

Toolheads for the XN and XL Series

FlexiHead

Sales code:
97AR851

The FlexiHead features three configurable tool stations that accommodate the full range of standard XN tool inserts. Each tool station is equipped with an air cylinder that, when activated, brings that tool station down to its operation level. Up/down control of the tool during the execution of a job is done by the Z-axis.

The center tool station has a material foot that serves two purposes:

- Its spring pressure provides hold-down of the material, reducing the risk of the knife blade pulling up pieces of material when extracted
- The foot has an integral mechanism that allows exact measurement of the material thickness.
The measurement process is a combination of Z-axis readings and the pre-recorded table-mapping process that builds a “terrain model” of the table's working area. The table mapping provides exact information about the relative position of the cutting surface at any given point and permits accurate calculation of the material thickness.

Normally, the center tool station is carrying a knife tool. If the toolhead should be configured with an additional knife tool both side stations can be equipped with a detachable material foot for hold-down force.

The PowerHead

Sales code: 97AR855

This toolhead comes with two regular tool positions, which means that all standard XN/XL tool inserts can be used. In addition the PowerHead features a large-size crease wheel, with diameter 150mm [6"]. This crease wheel has the equivalent of 50kg [110lb.] of down-pressure, which is 2½ times more than the down-pressure of the conventional tool stations. The additional pressure, combined with the large frontal area of the big wheel enables excellent crease quality in heavy-duty corrugated board and even permits creasing board with high recycle content without breaking the liner.

Adapters for using 26 and 15mm diameter crease wheels in the heavy-duty crease position are available as an option. The benefit of the adapter is that it frees up one tool station in situations where customers would like to use a smaller sized crease wheel for E- and Micro flute work. It will also allow creasing of plastic corrugated with smaller wheels using the extra crease power, which normally has a good effect on defeating the 'memory' of the plastic material.

The PowerHead can be expanded to V-notch cutting by exchanging the crease wheel with a knife adapter. V-notch cutting offers mitred corners and highly exact folds for specialty products, such as loading pallets and cushioning elements for shipping containers, as well as special-purpose displays.

The MultiCUT

Sales code: 97AR857

The MultiCUT comes with two conventional tool stations configurable with all the standard XN/XL tool inserts and in addition a high-power milling spindle capable of handling a wide range of rigid materials.

The MultiCUT features an air-cooling feature for the milling bit. A thin jet of air is continuously blowing at the bit and this cooling is important for the edge quality when milling acrylic and other synthetic materials at high speed.

Milling bit exchange is very fast and elegant with the MultiCUT. A switch opens / closes the collet holding the bit, eliminating all needs for hand tools. After mounting a new bit the operator needs to reset the position of the bit tip, supported by a simple adjustment procedure in X-Guide or by using the X-Pad.

MultiCUT is unique because with one single toolhead the customer can process materials all the way from corrugated and folding carton to glass-hard sheets of thick Plexi-glass.

Maximum material thickness for milling jobs:

For XN tables the maximal material thickness for milling is 25mm – 1" (bit dependant).

The MultiCUT can be retrofitted to all existing XN and XL-tables.

The MultiCUT-HP

Sales code: 97AR5332

The MultiCUT-HP has the same features as the standard MultiCUT but comes with a 3kW water-cooled milling spindle, the latest technology from the industry leader in this field; Ibag.

The rotational speed of the spindle is adjustable up to 60,000 rotations per minute (rpm), which, combined with the high power, offers a very robust platform for efficiently milling a broad spectrum of demanding materials with exceptionally high throughput.

The maximum milling thickness with the MultiCUT-HP is 25mm / 1".

Bit collets

Standard bit collet size for the MultiCUT-HP is 6mm diameter. Optionally, 3mm and ¼" diameter collets can be supplied.

The FoamHead

Sales code: 97AR265

The FoamHead is a separate toolhead that exchanges with the FlexiHead or the PowerHead when the customer needs to switch between foam and paperboard materials. The toolheads are all attached with two hex-screws and the changeover takes about one minute. The FoamHead will handle foam materials with a maximum thickness of 86mm [$3\frac{3}{8}$ "].

A striking detail of the FoamHead is the set of wheels that encloses the knife blade when in the up-position. The twin-wheels serve a dual purpose:

1. They provide safety against accidental cuts from the sharp blade.
2. The wheels apply a certain downward pressure on the top of the foam, thus improving cutting performance in some of the softer materials, those that tend to stick to the blade and follow the oscillations of the blade rather than shear. This is an effect that can be reduced by applying the weight of the wheel structure (about 0.7kg [1.5 lb.]).

Like all other toolheads in the XN/XL-series the FoamHead uses a servo-controlled motor (Z-axis) to control the vertical position of the knife blade. The Z-axis is a great advantage when cutting foam because it enables partial through cut, which is very important with many foam designs.



The FoamHead has its own measuring device to determine the thickness of the material. The benefit of knowing the thickness is time saving, because the machine can determine the amount of lift required to clear the material before repositioning for the next cut. Alternatively, the blade always needs to be lifted over the level of the traverse beam, which, accumulated over a large job can add a significant amount of time. The thickness sensor also enables simplified programming of partial cuts.



The laser pointer is also integrated in the FoamHead, to ensure accurate start positioning.


Typical cutting speed in various foam materials ranges from 3 to 10 meters per minute.





Using blades with serrated (wavy) edge the FoamHead is also utilized for honeycomb paperboard.


Knife Tool Inserts for the XN and XL Series





Knife Tool	Description
<p>Reciprocating Knife Tool</p> <p>Sales code: 97AR625</p> <p>Knife lag: 3.0 mm</p> 	<p>This is the standard cutting tool for corrugated board. Its knife tip oscillates, driven by an electric motor. This tool permits cutting of normal corrugated qualities at full machine speed. The amplitude of the reciprocation is 0.3mm [.012"]</p> <p>Appropriate blades: 1*, 8, 11*, 12*, 21**, 22, 23</p>
<p>MP HF Knife Tool</p> <p>(Multi purpose high frequency knife tool)</p> <p>Sales code: 97AR441</p> <p>Knife lag: 3.0 mm</p> 	<p>Special variant of the reciprocating knife tool for cutting a lot of different materials, such as 20mm foamboard, fluted core boards and corrugated with high recycled content.</p> <p>It runs at twice the frequency and four times the amplitude of the standard reciprocating knife. These properties, along with a more powerful motor, enable cutting of heavily recycled board at efficient speed. This tool comes with a blade adapter for cylindrical blades (SR6xxx series).</p> <p>Maximum cutting thickness is about 20mm. (about 10mm with the foot mounted)</p> <p>Appropriate blades: 14, 15, 16, 17, 18, 19, 20</p>
<p>Gasket package for MP HF Knife tool. SF3xx knife holder and blades.</p> <p>Includes 4 x SF312 and 4 x SF313 knife blades</p> <p>Sales code: 97AR5051</p>	<p>A special knife holder and knife blades for cutting in tuff gasket materials.</p> <p>The combination of the MP HF knife tool and the SF312/313 knife blades has proven remarkably good performance in tuff gasket materials.</p>
<p>The FoamKnife (does not apply to i-XL)</p> <p>Sales code: 97AR271</p>	<p>Can cut up to about 30mm [$1\frac{1}{4}$"] thick foam materials. Requires ext. traverse clearance.</p> <p>The amplitude of the reciprocation is 4mm [.157"], which requires a reduced cutting speed compared with the standard Reciprocating Knife Tool.</p> <p>Included with the FoamKnife are adapters for the DR63xx-series blades and for the SF5xx (flat) blades.</p>

<p>The RotaCut tool</p> <p>Sales code: 97AR473</p> <p>Knife blade only: g42444844</p> 	<p>The RotaCut Tool has specifically been developed for cutting printed textiles such as banners, flags and other advertising items</p> <p>Included with the RotaCut Tool:</p> <ul style="list-style-type: none"> - Five 10-facetted knife blades - Set of one spanner and one hex key for blade exchange <p>The PVC cutting underlays used for packaging materials will be too slippery for textiles and a felt based cutting underlay should be used.</p>
<p>LongStroke Knife tool</p> <p>Sales code: 97AR5005</p> <p>Knife lag: 3.0 mm</p> <p>Knife blade only: g42447227</p> 	<p>Special variant of the reciprocating knife tool.</p> <p>The characteristic of this tool gives it excellent performance in materials like die ejection rubber which makes it a perfect match for customers that like to take full advantage of the rubbering module in ArtiosCAD</p> <p>It runs with a frequency of 4800rpm and a stroke length of total 8mm from top to bottom.</p> <p>This tool comes with a blade adapter for cylindrical blades (SR6xxx series).</p> <p>Included with the LongStroke Knife tool is three SR6375 knife blades</p> <p>Maximum cutting thickness is about 20mm. (about 10mm with the foot mounted)</p>
	<p>Appropriate blades: 14, 15, 16, 17, 18, 19, 20</p>

Knife Tool	Description
<p>Static Knife General Purpose</p> <p>Sales code: 97AR623</p> <p>Knife lag: 3.0mm</p>	<p>Used for solid carton materials, plastic materials, etc., with thickness larger than 1mm [.040"]</p> <p>Appropriate blades: 1*, 4**, 8, 10*, 11*, 12*, 22, 23</p>
<p>Static Knife Gasket</p> <p>Sales code: 97AR697</p> <p>Knife lag: 3.0 mm</p> 	<p>Used for gasket materials, especially designed for the SB family of knife blades. The SB blades extend 4mm from the adapter, which means the knife tool is suitable for material thickness up to 3mm.</p> <p>Appropriate blades: 22, 23</p>

<p>Static Knife Folding Carton</p> <p>Sales code: 97AR621</p> <p>Knife lag: 0.5 mm</p> 	<p>For folding carton and similar materials with thickness up to about 1mm [0.40"].</p> <p>Appropriate blades: 1, 10, 4**, 11, 12</p>
<p>Static Knife Triple Wall</p> <p>Sales code: 97AR622</p> <p>Knife lag: 7.0 mm</p> 	<p>For triple wall materials with thickness up to 17mm [.670"].</p> <p>Appropriate blades: 6, 8 + Martor #28</p>
<p>Static Knife Double Edge</p> <p>Sales code: 97AR832</p> <p>Knife lag: 0.0 mm</p> 	<p>Center-aligned knife tool for the POP, Screen and Digital Printing industries. Supports double-edged blades.</p> <p>Appropriate blades: 26, 27</p>
<p>Static Knife Single Edge</p> <p>Sales code: 97AR833</p> <p>Knife lag: 0.0 mm</p> 	<p>Center-aligned knife tool for the POP, Screen and Digital Printing industries. Supports single-edged blades.</p> <p>Appropriate blades: 30, 31</p>

Knife Tool	Description
<p>The MicroCut Tool</p> <p>Sales code: 97AR626</p> <p>Knife lag: 0.5 mm</p> 	<p>For applications where very fine depth tolerances are needed, such as varnish blankets, adhesive vinyl foil and half-cuts in the thinnest folding cartons.</p> <p>Appropriate blades: 1, 10, 4**, 11, 12</p>

<p>Material Foot for MicroCut</p> <p>Sales code: 97AR948</p> 	<p>When using the MicroCut Tool for varnish blankets with high-friction surface customers have some times experienced problems because the depth control foot pivots, which causes inconsistency in the cutting depth.</p> <p>As a fix to this problem R&D has designed an alternative depth control foot that firmly clamps to the tool body, eliminating the tendency to pivot.</p> <p>The new foot fits all existing MicroCut tools but due to its larger diameter it cannot go through the tool station opening and must be attached to the tool after it has been inserted into the toolhead. The MicroCut Tool will ship with the original depth control foot (right) as the standard</p>
<p>The KissCut Tool</p> <p>Sales code: 97AR789</p> <p>Knife lag: 0 mm</p> 	<p>Pressure controlled knife tool for adhesive vinyl. Cutting pressure is adjustable at the tool top. Comes with two different pressure springs and removable, adjustable depth control collet for thicker foils. Includes 3x blades for sign foil cutting.</p> <p>Appropriate blades: 32, 33</p>
<p>The Bevel knife tool</p> <p>Sales code: 97AR475</p> 	<p>A special knife tool has been developed for optimal performance in the flexo plate materials.</p> <p>The BevelKnife fits all standard tool stations in the FlexiHead, PowerHead MultiCUT and MultiCUT HP toolheads</p> <p>Included with the BevelKnife tool kit are two SF212 knife blades for plate cutting</p> <p>The BevelKnife requires XL-Guide version no 6035 or newer, to have all required control functions enabled</p>
<p>The Bevel knife tool for solid board V-Notch cutting</p> <p>Sales code: 97AR5314</p> 	<p>A special knife blade has been developed for cutting V-notch folding lines in solid board carton.</p> <p>The new blades are designed to be used in the std BevelKnife tool that fits all standard tool stations in the FlexiHead, PowerHead MultiCUT and MultiCUT HP toolheads</p> <p>Included with the BevelKnife tool kit are two SF245knife blades for solid board.</p> <p>The BevelKnife requires XL-Guide version no 6035 or newer, to have all required control functions enabled</p>

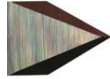
The Rigid Material knife tool

Sales code: 97AR5010

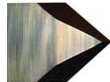


The Rigid Material Knife tool comes standard with two different new knife blades.

The DR8160
(double edge, 60degrees, tapered, 8mm)



The DR8180
(double edge, 80degrees, tapered, 8mm)



Both these knife blades have an 8mm cylindrical shaft and are only to be used in the RM knife tool.

The RM Knife extends the capabilities for knife cutting of rigid materials and further increases the productivity advantage we have over competition.

The knife blades and tool are designed such as the blades are mounted directly in the tool body.

This design gives the tool excellent performance when cutting in rigid materials such as display carton, rigid plastics such as Forex and others as well as many qualities of gasket materials

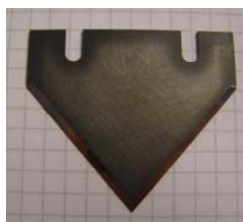
Maximum cutting depth is around 5-6mm

VI45-16 V-Insert for the Kongsberg XN/XL series

Sales code: 97AR5313

The VI45-16 tool comes standard with a specially made new knife blade.

The DF570



The VI45-16 knife tool and designed for V-notch cutting materials up to 16mm; typical materials are corrugated up to triple wall and fluted core board.

This tool is an insert tool which enables V-notch cutting with the MultiCUT, MultiCUT HP, PowerHead and FlexiHead tool heads.

When used in combination with a HD Knife tool in the PowerHead one will have a highly efficient fluted board converter

Maximum cutting depth is around 16 mm

HD Knife 17

Sales code: 97AR379

Knife lag: 10.0mm


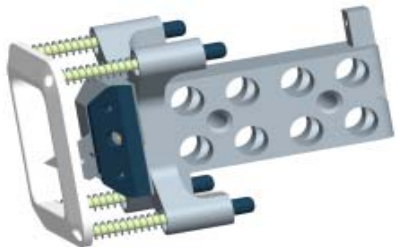
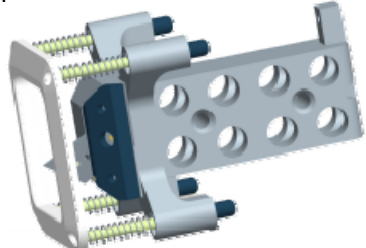
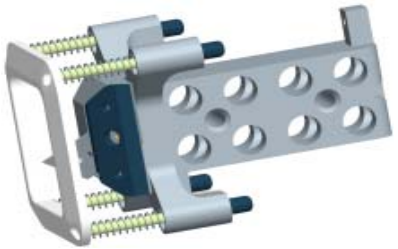


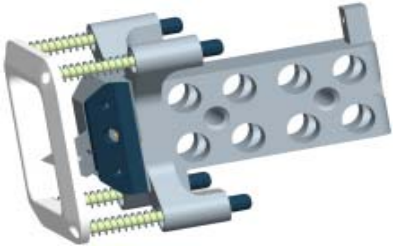
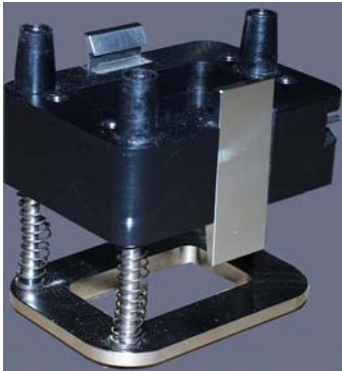
Heavy-duty knife tool that exchanges with the HD crease wheel in the PowerHead. Used for rigid board such as fluted core boards and triple wall material. Limited to straight lines longer than 50mm (2").

Max. cutting thickness is 17mm.

Sold as a kit including five appropriate blades

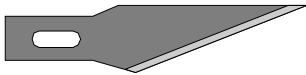



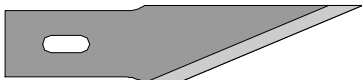


Appropriate blades: TZ Blades


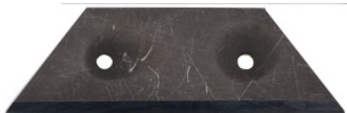
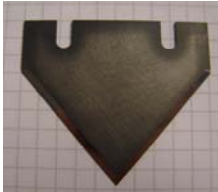
Knife Tool	Description
<p>HD Knife 30</p> <p>Sales code: 97AR725</p> <p>Knife lag: 10.0mm</p>  <p>SW version requirements: XL-Guide: v. 6036 or later DCM-Guide: v. 3041 or later</p>	<p>Similar to the above knife but permits cutting of max. 30mm – 1.18” material thickness.</p> <p>Uses a specially designed, Tungsten Carbide knife blade.</p> <p>Will also cut 22mm materials nicely, due to the very rigid knife blade.</p> <p>Sold as a kit including two appropriate blades (#13)</p> <p>Appropriate blades: 13</p>
<p>V-notch knife 45</p> <p>Sales code: 97AR620</p> 	<p>For V-notch cutting in TW corrugated, corrugated plastic and fluted core boards. Fits the “heavy-duty” tool position of the PowerHead.</p> <p>Max. cutting depth is 15mm - .590”. Limited to straight lines only.</p> <p>Sold as a kit including five appropriate blades.</p> <p>Appropriate blades: TZ blades</p>
<p>V-notch knife 45 10mm</p> <p>Sales code: 97AR274</p> 	<p>Similar to the above knife but limited to 10mm – 7/8” cutting depth. Will provide a more accurate cut in thinner material due to the shorter (=more rigid) exposed blade.</p> <p>Sold as a kit including five appropriate blades.</p> <p>Appropriate blades: TZ Blades</p>
<p>V-notch knife 15</p> <p>Sales code 97AR982</p> 	<p>The 15° V-notch tool is available for all machines equipped with the PowerHead. It is using a trapezoid knife blade to provide a slanted cut in thick materials, such as triple wall corrugated and fluted core board. Its application is to make a 30° partially cut V-notch for folding functionality, such as 12-edge polygonal pillars (15° blade angle=150° fold angle), or a through-cut leaving a slanted cutting edge. The tool comes equipped with automatic identification, permitting different V-notch tools to be interchanged without manual adjustment procedures.</p> <p>Included with the tool is a package of five appropriate knife blades.</p> <p>Appropriate blades: TZ Blades</p>

Knife Tool	Description
<p>V-notch knife 30</p> <p>Sales code: 97AR983</p> 	<p>The 30° V-notch tool is available for all machines equipped with the PowerHead. It is using a trapezoid knife blade to provide a slanted cut in thick materials, such as triple wall corrugated and fluted core board. Its application is to make a 30° partially cut V-notch for folding functionality, such as 12-edge polygonal pillars (15° blade angle=150° fold angle), or a through-cut leaving a slanted cutting edge. The tool comes equipped with automatic identification, permitting different V-notch tools to be interchanged without manual adjustment procedures.</p> <p>Included with the tool is a package of five appropriate knife blades.</p> <p>Appropriate blades: TZ Blades</p>
<p>The Detachable Material Foot</p> <p>Sales code: 97AR630</p> 	<p>The detachable material foot is an optional item that can be a great help when setting up a toolhead with two different knife tools. It duplicates the hold-down effect of the material foot found in the center position of the FlexiHead, PowerHead, MultiCUT and MultiCut HP toolheads.</p> <p>The detachable material foot clips on to the bottom of the tool fixture and is a great help to keep the material down while cutting, also when extracting the knife from the material at the end of a cut without lifting the material.</p> <p>The detachable foot fits tool station 1 and 3 in the FlexiHead and tool station 1 in the PowerHead, MultiCUT and MultiCut HP.</p>




Knife blades for the XN and XL Series





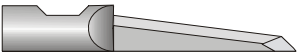



Standard blades

#	Product name Stock #	Length / edge angle	Application
1	BLD-SF186 Sales code: g42417444 	40.0mm 1.587" 21°	Widely used for corrugated samplemaking. Can be used for qualities up to and including DW when the guide pin is installed. Also used for FC but tip is quite brittle and the blade is subject to flexing.
10	BLD-SF110 Sales code: g42436063 	39.5mm 1.555" 23°	Good choice for folding carton. More durable than the ASR and cuts with less plough effect in the cut edges. Also suitable for varnish blankets in the MicroCut Tool.
4	BLD-SF177 Sales code: g42429795 	36.8mm 1.450" 39.5°	Used by many customers for FC samplemaking. Produces a nice cut in thin carton. Tip will last long, due to edge angle. Can also be used for chipboard. Good choice for cutting varnish blankets. It can be seated to the bottom of the knife adapter (in most cases).
5	BLD-SF184 Sales code: g42441840 	24,5mm .965" 32,5°	Good standard blade for folding carton, and other thin, compact materials such as polycarbonate and other synthetics. The SF184 is very rigid and will bend less than most other standard carbon steel blades. At the same time the grind angle gives nice cut line quality in folding carton. Max. cutting thickness: 6mm - ¼"
6	BLD-SF102 Sales code: g42411041 	47.5mm 1.870" 23°	Triple wall samplemaking. A near-equivalent to this blade is the Martor Solingen #28 blade.
41	BLD-TZ129 Sales code: g42435636 	53°	Super-trapezoid, deep-edged blade, used with the V-notch knife and the HD-knife tool. This blade is thicker and stiffer than standard trapezoid blades and will give a more accurate cut. Thickness 0.9mm - .035"
42	BLD-TZ192 Sales code: g42424374 	53°	Super-trapezoid, deep-edged blade, used with the V-notch knife and the HD-knife tool. This blade is thinner than the TZ129 blade and will give very good result used in fluted core board. Thickness 0.6mm - .024"


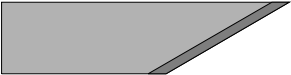



43	BLD-TZ511 (trapeze shaped) Sales code: g42448589 	53°	Trapezoid shaped blade for v-notching. Very good blade for V-notch cutting in tough materials such as Re-board, X-board and triple wall corrugated. Cuts materials up to about 17mm. Made from a special Tungsten Carbide alloy, to extend cutting cycles. Thickness 0.6mm - .024"
44	BLD-TZ512 (trapeze shaped) Sales code: g42448597 	53°	Very good blade for V-notch and straight cutting with the HD-knife tool in tough materials such as Re-board, X-board and triple wall corrugated. Cuts materials up to about 17mm. Made from a special Tungsten Carbide alloy, to extend lifetime. Thickness 0.9mm - .035"
	BLD-DF570 (trapeze shaped)  Sales code: g42455279	45°	Specially made blade for the VI45-16 V-notch insert tool. Works well in materials such as fluted core boards and triple wall corrugated. Cuts materials up to about 16mm. Made from a special Tungsten Carbide alloy, to extend lifetime. Thickness 0.9mm - .035"

Specially designed blades


#	Product name Stock #	Length / edge angle	Application
8	BLD-SF125 Sales code: g42416644 	45.5m m 1.800" 25°	For corrugated board up to and including TW. Precision ground edge. Made of High Speed Steel, which will last longer than conventional steel. Used by customers who need to cut corrugated with high recycle content, or those wanting longer blade lifetimes.
11	BLD-SF238 Sales code: g42423012 	39.5m m 1.555" 38°	For folding carton and other, high-precision applications with demand for long lifetime. Tungsten carbide steel with precision ground and polished edge, which handles softer, abrasive materials very well.
12	BLD-SF224 Sales code: g42423020 	39.5m m 1.555" 24°	For folding carton and other, high-precision applications with demand for long lifetime. Tungsten carbide steel with precision ground and polished edge. The last part of the tip is ground off, to prevent snapping.

13	BLD-TZ230 Sales code: g34061218 		Special trapezoid blade for the HD30 knife tool, designed for RE-board and similar material in thickness up to and including 30mm -1.18". Tungsten carbide steel material with precision ground edge.
Note: the following blades have a cylindrical shaft and need a special "SR6xxx" blade adapter (standard on the HiFrequency Knife Tool)			
14	BLD-SR6223 Sales code: g42437293 	39mm 1.535" 24°	Long-life knife blade, works well with most grades of corrugated board. Used in reciprocating knife tools. Tungsten carbide steel.
15	BLD-SR6224 Sales code: g42438135 	39mm 1.535" 24°	Similar to SR6223 but has better properties for recycled board. Tungsten carbide steel.
16	BLD-SR6310 Sales code: g42441626 	39mm 1.535" 11°	Gives nice results in thick and rigid paper-based materials, such as triple wall corrugated and fluted core boards, when used with the HiFrequency Knife Tool. Max cutting thickness is about 20mm – ¾"
17	BLD-SR6307 Sales code: g42441634 	39mm 1.535" 7°	Gives less over-cut than the SR6310 but is more slender and may give a less accurate cut in curves when cutting heavy board grades.
18	BLD-SR6303 Sales code: g42441642 	39mm 1.535" 3.5°	Good blade for 15 and 20mm foamboard in combination with the HiFrequency Knife Tool
19	BLD-SR6315 Sales code: g42449504 	39mm 1.535" 15°	Has shorter edge than SR6303, SR6307 and SR6310. At the same time more slender than SR6224 resulting in a good compromise between stability/strength when cutting fine details such as small arcs and overcuts. Max cutting depth is about 14mm or ½". Suited for materials such as soft foamboards (Kapa®) and plastic corrugated
20	BLD-SR6375  Sales code: g42447227	39mm 1.535" 3.5°	Good blade for cutting die ejection rubber in combination with the Long Stroke Knife Tool






Blades for gasket cutting

#	Product name Stock #	Length / edge angle	Application
21	BLD-SF420 Sales code: g42421974 	24.0mm .945" 3° / 27°	Specialty blade for cutting rubber gaskets. Tungsten carbide steel, precision ground edge. For high performance and long lifetime in rubber materials.
22	BL-SF310 BL-SF320 g42423855 g42423871 	38.2mm 1.500" 30°	These blades come in two qualities: Tungsten Carbide (TC) and CPM10V Extreme Wear Tool Steel (EWTS). They are specially designed blades for gasket cutting but may be useful for other applications, like corrugated samplemaking. The TC blade is well suited for cutting highly abrasive materials that are not really hard. It is 50 times tougher than an SF102 blade. The EWTS blade is 25 tougher than an SF102 blade and is more flexible than the TC blade. It is a good, versatile, high quality blade. Note: These blades are thicker than normal, which must be compensated for.
23	BLD-SF311 BLD-SF321 g42423863 g42423889 	38.2mm 1.500" 45°	
	BLD-SF312 (7,5mm with) g42447961 	38.2mm 1.500" 30°	
	BLD-SF313 (7,5mm with) g42447979 	38.2mm 1.500" 45°	

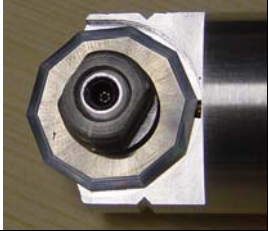
Blades for the Bevel knife tool

#	Product name Stock #	Length / edge angle	Application
	BLD-SF212 Sales code: g42443978 		A special Tungsten Carbide knife blade design that has been developed for optimal performance in the flexo plate materials.
	BLD-SF245 Sales code: g42455287		A special Tungsten Carbide knife blade for cutting V-notch folding lines in solid board carton.





Blades for the Rigid Material knife tool

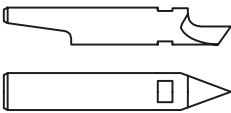
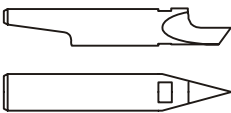
#	Product name Stock #	Length / edge angle	Application
	Knife Blade – BLD-DR8160 Sales code:g42447235 	2x 30°	Knife blade with 8mm cylindrical shaft for use with the RM (RigidMaterial) knife tool. Good blade for cutting in rigid materials such as different gasket materials Forex and solid carton board. Can cut up to about 5-6mm thick materials depending on the material quality. Similar to the blade above. The blunter angle reduces the risk for breaking the blade in tough materials, but gives more overcut with thicker materials
	Knife Blade – BLD-DR8180 Sales code:g42447284 	2x 40°	
	Knife Blade - BLD-DR8280A Sales code:g42452227 	2x 40°	Special tungsten carbide knife blade with an asymmetric edge, optimised for a nice cut ploughing all the burrs to one side. Requires that you can control the cutting direction. Good blade for cutting different plastic materials.
	Knife Blade - BLD-DR8210A Sales code:g42452235 	2x 50°	Special tungsten carbide knife blade with an asymmetric edge, optimised for a nice cut ploughing all the burrs to one side. Requires that you can control the cutting direction. Good blade for cutting different plastic materials.
	Knife Blade – BLD-SR8124 Sales code: g42450494 	1x24° length 40mm	Knife blade with 8mm cylindrical shaft for use with the RM (RigidMaterial) knife tool. Good blade for cutting in different plastic corrugated materials. Can cut up to about 10mm thick materials depending on the material quality. Nominal lag value is 4mm
	Knife Blade – BLD-SR8140 Sales code: g424555899	1x40° length 40mm	Knife blade with 8mm cylindrical shaft for use with the RM (RigidMaterial) knife tool. Good blade for cutting in different foam core materials. Can cut up to about 7mm thick materials depending on the material quality. Nominal lag value is 4mm

Blades for the RotaCut tool


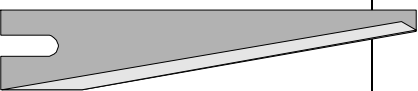
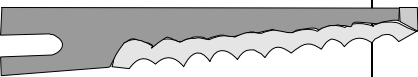
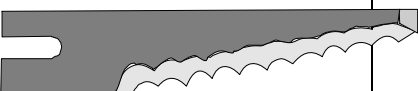

#	Product name Stock #	Length / edge angle	Application
	BLD-RC110 knife blades Sales code: g42444844 		A special 10 faceted knife blade that has been designed for use with the RotaCut tool.

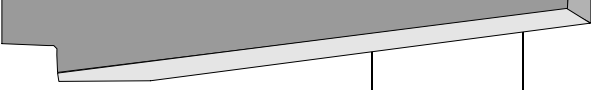

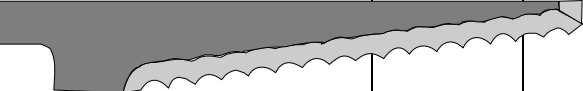

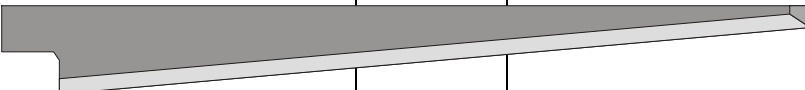
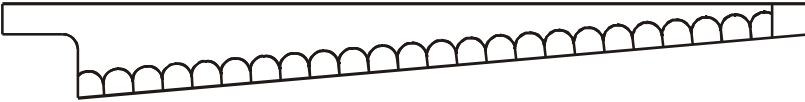
Specially designed blades for the sign/ SRG application

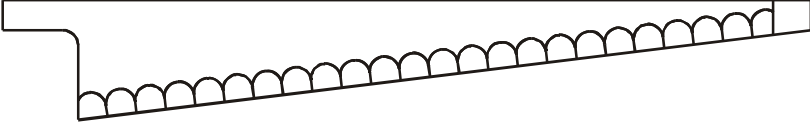
#	Product name Stock #	Length / edge angle	Application
26	BLD-DF212 Sales code: g42441196 	50mm 2" 2x 40°	General-purpose, double-sided, 80° sword knife blade for flexible materials. Used for through-cutting of paper, cardboard, vinyl, thin plastics, styrene, etc.
27	BLD-DF213 Sales code: g42441204 	50mm 2" 2x 30°	General-purpose, double-sided, 60° sword knife blade for flexible materials. Used for through-cutting of paper, cardboard, vinyl, thin plastics, styrene, etc.
30	BLD-SF216 Sales code: g42441212 	25.0mm 1" 35°	Single-edge blade for soft flexible materials. Used for through-cutting paper, vinyl, etc.
31	BLD-SF217 Sales code: g42441220 	25.0mm 1" 25°	Single-edge blade for soft flexible materials. Used for through-cutting paper, vinyl, etc. The more pointed edge reduces overcuts.

32	BLD-KC101 Sales code: g42438499 		General-purpose kiss-cutting blade for standard thickness adhesive foils. Its properties allow secure separation of foil and adhesive, to facilitate weeding.
33	BLD-KC102 Sales code: g42438507 		Sharper-edged blade for ticker, tougher adhesive foils, such as reflex foil.









Blades for foam and honeycomb paperboard, flat adapter type

#	Product name Stock #	Length / edge angle	Application
50	BLD-SF501 Sales code: g42423251 	54mm 2.125"	For foam cutting. Excellent general purpose foam knife - very sharp and durable.
51	BLD-SF502 Sales code: g42423269 	54mm 2.125"	For foam cutting. This blade has the same advantages as SF501. The more sloping edge allows for a little higher feed rate and improves cutting abilities in softer materials but will have a negative influence on quality in narrow curves.
52	BLD-SF503 Sales code: g42423277 	54mm 2.125"	Designed for cutting paper honeycomb material. Suitable also for some dense foam materials, which are vulnerable to melting. The serrated edge gives less friction between blade and material than a smooth edge and the blade gets less hot.
53	BLD-SF504 Sales code: g42423285 	54mm 2.125"	This blade has the same advantages as SF503. The more sloping edge allows for a little higher feed rate and improves cutting abilities in softer materials but will have a negative influence on quality in narrow curves.
60	BLD-SF505 Sales code: g42423293 	78mm 3.070"	Excellent general-purpose knife - very sharp and durable.

#	Product name Stock #	Length / edge angle	Application
61	BLD-SF506 Sales code: g42423301	78mm 3.070"	This blade has the same advantages as SF505. The more sloping edge allows for a little higher feed rate but will have a negative influence on cut quality in narrow curves.
			
62	BLD-SF507 Sales code: g42423319	78mm 3.070"	Designed for cutting paper honeycomb material. Suitable also for some dense foam materials that are vulnerable to melting. The serrated edge gives less friction between blade and material than a smooth edge and the blade gets less hot.
			
63	BLD-SF508 Sales code: g42423327	78mm 3.070"	This blade has the same advantages as SF503. The more sloping edge allows for a little higher feed rate and improves cutting abilities in softer materials but will have a negative influence on quality in narrow curves.
			
70	BLD-SF509 Sales code: g34012716	107 mm 4.210" 2°	Specialty blade for the FoamHead. Excellent general-purpose foam knife - very sharp and durable. Cuts up to 86mm [3 3/8"] thick material
			
71	BLD-SF510 Sales code: g34012708	107 mm 4.210" 5°	Specialty blade for the FoamHead. Excellent general-purpose foam knife - very sharp and durable. The more sloping edge allows for a little higher feed rate and may improve cutting abilities in some softer materials but its edge angle will have negative influence on quality in narrow curves. Cuts up to 86mm [3 3/8"] material
			
73	BLD-SF512 Sales code: g34019489	107mm 4.210" 5°	Honeycomb and foam knife w. serrated edge - very sharp and durable. Cuts up to 86mm [3 3/8"] thick material
			

#	Product name Stock #	Length / edge angle	Application
74	BLD-SF513 Sales code: g34019471	107mm 4.210" 7°	Honeycomb and foam knife w. serrated edge - very sharp and durable. Cuts up to 86mm [3 ³ / ₈ "] thick material
			

Blades for foam and honeycomb paperboard, VHM (cylindrical) adapter

BLD-SR6311 Sales code: g42443101	Blade for max. 32mm material thickness. Fits both FoamHead and FoamKnife with suitable SR-adaptors. 2.5° cutting angle enables very fine details with little over-cut in foam qualities with good cutting properties. Pointed tip for use with felt underlays.	
BLD-SR6312 Sales code: g42443093	Blade for max. 32mm material thickness. Fits both FoamHead and FoamKnife with suitable SR-adaptors. 6° cutting angle enables fine details in a several different foam qualities. Pointed tip for use with felt underlays.	
BLD-SR6313 Sales code: g42443085	Blade for max. 32mm material thickness. Fits both FoamHead and FoamKnife with suitable SR-adaptors. 8° cutting angle enables fine details in a wider range of foam qualities, as well as 30mm Re-board. Flattened tip to increase cutting speed and protect PVC cutting underlays.	
BLD-SR6521 Sales code: g42444877	Blade for max. 55mm material thickness. Fits the FoamHead with suitable SR-adaptors. 2.5° cutting angle enables very fine details with little over-cut in foam qualities with good cutting properties. Pointed tip for use with felt underlays.	
BLD-SR6522 Sales code: g42444885	Blade for max. 55mm material thickness. Fits the FoamHead with suitable SR-adaptors. 3.7° cutting angle enables fine cutting details. Pointed tip for use with felt underlays.	
BLD-SR6523 Sales code: g42444893	Blade for max. 55mm material thickness. Fits the FoamHead with suitable SR-adaptors. 3.7° cutting angle enables fine cutting details. Flattened tip to increase cutting speed and protect PVC cutting underlays.	
BLD-SR6831 Sales code: g42444919	Blade for max. 80mm material thickness. Fits the FoamHead with suitable SR-adaptors. 2.5° cutting angle enables very fine cutting details, minimal overcut and largely eliminates conical holes. Pointed tip for use with felt underlays.	
BLD-SR6832 Sales code: g42444927	Blade for max. 80mm material thickness. Fits the FoamHead with suitable SR-adaptors. 1.5° cutting angle enables very fine cutting details, minimal overcut and largely eliminates conical holes. Flattened tip to increase cutting speed and protect PVC cutting underlays.	

*

The blades marked with this symbol may benefit from a guide pin that can be installed in the blade adapter. The guide pin ensures constant seating depth when changing blades. Spare guide pins are included in the tool kit. The pin should be fixed using appropriate glue, like Lock-Tite #603. For removing the pin use a heat source (like a hot-air blower) to release the glue.

**

The blades marked with this symbol will enter the blade adapter but the seating depth must be adjusted 'manually', as there is no hole for a guide pin that will match the length of this blade.

Tip: To maintain a constant blade seating depth for a specific blade when no guide pin hole fits, take a piece of flat material of equal or less thickness than the blade and glue it in place in the knife adapter. A piece of shimming steel is fine for this purpose. Take care to use glue that can be removed to enable another blade type or seating depth later.

Steel qualities used in knife blades:























Blades with no material specification in the above list are made of conventional (razor blade quality) carbon steel.

High Speed Steel (HSS) - is a quality widely used for tooling purposes, a good example of usage would be drill bits. The benefit of HSS is very good shock resistance and much better wear resistance than conventional razor blade steel, although not as wear resistant as harder steel qualities.

Tungsten Carbide - With optimum grade selection, sub micron grain size carbide can be sharpened to a razor edge without the inherent brittleness frequently associated with conventional carbide. Although not as shock-resistant as steel, carbide is extremely wear-resistant, with hardness equivalent to Rc 75-80. Blade life of at least 50X conventional blade steels can be expected if chipping and breakage is avoided.

Extreme Wear Tool Steels - represent the epitome of wear-resistance available from steel. Notable steels in this family include A-7, CPM10V and PGK/Vasco-Wear. Although very expensive on a per pound basis and difficult to shape, these steels will often yield blade life as much as 25X that of conventional razor blade steels. Unfortunately, none of these steels has particularly good shock resistance compared to conventional tool steels, but they are superior to carbide or ceramic in this regard.

Crease profiles for XN and XL tools

	
Corrugated crease tool, for Ø26mm wheels Sales code: 97AR624	Folding carton crease tool, for Ø15mm wheels Sales code: 97AR638
 1 point Sales code: g32532129	 1,5 point Sales code: g34057588
 2 point Sales code: g32524837	 2 point Sales code: g32533291
 3 point Sales code: g32529075	 3 point Sales code: g34030858
 4 point Sales code: g32536542	 4 point Sales code: g34030908
 6 point Sales code: g32522880	 Double edge, 1 mm spacing Sales code: g32535999
 8 point Sales code: g32529240	 Double edge, 1.4 mm spacing Sales code: g32551301
 10 point Sales code: g32529091	 Double edge, 1.8 mm spacing Sales code: g32551327
 12 point Sales code: g32529117	 Double edge μ -flute, 1.25 mm spacing Sales code: g32555021
 14 point Sales code: g32547051	 Double edge E-flute, 2.2 mm spacing Sales code: g32555005
 Triple wall Sales code: g32537706	
 Crush, R=15 Sales code: g32524811	
 Double edge, 1 point (0.6 mm spacing) Sales code: g32546640	

The "Crusher" tool

A comment often made about corrugated prototypes produced on sample tables is that they are too perfect, which can set false expectations with customers. The customer of the packaging company is dissatisfied with the supplied product and proving this dissatisfaction by making a direct comparison between the approved (signed-off) prototype and the production die cut.



The "Crusher tool" is a solution to this dilemma by enabling production of cut edges that look like actual die strikes. This tool makes it possible to add crush areas to the design to duplicate the normal crush inherent in the die cutting process. The 'crusher' tool can also be used to flatten parts of a sample in order for slots and inserts to work well.

The "Crusher tool" is really just another creasing tool with a specially designed crease wheel profile. The 'Job Setup' functionality of X-Guide lets the application of the 'Crush' happen automatically, and also limited to certain board types, if desired.

Double-edge crease wheels

These are also called 'test-wheels'. Their purpose is to create a 'false' folding bulge so the design can be folded up with a certain precision, without the use of a crease matrix.

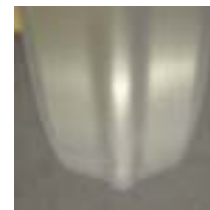
When the test-wheel is used the carton board is cut and creased from the reverse side.

The spacing between the rims is what determines the 'pointage', i.e. a spacing of about 1.4mm will act as a two point rule when the carton has a thickness of around 0.4mm [.016"].

PowerHead crease profiles

PowerHead crease wheel - U-shape, 150mm [6"] diameter.
For double- and triple wall of good quality.

Sales code: g34007096



PowerHead crease wheel - V-shape, 150mm [6"] diameter.
For recycled board with brittle liners.

Sales code: g34007906



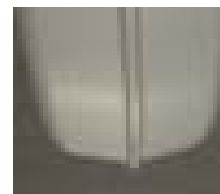
PowerHead crease wheel - 4-point, 150mm [6"] diameter.
For solid board (carton), chipboard, etc.

Sales code: g34010306



PowerHead crease wheel - 6-point, 150mm [6"] diameter.
For single wall corrugated

Sales code: g34023234



Crease wheel adapters

Adapters for using 'normal' sized crease wheels in the PowerHead heavy-duty crease position are available as an option. The benefit of this adapter is that it frees up one tool station in situations where customers who own a PowerHead would like to use a smaller sized crease wheel for work involving E- and Micro flutes.

It will also allow creasing of plastic corrugated with smaller wheels and the heavy crease power, which normally has a good effect on defeating the 'memory' of the plastic material.

The standard Ø26mm crease wheels will fit the adapter, with no need for resetting the height reference when the adapter replaces the Ø150mm crease wheel.



A different version of the adapter is available for the Ø15mm crease wheels.

FC tool kit and PowerHead

Please note that the configuration of the Folding Carton Tool Kit does not include a crease tool insert. In the instances where a customer would like to order a FC Tool Kit for a PowerHead, a crease tool insert, or a crease wheel adapter for the 'big wheel' position, must be added to the order to provide folding carton crease functionality.

Crease Blades

For creasing thin, synthetic materials such as polypropylene and polyethylene (PET)

These crease tips scribe into the material and provide a more distinct fold line than a wheel, due to the smaller impact area. The blades fit the Tang. controlled knife tool #212-213 (97AR832)

Crease Blade 0,5 mm for Tang. controlled knife tool #212-213

Sales code: g42442764



Crease Blade 1,0 mm for Tang. controlled knife tool #212-213	
Sales code: g42442772	

Plotting Tools

Ballpoint Pen Tool

Sales code: 97AR628



The Ballpoint Pen Tool is prepared for Fisher Space Pen refills. Multi-colored Ballpoint cartridges are available in line weights, fine, medium and bold; for high-speed plots on paper, Mylar foil or directly onto dieboard.

Liquid Ink Tool

Sales code: 97AR067



The Liquid Ink Tool has been designed to meet high demands in line quality on Mylar foils, producing lines with uniform width, optimal resolution and superior contrast. It uses the KOH-I-NOOR Rapidograph / Rapidoplot cartridges. These cartridges come in two interchangeable versions, disposable or refillable.

The disposable cartridges are available in the following line weights:
0.35mm

.014"

Please observe that, in order to achieve the best possible line quality and maximum pen tip lifetime, it is very important to ensure that the table top surface is free from all particles that will create 'humps' in the Mylar drawing area. We recommend that the tabletop surface is either vacuum cleaned or wiped off with a moist cloth prior to Mylar plots.

To prevent the pen tip insert from drying out it has to be capped when not in continuous use. It is a good idea to 'start' the pen tip insert by touching it with a little piece of Mylar just before plotting starts.

The Liquid Ink Tool comes with one disposable 0.35mm ink cartridge.

Fibertip Tool

Sales code: 97AR639



The Fiber Tip Tool option provides drawing capabilities on materials such as clear vinyl, which normally cannot be marked with ballpoint or liquid ink pens.

It uses a standard Staedtler Lumocolor fiber tip drawing pens, which comes in different line weights.

Line thickness will be less consistent than with the liquid ink cartridges due to the properties of the relatively soft fiber tip.

The Fiber Tip Tool comes with 8 multi-colored pens included.