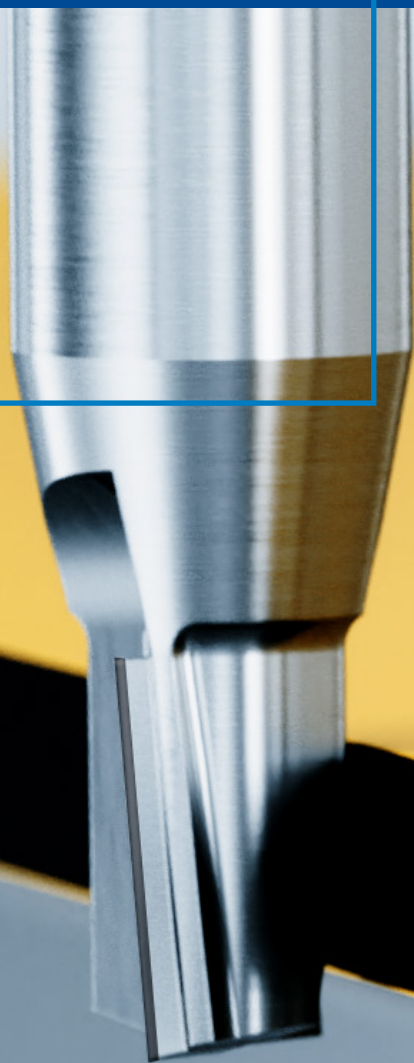


**leitz**

Tools for  
Compact Laminate



**NEW WITH  
PROGRAMME ADDITONS**

# 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.**

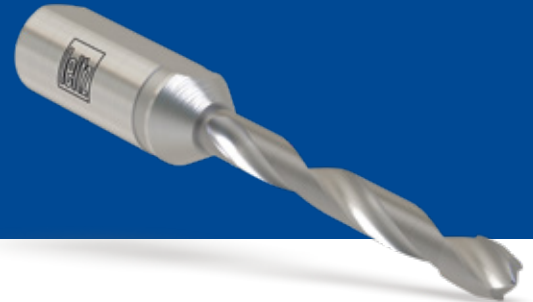
### YOUR BENEFITS

- 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

Leitz tools for  
Compact Laminate:  
processing with  
quality tools!



**PRODUCTIVITY & EFFICIENCY**

Router cutter  
Diamaster PLUS Z 2

For neutral cutting behaviour  
with alternating cutting angle.



**PRODUCTIVITY & EFFICIENCY**

Router cutter  
Diamaster PLUS Z 2

With negative cutting angle for  
perfect edges when grooving.



**QUALITY & SUSTAINABILITY**

Drill  
HW-solid Z 2

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

**YOUR BENEFITS**

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

**YOUR BENEFITS**

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

**YOUR BENEFITS**

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

**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

**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

**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

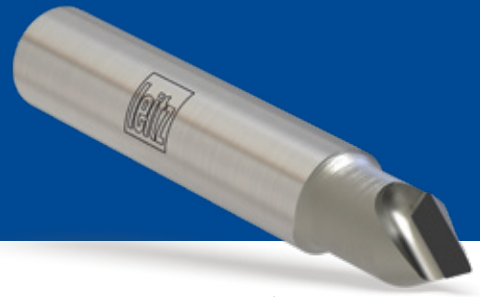
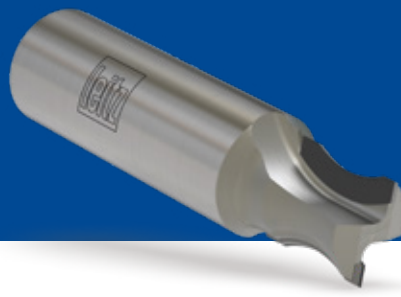
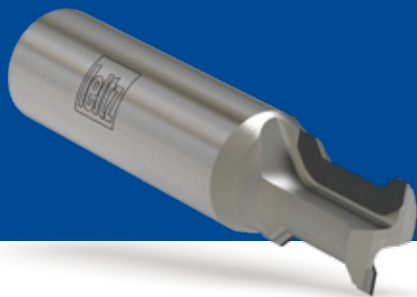
Suitable for the main circular  
sawblade for perfect cutting edges.

#### 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.**



**QUALITY & EFFICIENCY**

Profile router cutter  
Diamaster PRO Z 2

**The specialist for convex profiles  
for edge formation.**



**QUALITY & PRODUCTIVITY**

V-Nut router cutter  
Diamaster PRO Z 1

**Especially for engraving  
and V-grooving.**

**YOUR BENEFITS**

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

**YOUR BENEFITS**

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

**YOUR BENEFITS**

- Perfect processing results
- 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

**AT A GLANCE**

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

**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	Availability
Router cutter Diamaster PRO Z 1 Slightly positive shear angle*	Joining, Grooving	DP	$v_c = 6-10$ m/s Finishing: $f_z = 0.06-0.08$ mm Pre-cutting: $f_z = 0.1-0.3$ mm	D5/GL60/NL12/S8x35/Z1/RH	191086	●
				D6/GL60/NL14/S8x35/Z1/RH	191087	●
				D8/GL60/NL14/S8x35/Z1/RH	191088	●
Router cutter Diamaster PRO Z 2 Slightly positive shear angle*	Sizing, Grooving	DP	$v_c = 8.5-15$ m/s Finishing: $f_z = 0.04-0.06$ mm Pre-cutting: $f_z = 0.2-0.3$ mm  e. g. $\varnothing 12$ mm: $n = 24\ 000$ U/min Finishing: $v_f = 2-3$ m/min Pre-cutting: $v_f = 10-15$ m/min	D8/GL65/NL15/S12x35/Z2/RH	191108	●
				D8/GL70/NL22/S12x40/Z2/RH	191089	●
				D10/GL70/NL22/S12x35/Z2/RH	191090	●
				D12/GL75/NL18/S16x50/Z2/RH	191091	●
				D12/GL85/NL25/S16x50/Z2/RH	191092	●
Router cutter Diamaster PLUS Z 2 Alternating shear angle*	Sizing, Grooving	DP	$v_c = 15-20$ m/s Finishing: $f_z = 0.04-0.06$ mm Pre-cutting: $f_z = 0.2-0.3$ mm	D14/GL80/NL16/S20x50/Z2/RH	191093	●
				D16/GL80/NL20/S20x50/Z2/RH	191094	●
Router cutter Diamaster PLUS Z 2 Negative shear angle*	Sizing, Grooving	DP	$v_c = 15-20$ m/s Finishing: $f_z = 0.04-0.06$ mm Pre-cutting: $f_z = 0.2-0.3$ mm	D14/GL80/NL16/S20x50/Z2/RH	091157	●
				D16/GL80/NL18/S20x50/Z2/RH	091156	●
Drill HW-solid Z 2*	Blind and through holes	HW	$v_c = 0.7-1.6$ m/s $f_z = 0.15-0.3$ mm  e. g. $\varnothing 3$ mm: $n = 3\ 500$ U/min $v_f = 0.8$ m/min  e. g. $\varnothing 5$ mm: $n = 3\ 500$ U/min $v_f = 1.0$ m/min  e. g. $\varnothing 6$ mm: $n = 3\ 500$ U/min $v_f = 1.5$ m/min  e. g. $\varnothing 10$ mm: $n = 3\ 500$ U/min $v_f = 1.5$ m/min	D3/GL57.5/NL16/S10x36/Z2/RH	230610	●
				D3.6/GL57.5/NL16/S10x36/Z2/RH	230611	●
				D5/GL57.5/NL25/S10x25/Z2/RH	230612	●
				D5.1/GL57.5/NL25/S10x25/Z2/RH	230613	●
				D5.6/GL57.5/NL25/S10x25/Z2/RH	230614	●
				D6/GL57.5/NL25/S10x25/Z2/RH	230615	●
				D7/GL57.5/NL25/S10x25/Z2/RH	230616	●
				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 with pre-scoring	HW	$v_c = 60-75$ m/s $f_z = 0.02-0.1$ mm  e. g. $\varnothing 350$ mm: $n = 3\ 300-4\ 100$ U/min $v_f = 5-30$ m/min	D250/SB3.2/BO30/Z60/ZF TR/TR	161135	●
				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	Availability
Panel sizing sawblade RazorCut PLUS	Splitting of individual panels with pre-scoring	HW	$v_c = 60-75$ m/s $f_z = 0.02-0.1$ mm	D450/SB4.4/BO30/Z72/ZF TR/TR	161168	●
				D450/SB4.8/BO60/Z72/ZF TR/TR	161169	●
Panel sizing sawblade Diamaster PLUS	Splitting of individual panels with pre-scoring	DP	$v_c = 60-75$ m/s $f_z = 0.02-0.1$ mm  e. g. $\varnothing 450$ mm: $n = 2\ 600-3\ 200$ U/min $v_f = 4-22$ m/min	D300/SB4.4/BO30/Z60/ZF TR/TR	190706	●
				D350/SB4.4/BO30/Z72/ZF TR/TR	190707	●
				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	$v_c = 60-75$ m/s $f_z = 0.02-0.1$ 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 2*	Bevelling 45° top and bottom up to a material thickness of 13 mm	DP	$n = 24\ 000$ U/min $v_f = 2-5$ m/min	d13/D18/NL24/S20x55/GL85/Z2/RH	245500	●
Profile router cutter Diamaster PRO Z 2*	Convex profile 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 1*	V-grooving, engraving	DP	$n = 24\ 000$ U/min $v_f = 2-5$ m/min	D10/NL9/60°/S12x50/GL70/Z1/RH	245503	●

\* The ThermoGrip® high-precision shrink chuck for shank tools is recommended for tool holding.

● = available from stock

□ = available at short notice

BO = 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

$f_z$  = tooth feed

R = radius

Z = number of teeth

GL = total length

RH = right hand rotation

ZF = tooth shape (cutting edge shape)

HPL = High-Pressure-Laminates

S = shank dimension



# 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:

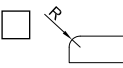
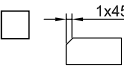

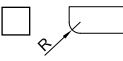
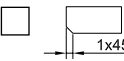

### General information

Panel thickness: \_\_\_\_\_ mm

### Application

- |                                   |                                   |                                  |
|-----------------------------------|-----------------------------------|----------------------------------|
| <input type="checkbox"/> Sizing   | <input type="checkbox"/> Grooving | <input type="checkbox"/> Pockets |
| <input type="checkbox"/> Jointing | <input type="checkbox"/> Cut-outs |                                  |

### Edge formation

- |   |   |   |
|---|---|---|
| <input type="checkbox"/>  Radius on top<br>R = _____ mm    | <input type="checkbox"/>  Bevel on top<br>_____ mm degree    | <input type="checkbox"/>  Straight edge                  |
| <input type="checkbox"/>  Radius on bottom<br>R = _____ mm | <input type="checkbox"/>  Bevel on bottom<br>_____ mm degree | <input type="checkbox"/>  Convex profile<br>R = _____ mm |

### Machine

Manufacturer: \_\_\_\_\_

Speed range: \_\_\_\_\_ min<sup>-1</sup>

Adaptors (e. g. SK30, HSK-F63, etc.): \_\_\_\_\_

### Workpiece clamping

- Grid-/Nesting table  
 Consoles/suction device

### Direction of rotation

- left  
 right

### Cutting material

- DP  
 HW

### Tool

Dimensions: \_\_\_\_\_

Shank diameter: \_\_\_\_\_ mm

Number of tools: \_\_\_\_\_ pc.

Please provide existing data on tool and machine:

\_\_\_\_\_  
 \_\_\_\_\_

### Sketch

