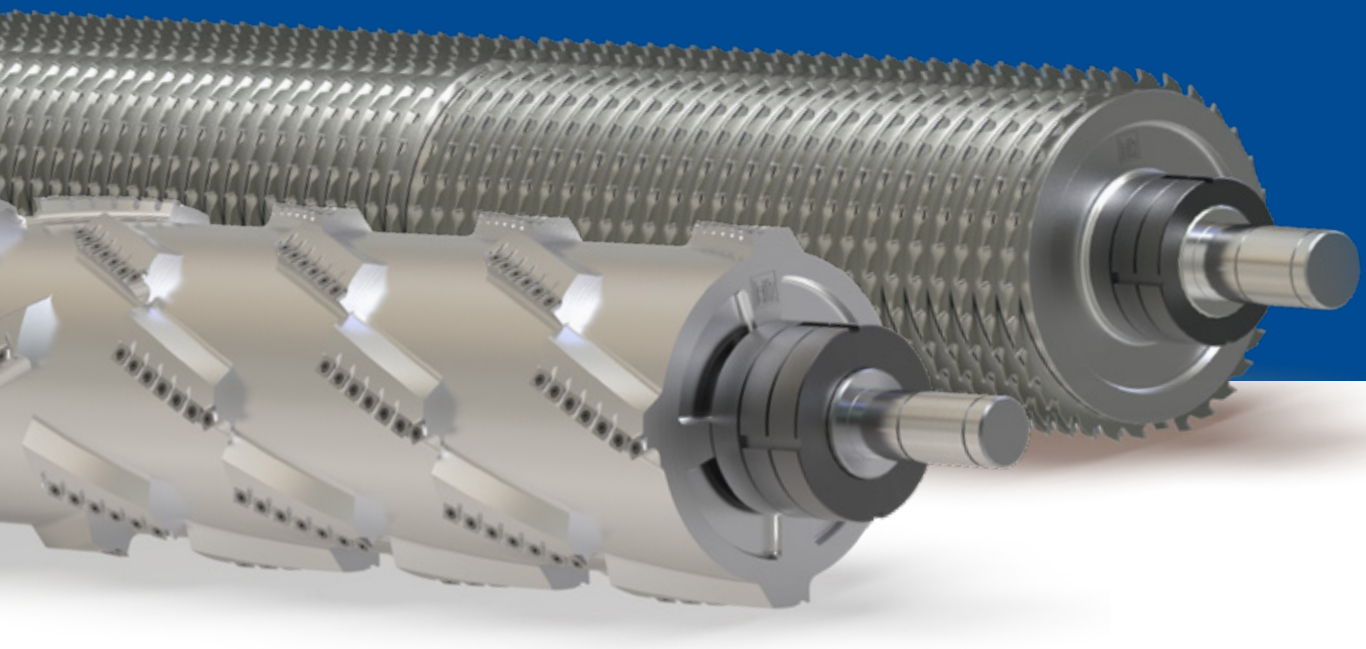
- Long tool life
- Individual tool design
- High cutting quality
- Recyclable chips

AT A GLANCE

- Can be used as combination or individual tool
- Multiple resharpening possible
- For machines with horizontal spindle
- Applicable in nearly all XPS/EPS panels and PU hard foams

Out of line

Shredding, CNC-machining & sawing



Hogger & HeliCut shredding long planerhead

Shredding for recycling

In the production of foams, residual pieces, rejects or overproduction are usually shredded then returned to the manufacturing process. Leitz offers individually designed tool solutions for such requirements.

CNC-machining

The right tool for every requirement

Spiral finishing cutter

HeliCut copyshaping cutterhead[1]

Spiral roughing finishing router Marathon[1]

[1] Order information see Leitz Lexicon.

Circular sawblade for insulating materials

For perfect trimming cuts

The trimming cut is required, for example, in the cross cutting of a multiple length of insulation panel. The edge formation is made as a smooth edge. The circular sawblade can be used as a combination or individual tool and is specially designed for the processing of insulation material. The cooling holes and the large tooth projection prevent the material from melting. The large gullet areas ensure a high cutting volume, making the circular sawblade a real specialist for the processing of insulating materials.

Circular sawblade for machining insulating materials

D mm	SB mm	TDI mm	BO mm	Z	ZF	ID
500	4.4	2.8	30	42	WZ	**166640**
550	4.4	3.0	30	48	WZ	**166641**
600	5.0	3.2	30	52	WZ	**166642**
650	5.0	3.2	30	54	WZ	**166643**
700	5.0	3.2	30	60	WZ	**166644**
750	5.5	3.5	30	64	WZ	**166645**
800	5.5	3.5	30	68	WZ	**166652**

Other dimensions available on request.

YOUR BENEFITS

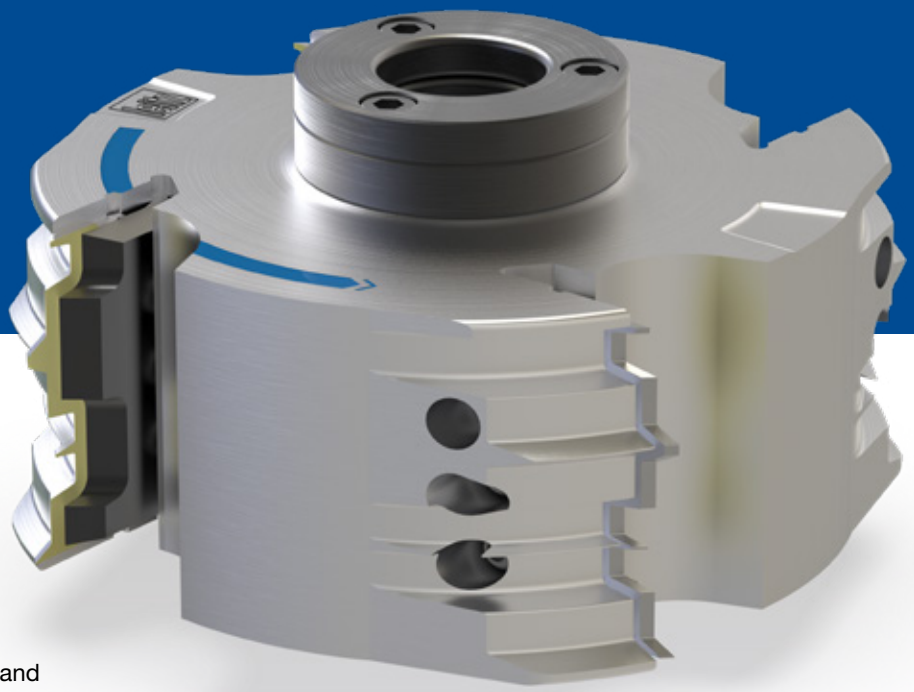
- Reduces melting
- High cutting quality
- Long tool life
- High cutting volume
- Recyclable chips

AT A GLANCE

- Can be used as combination or individual tool
- With cooling holes to avoid melting
- Multiple resharpening possible
- Applicable in nearly all XPS/EPS panels and PU hard foams

Out of line

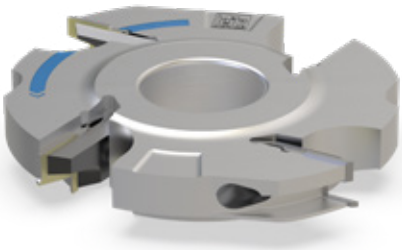
Special applications & DFC®-Extraction hoods



ProfilCut Q System Group

The system with unbeatable versatility

A system that combines the highest performance and excellent cutting quality. ProfilCut Q – the tailor-made solution for almost any profiling in a wide variety of foams such as XPS, PE, PU or PVC.



Example ProfilCut Q for processing PVC foam

Example ProfilCut Q for processing PU rigid foam

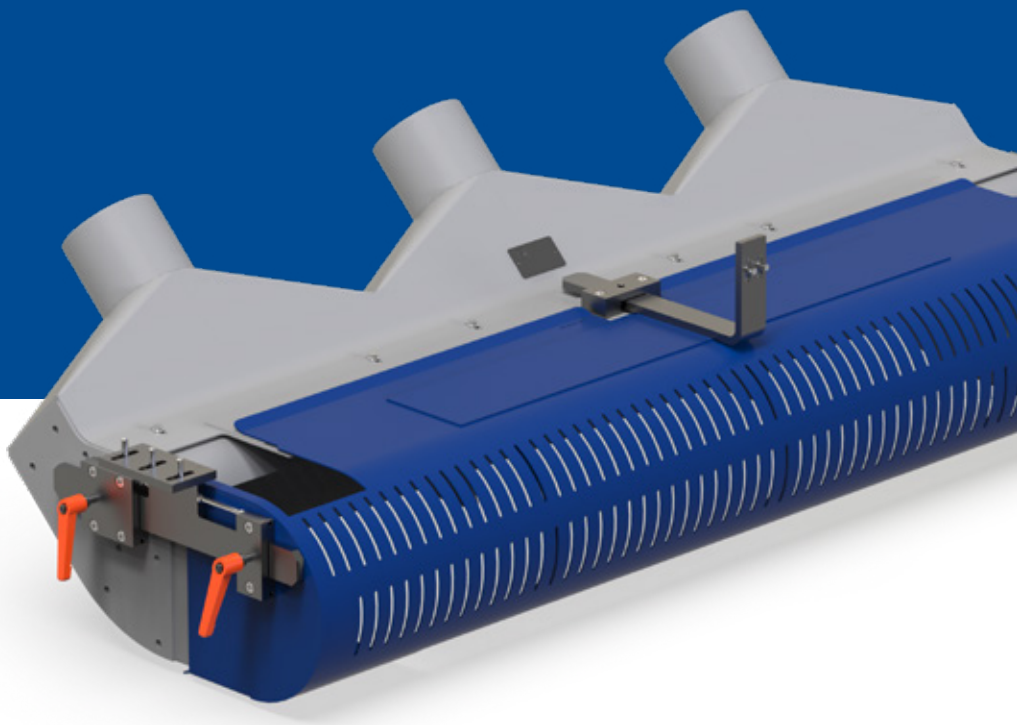
Example ProfilCut Q for machining PE foam

YOUR BENEFITS

- High life time
- Maximum cutting quality
- Short set-up times
- Constant profile and diameter
- Less noise

AT A GLANCE

- Knives can be changed in the assembled tool set
- Optimally adjusted due to the utilisation of carbide and diamond in the tool set
- Suitable for different materials such as foams, plastics and fibre composites
- No further machine setting required

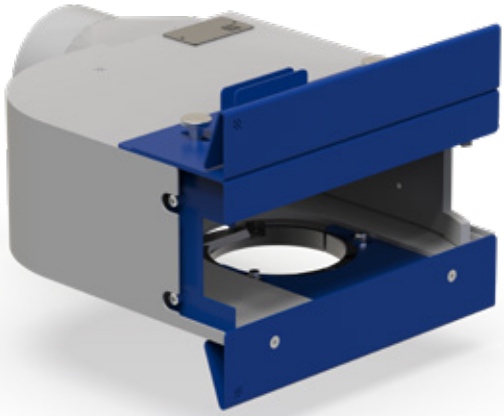


DFC®-Extraction hoods

The specialists for efficient chip extraction

Extraction hoods are often considered to be of secondary importance, but in machining they have an enormous influence on quality, economy and safety in the machining process. For maximum efficiency, it is important that the tool and the extraction hood are correctly designed and adjusted to 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. Costs can be saved, machine cleaning becomes easier and the workpieces remain free of dust and chips.



Example DFC®-Extraction hood for lateral machining

YOUR BENEFITS

- Minimum cleaning effort
- No chips on the workpiece
- Longer tool life times
- Easy handling
- Less noise and lower energy consumption

AT A GLANCE

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

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

ABM	=	dimension
BEM	=	note
BEZ	=	description
BO	=	bore diameter
D	=	cutting circle diameter
DFC	=	Dust Flow Control (optimised chip clearance)
DIK	=	thickness
EPS	=	expanded polystyrene
f_z	=	tooth feed
H	=	height
HS	=	high-speed steel (HSS)
HW	=	tungsten carbide (TCT)
ID	=	ident number
kPa	=	kilopascal
L	=	length
LH	=	left hand rotation
PE	=	polyethylene
PET	=	polyethylene terephthalate
PP	=	polypropylene
PU	=	polyurethane
PVC	=	polyvenyl chloride
QAL	=	cutting material quality
RH	=	right hand rotation
SB	=	cutting width
SET	=	set
TDI	=	thickness of tool
v_c	=	cutting speed
VE	=	sales unit
v_f	=	feed speed
XPS	=	extruded polystyrene
Z	=	number of teeth
ZF	=	tooth shape (cutting edge shape)

Your local contact:
Scan QR Code or visit
www.leitz.org.

www.leitz.org