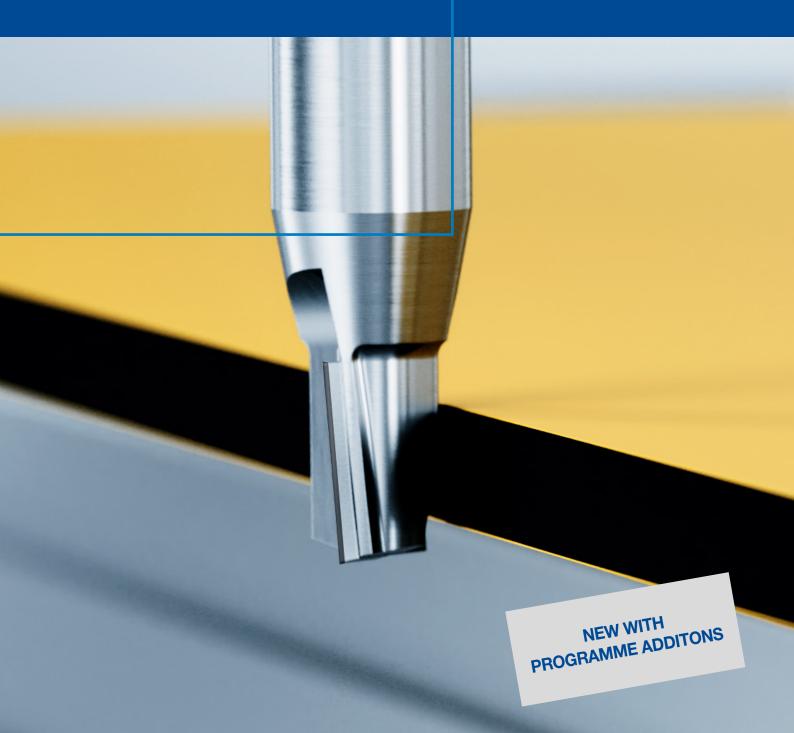


Tools for Compact Laminate



Compact Laminate – effective machining

Compact Laminates, such as HPL, hard paper or hard fabric, are typical examples of duroplastics. Especially High-Pressure-Laminates (HPL) have a wide range of applications due to their design and robust physical properties. This is evident in sectors such as furniture, kitchen and trade fair booth construction, in facade construction and also in the sanitary sector. Since Compact Laminates usually consist of melamine or phenolic resin impregnated papers or wood fibres, their machining is always associated with high tool wear. The use of diamond cutting materials from Leitz is the solution in this case.



QUALITY & PRODUCTIVITY

Router cutter
Diamaster PRO Z 1 and Z 2

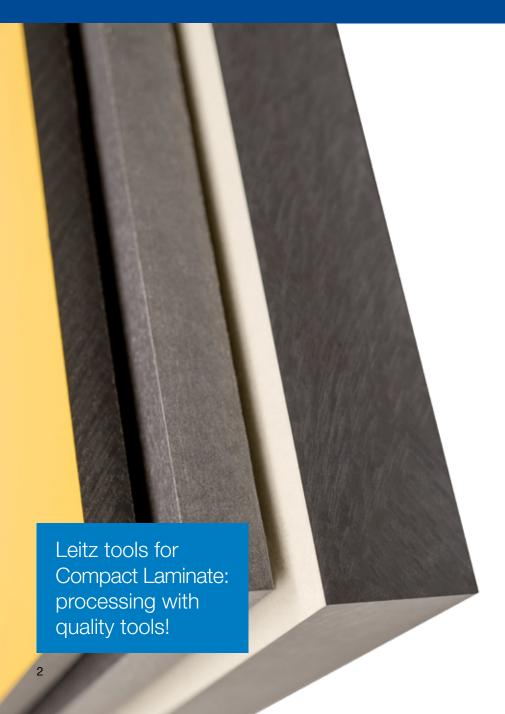
With slightly positive cutting angle for maximum chip removal.

YOUR BENEFITS

- Perfect cutting results
- Long tool life
- 2-3 times resharpenable

AT A GLANCE

- Slightly positive shear angle for best chip removal
- DP basic cutting edge suitable for ramp plunging
- Coordinated tool programme with diameters of 5, 6 and 8 mm in Z 1 and with diameter 8, 10 and 12 in Z 2
- For all conventional machines
- Available from stock
- Diamond-tipped











PRODUCTIVITY & EFFICIENCY

Router cutter Diamaster PLUS Z 2

For neutral cutting behaviour with alternating cutting angle.

YOUR BENEFITS

- High feed speeds
- Long tool life
- 5-8 times resharpenable

AT A GLANCE

- Alternating shear angle for neutral cutting behaviour during grooving and sizing
- Diamond plunging edge
- Excellent stability thus particularly suitable for cutting HPL
- Coordinated tool programme with diameters 14 and 16 mm
- For all conventional machines
- Available from stock
- Diamond-tipped







PRODUCTIVITY & EFFICIENCY

Router cutter Diamaster PLUS Z 2

With negative cutting angle for perfect edges when grooving.

YOUR BENEFITS

- High cutting performance
- Long tool life
- 5-8 times resharpenable

AT A GLANCE

- Negative shear angles for tear-free edges when grooving
- Excellent stability thus particularly suitable for cutting HPL
- The cutting pressure supports workpiece clamping for small machined parts in the nesting process
- Coordinated tool programme with diameter 14 and 16 mm
- For all conventional machines
- Available from stock
- Diamond-tipped





QUALITY & SUSTAINABILITY

Drill HW-solid Z 2

For break-out-free holes in HPL on both sides.

YOUR BENEFITS

- Breakout free bore holes
- Long tool life
- High stability

AT A GLANCE

- Special cutting edge geometry
- Polished gullet area
- Multiple times resharpenable
- Coordinated tool programme in the diameter range 3-10 mm
- For all conventional machines
- Available from stock







QUALITY & PRODUCTIVITY

Panel sizing sawblade RazorCut PLUS

For high feed rates and perfect edges.

YOUR BENEFITS

- Finish-cut quality
- High feed speeds
- Low noise

AT A GLANCE

- Special cutting edge geometry
- Irregular tooth pitch
- Use in combination with DP scorer recommended
- Multiple times resharpenable
- For splitting individual panels or flat panel stacks up to 60 mm thick
- Diameter range 250-450 mm
- Available from stock
- HW cutting material





PRODUCTIVITY & QUALITY

Panel sizing sawblade Diamaster PLUS

For perfect cutting edges and a long tool life.

YOUR BENEFITS

- High cutting performance
- Long tool life
- 5-8 times resharpenable

AT A GLANCE

- Filled laser ornaments
- Diameter range 300-450 mm
- For all conventional panel-sizing and sizing saws
- Available from stock
- Diamond-tipped





PRODUCTIVITY & QUALITY

Scoring sawblade KON/FZ Excellent

Suitable for the main circular sawblade for perfect cutting edges.

YOUR BENEFITS

- High cutting performance
- Long tool life
- 5-8 times resharpenable

AT A GLANCE

- Suitable for main circular sawblade
- Diameter 180 mm
- Available from stock
- Diamond-tipped









QUALITY & EFFICIENCY

Profile router cutter Diamaster PRO Z 2

For perfect 45° bevels at top and bottom.

YOUR BENEFITS

- High processing quality
- Long tool life
- 2-3 times resharpenable

AT A GLANCE

- Flexible bevelling 45° top and bottom up to a material thickness of 13 mm
- Suitable for rapid plunging
- For all conventional machines
- Available from stock
- Diamond-tipped







QUALITY & EFFICIENCY

Profile router cutter Diamaster PRO Z 2

The specialist for convex profiles for edge formation.

YOUR BENEFITS

- Perfect cutting results
- Long tool life
- 2-3 times resharpenable

AT A GLANCE

- Suitable for rapid plunging
- Coordinated tool programme R9 and R16
- For all conventional machines
- Available from stock
- Diamond-tipped





QUALITY & PRODUCTIVITY

V-Nut router cutter Diamaster PRO Z 1

Especially for engraving and V-grooving.

YOUR BENEFITS

- Perfect processing results
- Long tool life
- 2-3 times resharpenable

AT A GLANCE

- For engraving and V-grooving
- For all conventional machines
- Available from stock
- Diamond-tipped

Ordering information for the products shown above can be found on the following pages!

Ordering information

Description	Application	Cutting material	Cutting value parameters, standard values	Dimensions	Ordering ID	Avail- ability
Router cutter Diamaster PRO Z 1	Jointing, Grooving	DP	v _c = 6-10 m/s Finishing: f _s = 0.06-0.08 mm	D5/GL60/NL12/S8x35/Z1/RH	191086	•
Slightly positive shear angle ^{a b}			Pre-cutting: $f_z = 0.1-0.3 \text{ mm}$	D6/GL60/NL14/S8x35/Z1/RH	191087	•
				D8/GL60/NL14/S8x35/Z1/RH	191088	•
Router cutter Diamaster PRO Z 2	Sizing, Grooving	DP	$v_c = 8.5-15 \text{ m/s}$ Finishing: $f_z = 0.04-0.06 \text{ mm}$	D8/GL65/NL15/S12x35/Z2/RH	191108	•
Slightly positive shear angle ^{a b}			Pre-cutting: $f_z = 0.2-0.3 \text{ mm}$	D8/GL70/NL22/S12x40/Z2/RH	191089	•
			e. g. Ø 12 mm: n = 24 000 U/min Finishing: v _t = 2-3 m/min	D10/GL70/NL22/S12x35/Z2/RH	191090	•
			Pre-cutting: $v_f = 10-15$ m/min	D12/GL75/NL18/S16x50/Z2/RH	191091	•
				D12/GL85/NL25/S16x50/Z2/RH	191092	•
Router cutter Diamaster PLUS Z 2	Sizing, Grooving	DP	v _c = 15-20 m/s Finishing: f _s = 0.04-0.06 mm	D14/GL80/NL16/S20x50/Z2/RH	191093	•
Alternating shear angle ^{a b}			Pre-cutting: $f_z = 0.2-0.3 \text{ mm}$	D16/GL80/NL20/S20x50/Z2/RH	191094	•
Router cutter Diamaster PLUS Z 2	Sizing, Grooving	DP	v _c = 15-20 m/s Finishing: f _z = 0.04-0.06 mm	D14/GL80/NL16/S20x50/Z2/RH	091157	•
Negative shear angle ^{a b}			Pre-cutting: f _z = 0.2-0.3 mm	D16/GL80/NL18/S20x50/Z2/RH	091156	•
Drill HW-solid Z 2ª	Blind and through holes	HW	$v_c = 0.7-1.6 \text{ m/s}$ $f_z = 0.15-0.3 \text{ mm}$	D3/GL57.5/NL16/S10x36/Z2/RH	230610	•
			e.g. Ø 3 mm:	D3.6/GL57.5/NL16/S10x36/Z2/RH	230611	•
			$n = 3 500 \text{ U/min}$ $v_f = 0.8 \text{ m/min}$	D5/GL57.5/NL25/S10x25/Z2/RH	230612	•
			e.g. Ø 5 mm: n = 3 500 U/min	D5.1/GL57.5/NL25/S10x25/Z2/RH	230613	•
			v _f = 1.0 m/min	D5.6/GL57.5/NL25/S10x25/Z2/RH	230614	•
			e.g. Ø 6 mm: n = 3 500 U/min v _r = 1.5 m/min	D6/GL57.5/NL25/S10x25/Z2/RH	230615	•
			e.g. Ø 10 mm:	D7/GL57.5/NL25/S10x25/Z2/RH	230616	•
			$n = 3 500 \text{ U/min}$ $v_f = 1.5 \text{ m/min}$	D8/GL57.5/NL25/S10x25/Z2/RH	230617	•
				D8.5/GL57.5/NL25/S10x25/Z2/RH	230618	•
				D9.3/GL57.5/NL25/S10x25/Z2/RH	230619	•
				D10/GL57.5/NL25/S10x25/Z2/RH	230620	•
Panel sizing sawblade RazorCut PLUS	Splitting of individual panels	HW	$v_c = 60-75 \text{ m/s}$ $f_z = 0.02-0.1 \text{ mm}$	D250/SB3.2/BO30/Z60/ZF TR/TR	161135	•
	with pre-scoring		e. g. Ø 350 mm: n = 3 300-4 100 U/min v _r = 5-30 m/min	D280/SB3.2/BO30/Z60/ZF TR/TR	161136	•
				D300/SB4.4/BO30/Z60/ZF TR/TR	161137	•
				D300/SB4.4/BO60/Z72/ZF TR/TR	161140	•
				D350/SB4.4/BO30/Z72/ZF TR/TR	161149	•
				D350/SB4.4/BO60/Z72/ZF TR/TR	161150	•
				D380/SB4.4/BO30/Z72/ZF TR/TR	161156	•
				D380/SB4.4/BO60/Z72/ZF TR/TR	161158	•
				D400/SB4.4/BO30/Z72/ZF TR/TR	161161	•
				D420/SB4.8/BO60/Z72/ZF TR/TR	161164	•

Description	Application	Cutting material	Cutting value parameters, standard values	Dimensions	Ordering ID	Avail- ability
Panel sizing sawblade RazorCut PLUS	Splitting of individual panels	HW	v _c = 60-75 m/s f _z = 0.02-0.1 mm	D450/SB4.4/BO30/Z72/ZF TR/TR	161168	•
	with pre-scoring		-	D450/SB4.8/BO60/Z72/ZF TR/TR	161169	•
Panel sizing sawblade Diamaster PLUS	Splitting of individual panels	DP	$v_c = 60-75 \text{ m/s}$ $f_z = 0.02-0.1 \text{ mm}$	D300/SB4.4/BO30/Z60/ZF TR/TR	190706	•
	with pre-scoring		e. g. Ø 450 mm:	D350/SB4.4/BO30/Z72/ZF TR/TR	190707	•
	n = 2 600-3			D350/SB4.4/BO60/Z72/ZF TR/TR	190708	•
				D380/SB4.4/BO60/Z72/ZF TR/TR	190709	•
				D380/SB4.8/BO60/Z72/ZF TR/TR	190710	•
				D400/SB4.4/BO30/Z72/ZF TR/TR	190711	•
				D450/SB4.8/BO60/Z72/ZF TR/TR	190712	•
Scoring sawblade KON/FZ Excellent	Scoring with feed	DP	$v_c = 60-75 \text{ m/s}$ $f_z = 0.02-0.1 \text{ mm}$	D180/SB4.3/BO45/Z30/ZF KON/FZ	190568	•
				D180/SB4.7/BO45/Z30/ZF KON/FZ	190569	•
Profile router cutter Diamaster PRO Z 2ª	Bevelling 45° top and bottom up to a material thick- ness of 13 mm	DP	$n = 24 \ 000 \ U/min$ $v_{\scriptscriptstyle \parallel} = 25 \ m/min}$	d13/D18/NL24/S20x55/GL85/Z2/RH	245500	•
Profile router cutter Diamaster PRO Z 2ª	Convex profile D R9 and R16	DP	n = 24 000 U/min v _f = 2-5 m/min	d13/D21.05/R9/NL20/S20/GL80/Z2/RH	245501	•
				d13/D16.7/R16/NL20/S20/GL80/Z2/RH	245502	•
V-Nut router cutter Diamaster PRO Z 1ª	V-grooving, engraving	DP	n = 24 000 U/min v _f = 2-5 m/min	D10/NL9/60°/S12x50/GL70/Z1/RH	245503	•

 ^a The ThermoGrip® high-precision shrink chuck for shank tools is recommended for tool holding.
 ^b Maximum axial feed during grooving: 1.0 x D. Ensure that the workpiece is sufficiently clamped.

•	=	available from stock		=	available at short notice			
во	=	bore diameter	HW	=	tungsten carbide (TCT)	SB	=	cutting width
d	=	diameter	KON/FZ	=	flat teeth - conical	TR/TR	=	trapezoidal/trapezoidal teeth
D	=	cutting circle diameter	n	=	RPM	V _c	=	cutting speed
DP	=	polycrystalline diamond	NL	=	cutting length	V _f	=	feed speed
f,	=	tooth feed	R	=	radius	Ż	=	number of teeth
ĞL	=	total length	RH	=	right hand rotation	ZF	=	tooth shape (cutting edge shape)
HPL	=	High-Pressure-Laminates	S	=	shank dimension			





Subject to changes prior to technical developments.

Enquiry form for special tools Router cutters for compact laminates

Company	Customer number, contact person
Name, first name	E-Mail address
Street	Post code, city, country
Date	Phone

Please select by marking with a cross and	complete:	
General information		
Panel thickness: mm		
Application		
Sizing	Grooving	Pockets
Jointing	Cut-outs	
Edge formation		
Radius on top R = mm	Bevel on top mm degree	Straight edge
Radius on bottom R = mm	Bevel on bottom mm degree	Convex profile R = mm
Machine	Workpiece clamping	Direction of rotation
Machine Manufacturer:	Workpiece clamping Grid-/Nesting table	Direction of rotation
	·	
Manufacturer:	Grid-/Nesting table	☐ left
Manufacturer: min ⁻¹	Grid-/Nesting table	☐ left
Manufacturer: min ⁻¹ Speed range: min ⁻¹ Adaptors (e. g. SK30, HSK-F63, etc.):	Grid-/Nesting table Consoles/suction device	☐ left ☐ right
Manufacturer: min-1 Speed range: min-1 Adaptors (e. g. SK30, HSK-F63, etc.): Cutting material	Grid-/Nesting table Consoles/suction device Tool	☐ left ☐ right
Manufacturer: Speed range: min ⁻¹ Adaptors (e. g. SK30, HSK-F63, etc.): Cutting material DP HW Please provide existing data	Grid-/Nesting table Consoles/suction device Tool Dimensions:	☐ left ☐ right
Manufacturer: Speed range: min ⁻¹ Adaptors (e. g. SK30, HSK-F63, etc.): Cutting material DP HW	Grid-/Nesting table Consoles/suction device Tool Dimensions: mm	☐ left ☐ right





