



MULTIPURPOSE SINGLE FLUTE TOOLS FOR ALUMINIUM ALLOYS

Single flute tools with upcut.

These tools are a real all-rounder. Their best use is for milling aluminum and its alloys. With single flute, they create large chips. For high feed rates and cutting quality in non-ferrous metals (aluminum, brass), also suitable for plastic, wood, PVC, MDF, acrylics, etc.

During milling of aluminum, it is necessary to use misting unit - we recommend technical spirit or special cutting fluids along with COMAGRAV spray cooling system. During work with alcohol observe safety and handling, avoid open fire!

Code	PR/PN x DR x CDN	
MP310	1,0 / 3 x 4 x 38mm	
MP320	2,0 / 3 x 6 x 38mm	
MP330	3,0 / 3 x 11 x 38mm	
MP440	4,0 / 4 x 14 x 50mm	
MP44022	4,0 / 4 x 22 x 50mm	
MP6306	3,0 / 6 x 6 x 50mm	
MP63011	3,0 / 6 x 11 x 50mm	
MP650	5,0 / 6 x 16 x 50mm	
MP65022	5,0 / 6 x 22 x 50mm	
MP660	6,0 / 6 x 22 x 50mm	
MP66032	6,0 / 6 x 32 x 64mm	
MP880	8,0 / 8 x 22 x 64mm	
MP88042	8,0 / 8 x 42 x 100mm	
MP1010	10,0 / 10 x 32 x 76mm	

BALANCED MULTIPURPOSE SINGLE FLUTE TOOLS FOR ALUMINIUM ALLOYS

Try these tools with brand new design! They are recommended for use with **high speed spindles (30.000 RPM and more)**, where is very important care of expensive bearings. These balanced tools provides non-compromising cutting edge quality in high speeds.

Code	PR/PN x DR x CDN	
MP660B	6,0 / 6 x 12 x 50mm	
MP66022B	6,0 / 6 x 22 x 58mm	



ACRYL SINGLE FLUTE TOOLS
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.

Single flute tools with upcut.

These tools were developed for high speeds in acrylic and plastic. With single flute, they create large chips. For high feed rates and cutting quality in non-metalic materials, wood, PVC, MDF, etc. Do not use for aluminium.

Code	PR/PN x DR x CDN	
A310	1,0 / 3 x 4 x 30mm	
A315	1,5 / 3 x 6 x 30mm	
A320	2,0 / 3 x 8 x 30mm	
A32011	2,0 / 3 x 11 x 38mm	
A330	3,0 / 3 x 11 x 38mm	
A440	4,0 / 4 x 14 x 50mm	
A650	5,0 / 6 x 16 x 50mm	
A660	6,0 / 6 x 22 x 50mm	
A66032	6,0 / 6 x 32 x 64mm	
A880	8,0 / 8 x 22 x 64mm	
A88032	8,0 / 8 x 32 x 64mm	
A1010	10,0 / 10 x 32 x 76mm	
A101055	10,0 / 10 x 55 x 100mm	

BALANCED ACRYL SINGLE FLUTE TOOLS
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.

Try these tools with brand new design! They are recommended for use with **high speed spindles (30.000 RPM and more)**, where is very important care of expensive bearings. These balanced tools provides non-compromising cutting edge quality in high speeds.

Code	PR/PN x DR x CDN	
A660B	6,0 / 6 x 22 x 58mm	
A66032B	6,0 / 6 x 32 x 64mm	
A880B	8,0 / 8 x 22 x 64mm	
A88032B	8,0 / 8 x 32 x 64mm	
A88042B	8,0 / 8 x 42 x 76mm	
A101032B	10,0 / 10 x 32 x 76mm	
A101042B	10,0 / 10 x 42 x 76mm	



BELIN SINGLE FLUTE TOOLS
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.

Single flute tools with upcut.

These tools were developed for high speeds in acrylic and plastic. With single flute, they create large chips. For high feed rates and cutting quality in non-metallic materials, wood, PVC, MDF, etc. Do not use for aluminium.

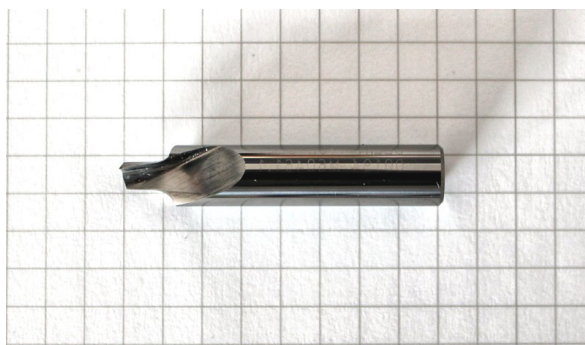
Code	PR/PN x DR x CDN	
B330	3,0 / 3 x 12 x 40mm	
B440	4,0 / 4 x 12 x 50mm	
B44030	4,0 / 4 x 30 x 70mm	
B660	6,0 / 6 x 22 x 60mm	
B66038	6,0 / 6 x 38 x 80mm	
B880	8,0 / 8 x 22 x 60mm	
B88038	8,0 / 8 x 38 x 80mm	

BELIN SINGLE FLUTE TOOLS ALU
FOR ALUMINIUM

Single flute tools with upcut.

These tools were developed for high speeds in aluminium and its alloys.

Code	PR/PN x DR x CDN	
BA660	6,0 / 6 x 15 x 60mm	
BA880	8,0 / 8 x 20 x 60mm	



BELIN SINGLE FLUTE TOOLS RADIUS
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.

Single flute tools with upcut and radius on top.

These tools were developed for high speeds in acrylic and plastic. It creates 2mm radius at surface of the material. Bottom part of this tool is classic single flute with 4mm diameter and length of cut 4,3mm.

Code	PR/PN x DR x CDN	
B840R2	4,0 / 8 x 4,3 x 40mm	



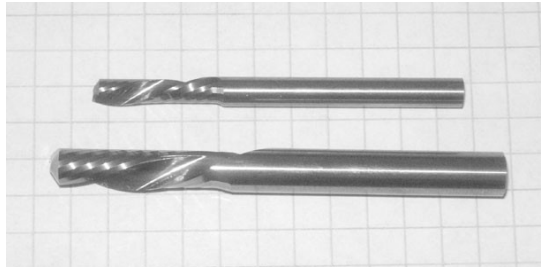
SINGLE FLUTE TOOLS FOR PLASTIC
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.

Single flute tools with upcut.

These tools were developed for high speeds in acrylic and plastic. With single flute, they create large chips. For high feed rates and cutting quality in non-metalic materials, wood, PVC, MDF, etc.

Made of hard K10 material. Do not use for aluminium.

Code	PR/PN x DR x CDN	
PL330	3,0 / 3 x 11 x 40mm	
PL440	4,0 / 4 x 14 x 50mm	
PL660	6,0 / 6 x 22 x 60mm	
PL880	8,0 / 8 x 22 x 70mm	



**SINGLE FLUTE DOWNCUT TOOLS FOR PLASTIC
FOR PLEXIGLASS, PLASTIC, WOOD, ETC.**

Single flute tools with downcut.

During cutting of thin plastic sheets, there might be problem to ensure proper vacuum holddown. These tools do not tend to lift material. Chips are left in the routed groove.

Use ramp to enter the material with this tool.

Code	PR/PN x DR x CDN	
D330	3,0 / 3 x 12 x 50mm	
D440	4,0 / 4 x 15 x 50mm	
D660	6,0 / 6 x 22 x 60mm	
D880	8,0 / 8 x 22 x 70mm	



COMPRESSION TOOLS
FOR PLASTIC, LAMINATED SHEETS, WOOD, ETC.

Compression tools with combined cutting direction up and down.

These tools were developed for high cutting quality of both top and bottom layer of laminated plywood and similar sheet materials.

For high feed rates and cutting quality in wood, non-metallic materials, PVC, MDF, etc.

Code	PR/PN x DR x CDN	Price in EUR
K330	3,0 / 3 x 12 x 50mm	
K440	4,0 / 4 x 15 x 50mm	
K660	6,0 / 6 x 17 x 50mm	
K880	8,0 / 8 x 22 x 70mm	
K1010	10,0 / 10 x 32 x 70mm	

Comagrav TOOLS Knives/Knife Blades Router Bits & Routing Cutters



TWO-FLUTED TOOL WITH STRAIGHT CUT
FOR PLASTIC, WOODEN SHEETS, MANUAL MACHINES, ETC.

Double flute tools with straight cut.

These tools were developed for high speeds in plastic, MDF, wood, laminated and similar. Straight cutting edge prevents lifting of chips and material.

Suitable also for cutting out vacuum formed plastics.

Code	PR/PN x DR x CDN	
R330	3,0 / 3 x 10 x 50mm	
R440	4,0 / 4 x 10 x 50mm	
R660	6,0 / 6 x 20 x 60mm	
R880	8,0 / 8 x 25 x 70mm	

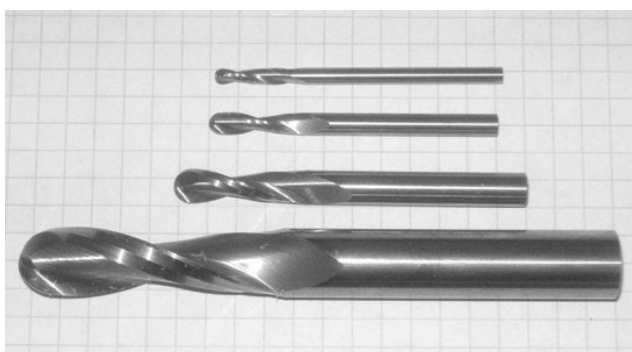


THREE-FLUTED UPCUT TOOL
FOR PLASTIC, WOOD, FOAMS, ETC.

Triple flute tools with upcut.

These tools were developed for high speeds in wood, plastic, foams, MDF, laminated and similar. Three cutting edges means extreme high speeds and perfect edge quality.

Code	PR/PN x DR x CDN	
U880.32	8,0 / 8 x 32 x 70mm	
U1212.32	12,0 / 12 x 32 x 80mm	
U1212.52	12,0 / 12 x 52 x 100mm	



TWO-FLUTED BALLNOSE TOOL

Double flute ballnose tools with upcut.

These tools are used for three-dimensional surfaces. Mostly usable for modelling, also for engraving to acrylic sheets ala neon.

Code	PR/PN x DR x CDN	
BN3	3,0 / 3 x 12 x 50mm	
BN4	4,0 / 4 x 15 x 50mm	
BN6	6,0 / 6 x 22 x 60mm	
BN12	12,0 / 12 x 42 x 100mm	

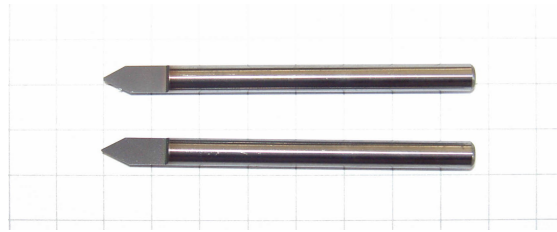
Comagrav TOOLS Knives/Knife Blades Router Bits & Routing Cutters



ENGRAVING HALFROUND TOOLS

Microcarbide engraving tools made in USA. One of the best engraving tools in this attractive price range. Its geometry is designed for long lifetime in non-ferrous metals (brass, aluminium). They are suitable also for plastics.

Code	CRU x PS	PN x CDN	
G33001	30° x 0,1mm	3 x 38mm	
G33002	30° x 0,2mm	3 x 38mm	
G33003	30° x 0,3mm	3 x 38mm	
G33004	30° x 0,4mm	3 x 38mm	
G33006	30° x 0,6mm	3 x 38mm	
G34502	45° x 0,2mm	3 x 38mm	
G34504	45° x 0,4mm	3 x 38mm	
G36003	60° x 0,3mm	3 x 38mm	
G43002	30° x 0,2mm	4 x 50mm	
G43004	30° x 0,4mm	4 x 50mm	
G44506	45° x 0,6mm	4 x 50mm	
G44510	45° x 1,0mm	4 x 50mm	
G44515	45° x 1,5mm	4 x 50mm	
G46001	60° x 0,1mm	4 x 50mm	
G46004	60° x 0,4mm	4 x 50mm	



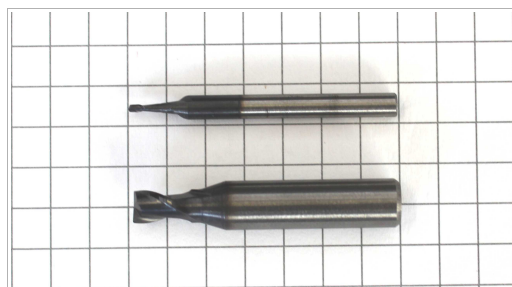
ENGRAVING HALFROUND TOOLS FOR STEEL AND STAINLESS

For steel and hard steel we offer two kinds of engraving tools:

1. Antares (GS) 2. Nanograver (GN)

We recommend these tools for engraving of steel and stainless steel. Nanograver tool is coated and made in perfect halving tolerance $-0,000\text{mm} +0,005\text{mm}$. It is especially good when used in high speed spindles reaching 50.000 RPM and more.

Code	CRU x PS	PN x CDN	
GS36002	60° x 0,2mm	3 x 38mm	
GS64502	45° x 0,2mm	6 x 50mm	
GN36002	60° x 0,2mm	3 x 38mm	
GN36004	60° x 0,4mm	3 x 38mm	



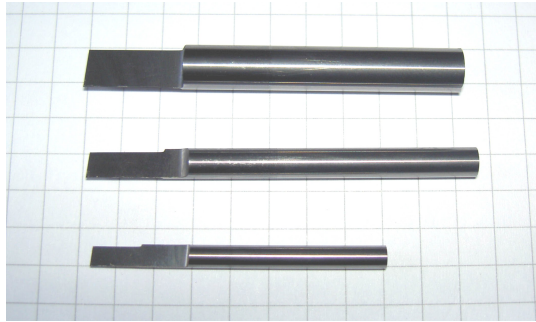
TWO-FLUTED COATED TOOLS FOR STEEL AND STAINLESS STEEL

Top quality cutting tools for steel and stainless steel / Resopal.

The long life of the cutter ensures a small radius to 0,2mm.

During milling it is necessary to use misting unit, we recommend oil or emoliet.

Code	PR/PN x DR x CDN
N310	1,0 / 3 x 2 x 35mm
N315	1,0 / 3 x 3 x 35mm
N320	2,0 / 3 x 4 x 35mm
N330	3,0 / 3 x 5 x 35mm
N620	2,0 / 6 x 4 x 40mm
N630	3,0 / 6 x 5 x 40mm
N640	4,0 / 6 x 5 x 40mm



SINGLEFLUTE TOOL PROFILING

Single flute tools with straight cut.

These tools were developed for cutting and engraving of plastics. Straight cutting edge prevents lifting of chips and material.

Code	PR/PN x DR x CDN	
P330	3,0 / 3 x 6 x 38mm	
P440	4,0 / 4 x 8 x 50mm	
P660	6,0 / 6 x 12 x 50mm	

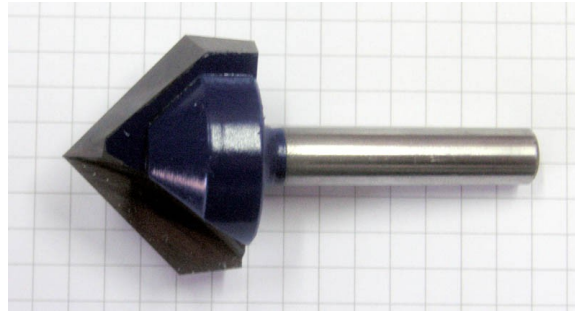


BOTHSIDED STOCK

This is unfinished tool for your grinder COMAC CU2. You can use both sides to create your own engraving tool, because both sides are halved.

Code	PR/PN x DR x CDN	
NP3	3 x 11 x 50mm	
NP4	4 x 13 x 50mm	
NP6	6 x 13 x 50mm	
NP8	8 x 13 x 50mm	

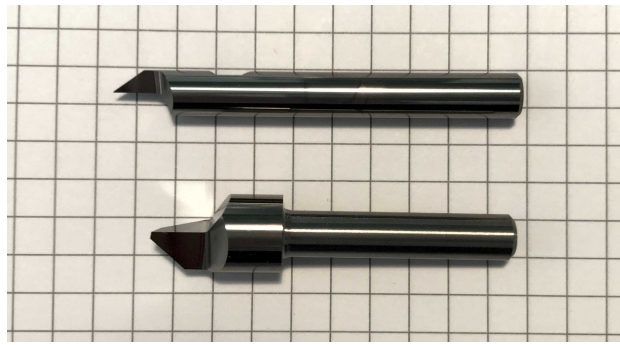
Do you not still have a tool grinder? Ask us for an offer.



V-BIT CUTTER

This carbide tool is designed for creation of 3D effects in wood, MDF and plastics. Requires special 3D software with V-bit carving function. (ie. Vectric Aspire). Cutting angle is 90°, 120° or 150°. 5 mm thick layer of carbide allows many regrinding which brings long lifetime.

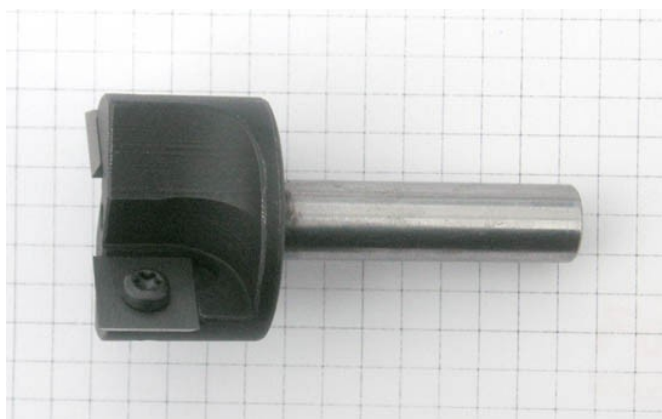
Code	PR/PN x DR x CDN	
V9016	16/6 x 14 x 55mm	
V9032	32/8 x 26 x 65mm	
V12032	32/8 x 26 x 65mm	
V15032	32/8 x 26 x 65mm	



TOOL FOR GROOVES IN SANDWICH (ALUCOBOND)

This carbide tool was designed for extreme high speeds in sandwich materials. Suitable for bending purposes. Tool is balanced for high speed spindles.

Code	CRU x PS	PR/PN x CDN	
CB90	90° x 1,8mm	10/10 x 50mm	
- for dibond 3mm, 4mm			
CB90-6	90° x 1,8mm	10/6 x 45mm	
- for dibond 3mm, 4mm			
CB92-6	92° x 0,2mm	6/6 x 50mm	
- for dibond 3mm			
CB210 90-6	90° x 1,8mm	10/6 x 50mm	
- for dibond 3mm, 4mm			
CB213 90-6	90° x 1,8mm	13/6 x 50mm	
- for dibond 3mm, 4mm, 5mm, 6mm			



PLANING TOOL*

This special tool is designed for planing of large areas. 32 mm wide trail ensures quick planing even on 2x4 m machine. The tool contains 2 exchangeable plates. Next ones could be ordered with code VD1212.

Code	PR/PN x DR x CDN	
P10320	32/10 x 12 x 60mm	
D1212	12 x 12 x 1,5mm	



DIAMOND POLISHING TOOL FOR PLEXIGLASS*

These tools were designed for polishing of acrylic sheets. The result is fantastic. Tool is made of monocrystalline or natural diamond. In standard we supply it in 3 lengths of edge. 4mm is recommended for sheets up to 3mm thickness, 6mm for 5mm thickness and 11mm is perfect for sheets up to 10mm.

Monocrystalline diamonds are for users who need to polish often and/or require ultimate edge quality.

Polycrystalline are intended for users who need to polish sporadically and/or need to polish a thick material for 1 pass.

We also offer diamond for polishing faceted holes and edges with 45 degrees with code LDV90860. Length of diamond is 6mm in this case.

Monocrystalline

Code	PR/PN x DR x CDN	
LD6404	4/6 x 4 x 60mm	
LD8606	6/8 x 6 x 60mm	
LD10811	8/10 x 11 x 60mm	
LDV90860	8 x 6 x 60mm	

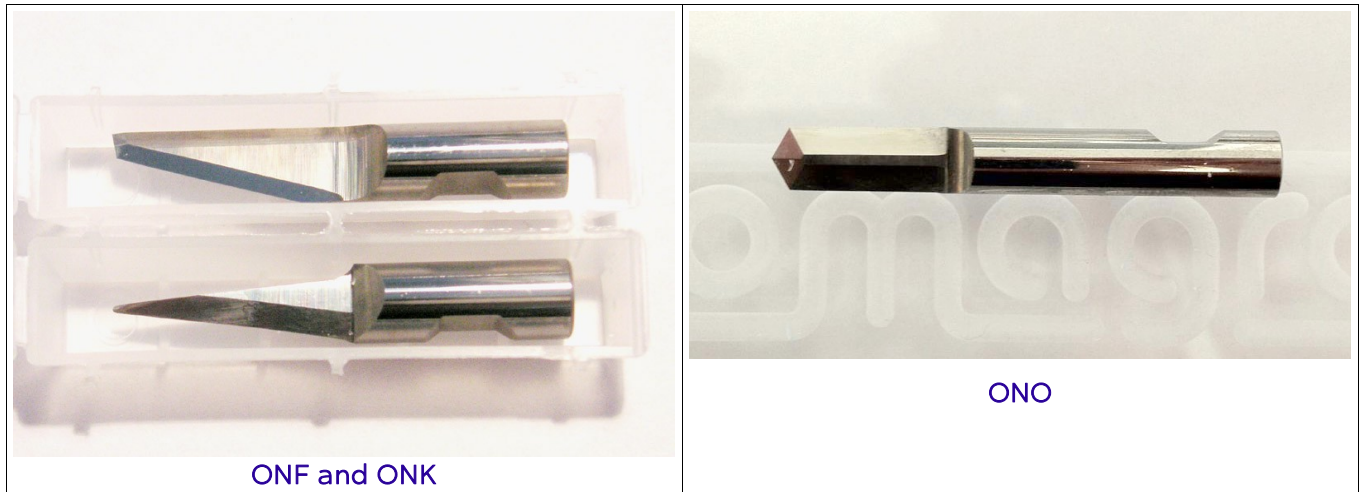
Polycrystalline

Code	PR/PN x DR x CDN	
LDP14	6/6 x 14 x 50 x 22mm	
LDP22	8/8 x 22 x 60 x 33mm	
LDP33	8/10 x 33 x 75 x 43mm	



LDV90860

These tools are not calculated into volume discount!



ROUNDED KNIVES FOR OSCILLATION CUTTING Ø6mm

We offer these knives for oscillating cutting of corrugated cardboards, cardboards, fibrous materials, rubber, etc.

- ONF** - knives for cutting fibrous materials. The knife is flat on the bottom, so it cuts all fibres.
- ONK** - knives for cutting corrugated cardboard, rubber and hard materials. The tool has small radius on the bottom to prevent unexpected wear.
- ONO** - knives for cutting corrugated cardboard, foam, wool and other materials in high speeds.

These knives are usable for oscillating cutting heads COMAGRAV, primary designed for pneumatic head. Using special adapter, they can be used also in electric oscillation unit.
Suitable also for Aristo plotters.

Code	PN x DR x CDN x UB	
ONK6	6 x 6 x 36 mm	
ONK10	6 x 10 x 36mm	
ONK15	6 x 15 x 36mm	
ONK25	6 x 25 x 46mm	
ONK30	6 x 30 x 55mm	
ONK50	6 x 50 x 68mm	
ONK65	6 x 65 x 81mm	
ONK90	6 x 90 x 110mm	
ONK110	6 x 110 x 118mm	
ONF10	6 x 10 x 36mm x 68°	
ONF15	6 x 15 x 36mm x 73°	
ONF20	6 x 20 x 39mm x 89°	
ONF30	6 x 30 x 46mm x 82°	
ONF35	6 x 35 x 55mm x 86°	
ONF40	6 x 40 x 57mm x 87°	
ONF60	6 x 60 x 83mm x 86,8°	
ONO15	6 x 15 x 36mm	
ONO25	6 x 25 x 56mm	
ONO40	6 x 40 x 56mm	
ONO65	6 x 65 x 81mm	

FLAT KNIVES FOR OSCILLATION CUTTING

High quality carbide knives for cutting of corrugated cardboard, carton, foam, rubber, fabrics, etc. Knives are suitable also for Zünd plotters.

	Type	
	FN8 - for cutting soft materials, corrugated, PE foils, etc. Cutting length 8mm. For use with electric oscillating knife. Cuts also without oscillation. Knife thickness 0,63mm.	
	FN12 - for cutting PE foils, leather, etc. Cutting length 12mm. For use with electric oscillating knife. Cuts also without oscillation. Knife thickness 0,63mm.	
	FNS10 - for cutting corrugated cardboard to 10mm, rubber, etc. Cutting length 10mm. For use with electric oscillating knife. Knife thickness 0,63mm.	
	FNS13 - for cutting corrugated cardboard to 13mm, rubber, etc. Cutting length 13mm. For use with electric oscillating knife. Knife thickness 0,63mm.	
	FNS16 - for cutting sandwich panels to 16mm, etc. Cutting length 16mm. For use with electric oscillating knife. Knife thickness 0,63mm.	
	FNF10 - for cutting fabrics, textile, etc. Cutting length 10mm. For use with electric oscillating knife. Knife thickness 0,63mm.	






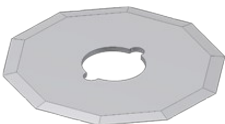
FLAT KNIVES FOR DRAG CUTTING

Knives are designed for cutting without oscillation.
Knives are suitable also for Zünd and ESKO plotters.

	Type	
	E10 - fix knife for cutting thin and hard materials. For use with U1 holder for flat knives. Works without oscillation. Knife thickness 1,45mm.	
	E11 - fix knife for cutting thin and hard materials. For use with U1 holder for flat knives. Works without oscillation. Knife thickness 1,45mm.	
	E44 - same type as E11, but with additional cutting edge for fibrous materials (carpets). For use with U1 holder for flat knives. Works without oscillation. Knife thickness 1,45mm.	
	E46 - fix knife for cutting thin and hard materials. For use with U1 holder for flat knives. Works without oscillation. Knife thickness 1,45mm.	
	E70 - flat knife for V-cut. Knife thickness 0,63mm.	
	E71 - flat knife for V-cut. Knife thickness 1mm.	

ROTARY KNIVES FOR TEXTILE CUTTING

Knives are designed for cutting rotations in modules for cutting fabrics and textiles.
 Knives are suitable also for Zünd plotters.

	Type	
	CD25 - rotating knife for cutting fibrous materials, banners, etc. For use with motorised cutting disc. Cutting diameter 25mm.	
	CD28 - rotating knife for cutting fibrous materials, banners, etc. For use with motorised cutting disc. Cutting diameter 28mm.	
	CD32 - rotating knife for cutting fibrous materials, banners, etc. For use with motorised cutting disc. Cutting diameter 32mm.	
	CD66 - rotating knife for cutting fibrous materials, banners, etc. For use with motorised cutting disc. Cutting diameter 66mm.	
	CD160-10 - 10-sided rotating knife (HSS) for cutting fibrous insulating materials. Special knife for MCD160 module. Cutting diameter 160mm.	
	CD160-20 - 20-sided rotating knife (HSS) for cutting fibrous insulating materials. Special knife for MCD160 module. Cutting diameter 160mm.	