

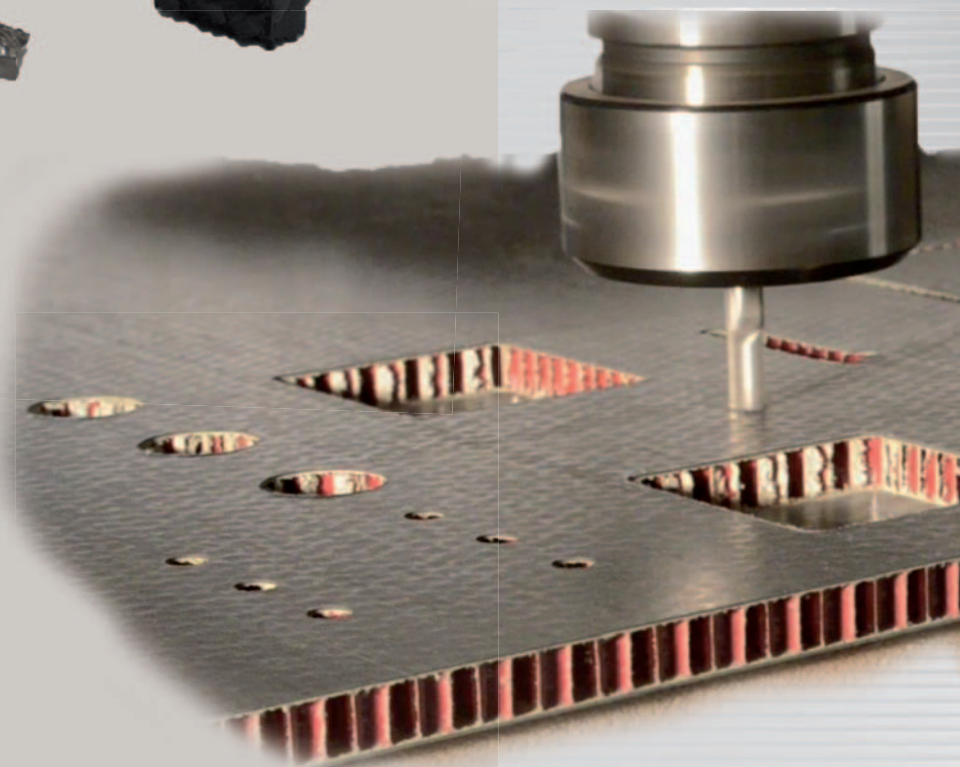
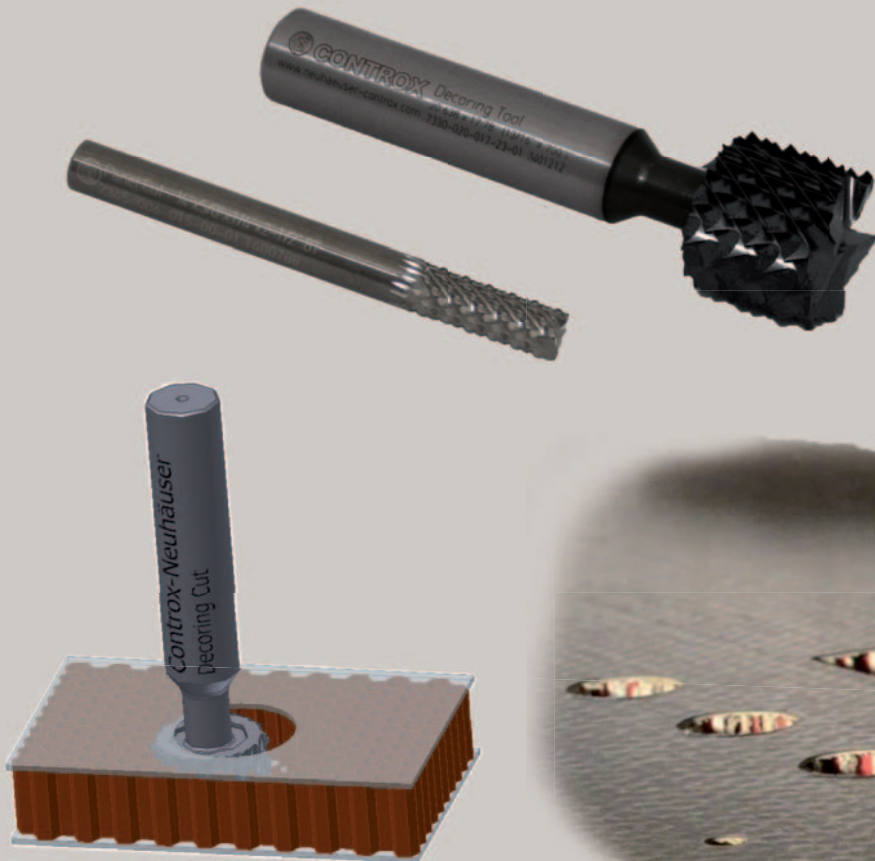


CONTROX-NEUHAUSER
Precision Cutting Tools



NEUHAUSER
CONTROX-Präzisionswerkzeuge

Tools for the Machining of Composite Panels





PANEL CUT

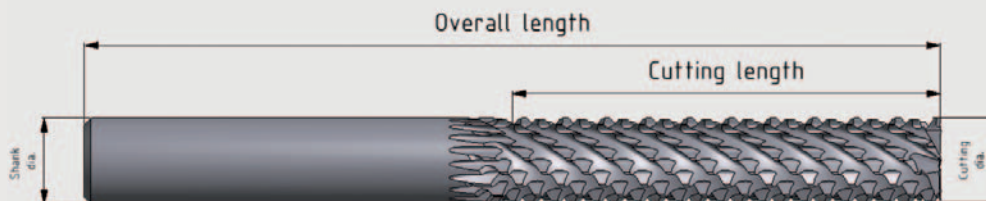
The PANEL CUT tools are specially designed for the machining of composite lightweight panels. With the PANEL CUT it is possible to drill perfectly clean holes through sandwich panels without any delamination on the glass or carbon fiber skins or flagging of the honeycomb in between. It is also the ideal tool for profiling operations where the PANEL CUT achieves outstanding results. The honeycomb structure between the skins gets removed cleanly without any flagging.

The outstanding advantage of the PANEL CUT is the possibility of extremely high feed rates while still establishing a clean surface finish. With feed rates of up to 10.000 mm/min / 400 IPM you are able to maximize your productivity.

The special tooth design of the PANEL CUT increases tool life due to stabilized tips. It also enables extremely high feed rates and reduces machining times of sandwich panels remarkably. The sophisticated tool geometry of the PANEL CUT allows a precise machining of composite panels and a high quality surface finish of the skins.

Panel Cut		Cutting dia.		Cutting length	Overall length	Shank dia.		Mat.	EDP # / Item #
Panel Cut, CC	mm	6.35	± 0.1	15.875	63.5	6.35	h6	SC	170126
	inch	1/4	± 0.005	5/8	2-1/2	1/4	-0.0005		7345-006-015-00-01
Panel Cut, CC	mm	6.35	± 0.1	31.75	63.5	6.35	h6	SC	170127
	inch	1/4	± 0.005	1-1/4	2-1/2	1/4	-0.0005		7345-006-031-00-01
Panel Cut, CC	mm	12.7	± 0.1	31.75	76.2	12.7	h6	SC	170128
	inch	1/2	± 0.005	1-1/4	3	1/2	-0.0005		7345-012-031-00-01

SC=Solid Carbide



DECORING CUT

The DECORING CUT is specially engineered for the machining of composite lightweight panels.

It is the ideal solution to drill holes into the panel and to undercut the skins. This is often necessary to achieve a better bonding between insert, potting and panel. Undercutting of the outside profile contour is often done to be able to epoxy the out edge of the part to achieve a better stability and surface finish. With its end teeth the DECORING CUT enables to first drill the hole and then undercut the panel without a tool change. Thereby it removes and pulverizes the material instead of just compressing it and eliminates the core "spring back".

The DECORING CUT is made out of Solid Carbide or HSS Cobalt Powdered Metal (PM) and coated with our patented PVD multi-layer coating. It is available in different dimensions depending on the panel width and necessary undercut depth.

Please contact us on any special sizes needed we understand that there are many insert sizes needed.

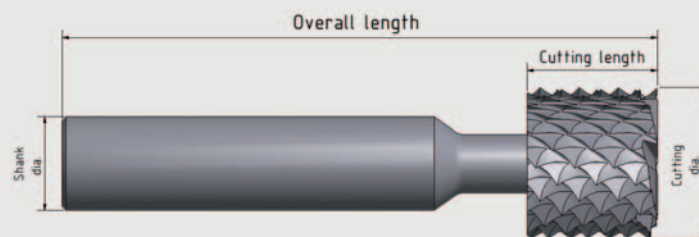


The DECORING CUT with its sophisticated tooth geometry is suitable for plunging and undercutting of the skins in composite sandwich panels like no other tool. We recommend the Solid Carbide version if plunging is a main part of the work due to a longer tool life. For mainly undercutting operations, the HSS Cobalt Powdered Metal DECORING CUT is suitable. The DECORING CUT has a PVD multi-layer coating for maximum performance and tool life.

The tools are available from stock in different dimensions. Please choose the cutting length depending on the panel width. Please take the details from the following chart.

Decoring Cut		Cutting dia.		Cutting length	Overall length	Shank dia.		Neck dia.	Panel width	Mat.	EDP # / Item #
Decoring Cut, AWAC3-coated	mm	11,113	±0,2	5,08	68,5	12,7	h6	3,556	6,35	SC	170137
	inch	7/16	±0,005	0.2	2.7	1/2	-0,0005	0.14	1/4		7335-011-005-23-01
Decoring Cut, AWAC3-coated	mm	11,113	±0,2	11,43	74,5	12,7	h6	3,556	12,7	SC	170138
	inch	7/16	±0,005	0.45	2.93	1/2	-0,0005	0.14	1/2		7335-011-011-23-01
Decoring Cut, AWAC3-coated	mm	11,51	±0,2	5,08	68,5	12,7	h6	3,556	6,35	SC	170139
	inch	0.453	±0,005	0.2	2.7	1/2	-0,0005	0.14	1/4		7335-011-005-23-02
Decoring Cut, AWAC3-coated	mm	11,51	±0,2	11,43	74,5	12,7	h6	3,556	12,7	SC	170140
	inch	0.453	±0,005	0.45	2.93	1/2	-0,0005	0.14	1/2		7335-011-011-23-02
Decoring Cut, AWAC3-coated	mm	12,7	±0,2	5,08	68,5	12,7	h6	3,556	6,35	SC	170141
	inch	1/2	±0,005	0.2	2.7	1/2	-0,0005	0.14	1/4		7335-012-005-23-01
Decoring Cut, AWAC3-coated	mm	12,7	±0,2	11,43	74,5	12,7	h6	3,556	12,7	SC	170142
	inch	1/2	±0,005	0.45	2.93	1/2	-0,0005	0.14	1/2		7335-012-011-23-01
Decoring Cut, AWAC3-coated	mm	14,224	±0,2	5,08	68,5	12,7	h6	4,572	6,35	SC	170143
	inch	0.56	±0,005	0.2	2.7	1/2	-0,0005	0.18	1/4		7335-014-005-23-01
Decoring Cut, AWAC3-coated	mm	14,224	±0,2	11,43	74,5	12,7	h6	4,572	12,7	SC	170144
	inch	0.56	±0,005	0.45	2.93	1/2	-0,0005	0.18	1/2		7335-014-011-23-01
Decoring Cut, AWAC3-coated	mm	14,99	±0,2	5,08	68,5	12,7	h6	4,572	6,35	SC	170145
	inch	0.59	±0,005	0.2	2.7	1/2	-0,0005	0.18	1/4		7335-014-005-23-02
Decoring Cut, AWAC3-coated	mm	14,99	±0,2	11,43	74,5	12,7	h6	4,572	12,7	SC	170146
	inch	0.59	±0,005	0.45	2.93	1/2	-0,0005	0.18	1/2		7335-014-011-23-02

SC=Solid Carbide



Decoring Cut		Cutting dia.		Cutting length	Overall length	Shank dia.		Neck dia.	Panel width	Mat.	EDP # / Item #
Decoring Cut, AWAC3-coated	mm	20.638	±0.2	5.08	68.5	12.7	h6	7.938	6.35	PM	170129
	inch	13/16	±0.005	0.2	2.7	1/2	-0.0005	5/16	1/4		7330-020-005-23-01
Decoring Cut, AWAC3-coated	mm	20.638	±0.2	11.43	74.5	12.7	h6	7.938	12.7	PM	170130
	inch	13/16	±0.005	0.45	2.93	1/2	-0.0005	5/16	1/2		7330-020-011-23-01
Decoring Cut, AWAC3-coated	mm	20.638	±0.2	17.78	81	12.7	h6	7.938	19.05	PM	170131
	inch	13/16	±0.005	0.7	3.19	1/2	-0.0005	5/16	3/4		7330-020-017-23-01

PM=Powdered Metal



CONTROX-NEUHÄUSER Precision Cutting Tools

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