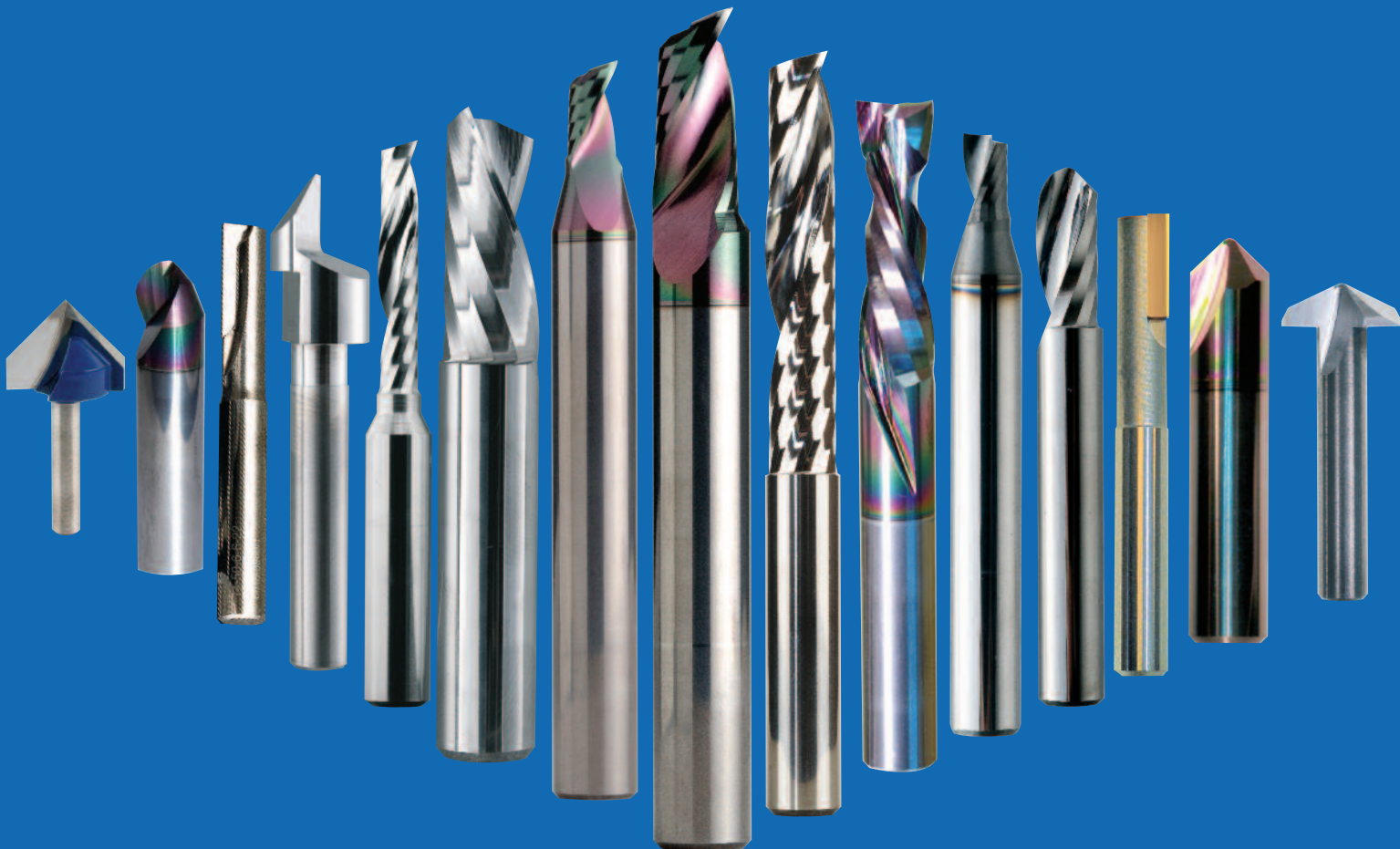


Innovative cutting tools

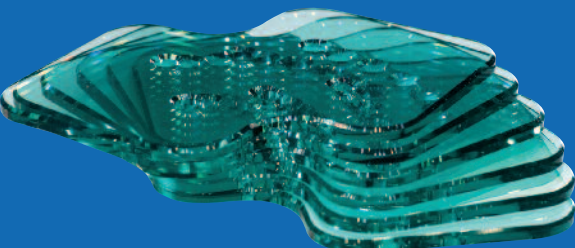
The professional's first choice



2024



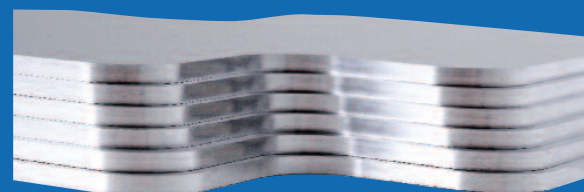
ACRYLIC



ACM



ALUMINIUM



For more information and videos, please visit www.crown-norge.no

Crown Norge, the perfect partner you can trust. Precise and high quality tooling designed to fully optimise your machine's cutting performance. The innovation, knowledge and experience to significantly improve your manufacturing process.

Reduce cost, labour and machine time with the revolutionary range of tooling designed to meet the requirements of the professional machine operator of today. The geometry of these tools is specifically designed to maximise the surface finish, with high feed rates and tool longevity, to truly revolutionise your business.

Achieve consistent quality. Burr free edges with a high gloss finish, giving you the advantage to retain customers, reduce cost and eliminate hand finishing. Machine operators will be safe in the knowledge that every Crown Norge tool they use is of the same consistent high quality, tolerances and longevity as the last.

High speed routing.

The SUPERIOR range of tooling has been extended to include new tool dimensions. The revolutionary coating on these tools allow for super fast dry routing of aluminium, ACM (DIBOND®), ACM mineral core (ALUCOBOND® A2), TRESPA® (HPL) ++. No need for coolant or oil as the coating provides a 60% reduction in friction compared to standard DLC coated tools. In addition, the hardened coating prolongs the cutting edge, thus dramatically increasing tool longevity. The SUPERIOR range of tools provides an exceptional finish.



B1-ACM 10,0/10-10-50 MP-SUP-B



The best selection of single fluted router tools.

With the machine operator in mind and a keen focus on optimisation of the tooling performance, Crown Norge has an exceptional range.

The new ACRYLIC GENERATION 2 (A GEN2) acrylic range of tools provides a near polished edge on clear acrylic in a single pass. The dedicated, wider range of "ACRYLIC" (A) tools provides additional sharpness compared to the MP range for a higher gloss finish on Acrylic.

The "Multi-Purpose" (MP) range covers a wider cross section of materials.



Polished acrylic

with high quality MCD, MCVD and PCD diamond tools, which provide an unsurpassed high gloss finish. Hand finishing and flame polishing are eliminated with the extensive range of dimensions, which match each material thickness perfectly.

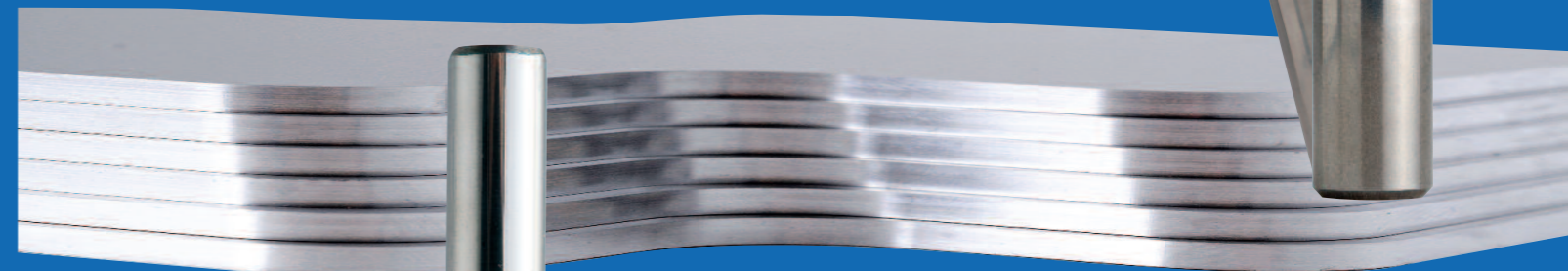
MP-SUP. (Multi-Purpose SUPERIOR coated)

Single flute routing tools with revolutionary coating for dry or wet cutting of aluminium, ACM, ACM mineral core, TRESPA® (HPL) ++. With 60% less friction and exceptional longevity, the tools perform perfectly in hard and difficult materials.

Videos on: www.crown-norge.no

Art.no. UP-CUT	d	D	ℓ	L
S1-3,0/3-6-38 MP-SUP.	3,0	3	6	38
S1-4,0/4-6-50 MP-SUP.	4,0	4	6	50
S1-2,0/6-6-50 MP-SUP.	2,0	6	6	50
S1-3,0/6-6-50 MP-SUP.	3,0	6	6	50
S1-4,0/6-6-50 MP-SUP.	4,0	6	6	50
S1-4,0/6-12-50 MP-SUP.	4,0	6	12	50
S1-5,0/6-12-50 MP-SUP.	5,0	6	12	50
S1-6,0/6-12-50 MP-SUP.	6,0	6	12	50
S1-6,0/6-12-50 MP-SUP-B	6,0	6	12	50
S1-6,0/6-22-50 MP-SUP.	6,0	6	22	50
S1-6,0/6-22-58 MP-SUP-B	6,0	6	22	58
S1-8,0/8-12-64 MP-SUP-B	8,0	8	12	64
S1-8,0/8-22-64 MP-SUP-B	8,0	8	22	64
S1-8,0/8-32-76 MP-SUP-B	8,0	8	32	76
S1-8,0/8-42-76 MP-SUP-B	8,0	8	42	76
S1-10,0/10-22-64 MP-SUP-B	10,0	10	22	64
S1-10,0/10-32-76 MP-SUP-B	10,0	10	32	76
S1-10,0/10-42-76 MP-SUP-B	10,0	10	42	76
S1-10,0/10-55-100 MP-SUP-B	10,0	10	55	100

B=Balanced



MP-DLC (Multi-Purpose)

Multi-purpose routing tools with DLC coating for dry or wet cutting of aluminium.

Art.no. UP-CUT	d	D	ℓ	L
S1-2,0/6-6-50 MP - DLC	2,0	6	6	50
S1-3,0/6-6-50 MP - DLC	3,0	6	6	50
S1-4,0/6-6-50 MP - DLC	4,0	6	6	50
S1-4,0/6-12-50 MP - DLC	4,0	6	12	50
S1-5,0/6-12-50 MP - DLC	5,0	6	12	50
S1-6,0/6-12-50 MP - DLC	6,0	6	12	50
S1-6,0/6-12-50 MP - DLC - B	6,0	6	12	50
S1-6,0/6-22-50 MP - DLC	6,0	6	22	50
S1-6,0/6-22-58 MP - DLC - B	6,0	6	22	58
S1-8,0/8-22-64 MP - DLC - B	8,0	8	22	64

B=Balanced

- S1 = Single flute routing tools
- d = Cutting diameter
- D = Shank diameter
- ℓ = Length of cut
- L = Total length
- MP= Multi-Purpose
- B = Balanced



All tools manufactured from premium grade tungsten carbide.
DIBOND® is a Registered Trademark of 3A Composites.


TRESPA® is a Registered Trademark of Trespa International B.V.

"ACRYLIC" SINGLE FLUTE ROUTING TOOLS. Razor sharp, polished for acrylic, plastics, foam and wood.

UP-CUT

Art.no. UP-CUT	d	D	ℓ	L
S1-1,0/3-4-30 A	1,0	3	4	30
S1-1,5/3-6-30 A	1,5	3	6	30
S1-2,0/3-6-30 A	2,0	3	6	30
S1-2,0/3-8-30 A	2,0	3	8	30
S1-2,0/3-11-38 A	2,0	3	11	38
S1-2,5/3-6-30 A	2,5	3	6	30
S1-2,5/3-11-38 A	2,5	3	11	38
S1-3,0/3-6-30 A	3,0	3	6	30
S1-3,0/3-11-38 A	3,0	3	11	38
S1-3,0/3-22-50 A	3,0	3	22	50
S1-2,0/4-6-50 A	2,0	4	6	50
S1-3,0/4-11-50 A	3,0	4	11	50
S1-4,0/4-8-50 A	4,0	4	8	50
S1-4,0/4-12-50 A	4,0	4	12	50
S1-4,0/4-14-50 A	4,0	4	14	50
S1-4,0/4-22-50 A	4,0	4	22	50
S1-4,0/4-32-64 A	4,0	4	32	64
S1-2,0/6-6-50 A	2,0	6	6	50
S1-3,0/6-6-50 A	3,0	6	6	50
S1-3,0/6-11-50 A	3,0	6	11	50
S1-3,0/6-14-50 A	3,0	6	14	50
S1-3,0/6-22-60 A	3,0	6	22	60
S1-4,0/6-8-50 A	4,0	6	8	50
S1-4,0/6-12-50 A	4,0	6	12	50
S1-4,0/6-14-50 A	4,0	6	14	50
S1-4,0/6-22-50 A	4,0	6	22	50
S1-5,0/6-12-50 A	5,0	6	12	50
S1-5,0/6-16-50 A	5,0	6	16	50
S1-5,0/6-22-50 A	5,0	6	22	50
S1-6,0/6-12-50 A	6,0	6	12	50
S1-6,0/6-22-50 A	6,0	6	22	50
S1-6,0/6-32-64 A	6,0	6	32	64
S1-6,0/6-32-100 A	6,0	6	32	100
S1-6,0/6-42-76 A	6,0	6	42	76
S1-8,0/8-22-64 A	8,0	8	22	64
S1-8,0/8-32-64 A	8,0	8	32	64
S1-8,0/8-42-76 A	8,0	8	42	76
S1-8,0/8-42-100 A	8,0	8	42	100
S1-8,0/8-55-100 A	8,0	8	55	100
S1-10,0/10-22-64 A	10,0	10	22	64
S1-10,0/10-32-76 A	10,0	10	32	76
S1-10,0/10-42-76 A	10,0	10	42	76
S1-10,0/10-55-100 A	10,0	10	55	100

DOWN-CUT



Art.no. DOWN-CUT	d	D	ℓ	L
S1-1,0/3-3-38 A-DC	1,0	3	3	38
S1-1,5/3-4-38 A-DC	1,5	3	4	38
S1-2,0/3-6-38 A-DC	2,0	3	6	38
S1-3,0/3-6-38 A-DC	3,0	3	6	38
S1-3,0/3-11-38 A-DC	3,0	3	11	38
S1-4,0/4-12-50 A-DC	4,0	4	12	50
S1-4,0/4-14-50 A-DC	4,0	4	14	50
S1-2,0/6-6-50 A-DC	2,0	6	6	50
S1-3,0/6-6-50 A-DC	3,0	6	6	50
S1-3,0/6-11-50 A-DC	3,0	6	11	50
S1-4,0/6-8-50 A-DC	4,0	6	8	50
S1-4,0/6-12-50 A-DC	4,0	6	12	50
S1-4,0/6-14-50 A-DC	4,0	6	14	50
S1-5,0/6-12-50 A-DC	5,0	6	12	50
S1-5,0/6-16-60 A-DC	5,0	6	16	50
S1-5,0/6-22-60 A-DC	5,0	6	22	60
S1-6,0/6-12-50 A-DC	6,0	6	12	50
S1-6,0/6-22-60 A-DC	6,0	6	22	60
S1-8,0/8-22-64 A-DC	8,0	8	22	64
S1-8,0/8-32-70 A-DC	8,0	8	32	70
S1-10,0/10-22-64 A-DC	10,0	10	22	64

S1 = Single flute routing tools
 d = Cutting diameter
 D = Shank diameter
 ℓ = Length of cut
 L = Total length
 A = Acrylic
 B = Balanced
 DC = Down-cut

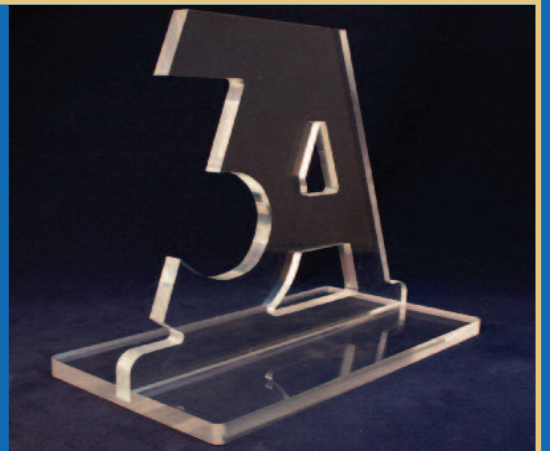
GEN2

ACRYLIC SINGLE FLUTE ROUTING TOOLS GENERATION 2 (GEN2)

In 1996 Crown Norge introduced the "Multi-Purpose" single flute routing tools. These tools exceeded all expectations and achieved great success. Our customers experienced significant improvements in both surface finish and efficiency in production.

In 2001 Crown Norge introduced the single flute "ACRYLIC" routing tools, which are sharper and designed to give an optimal surface finish in acrylic and other plastic materials. In further trials, these tools have also proven to give excellent results in materials such as wood and softer materials such as foam.

We are now proud to introduce the "ACRYLIC" GEN 2" range of tools. After a long period of development and testing in several countries, Crown Norge can now offer eight dimensions which are designed to match the material thicknesses most commonly used. These new tools give a polished and clear surface finish, close to what is achieved when using diamond polishing tools on clear acrylic. The new "ACRYLIC" GEN 2" range have been tested on many different machine types with spindle speeds ranging from 18,000 to 60,000 RPM.



"ACRYLIC UP-CUT" GEN2

Art.no.	d	D	ℓ	L
S1-3,0/6-7-50 A-GEN2	3,0	6	7	50
S1-3,0/6-11-50 A-GEN2	3,0	6	11	50
S1-4,0/6-8-50 A-GEN2	4,0	6	8	50
S1-4,0/6-12-50 A-GEN2	4,0	6	12	50
S1-6,0/6-12-50 A-GEN2	6,0	6	12	50
S1-6,0/6-12-50 A-GEN2-B	6,0	6	12	50
S1-6,0/6-22-50 A-GEN2	6,0	6	22	50
S1-6,0/6-22-58 A-GEN2-B	6,0	6	22	58

BALANCED single flute routing tools

RESULT:

- Improved productivity
- Better surface finish
- Reduced spindle repair costs
- Extended tool life
- Less noise
- Less vibration

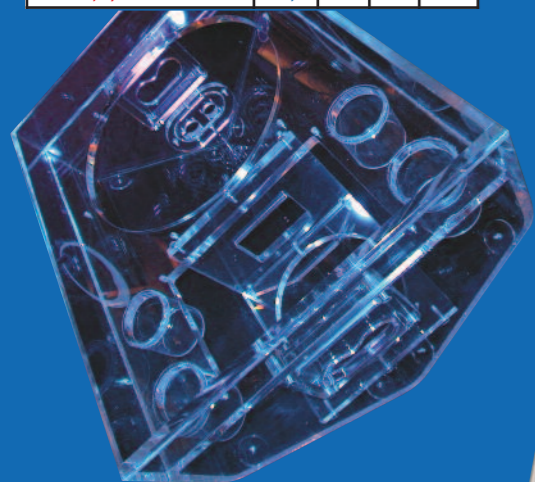
Balanced routing tools should always be used in high frequency spindles. In all spindles, tools Ø 8.0 mm and larger should be balanced.

Art.no. UP-CUT	d	D	ℓ	L
S1-5,0/6-12-50 A-B	5,0	6	12	50
S1-5,0/6-22-58 A-B	5,0	6	22	58
S1-6,0/6-12-50 A-B	6,0	6	12	50
S1-6,0/6-22-58 A-B	6,0	6	22	58
S1-6,0/6-32-64 A-B	6,0	6	32	64
S1-6,0/6-42-76 A-B	6,0	6	42	76
S1-8,0/8-22-64 A-B	8,0	8	22	64
S1-8,0/8-32-64 A-B	8,0	8	32	64
S1-8,0/8-42-76 A-B	8,0	8	42	76
S1-8,0/8-55-100 A-B	8,0	8	55	100
S1-10,0/10-22-64 A-B	10,0	10	22	64
S1-10,0/10-32-76 A-B	10,0	10	32	76
S1-10,0/10-42-76 A-B	10,0	10	42	76
S1-10,0/10-55-100 A-B	10,0	10	55	100

The balancing flute also improves the chip flow.



Same cutting geometry as on our standard "Acrylic" routing tools

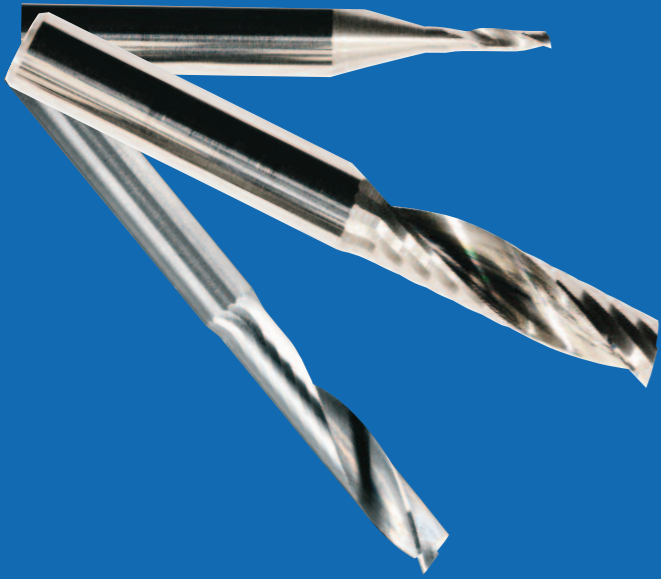


Speaker monitor used at 6 Nobel Peace Prize concerts
 Produced by: plexx.no



"MULTI-PURPOSE" SINGLE FLUTE ROUTING TOOLS

for aluminium, ACM,
brass, plastics, MDF etc...



UP-CUT

Art.no. UP-CUT	d	D	ℓ	L
S1-1,0/3-4-38 MP	1,0	3	4	38
S1-1,5/3-6-38 MP	1,5	3	6	38
S1-2,0/3-6-38 MP	2,0	3	6	38
S1-3,0/3-6-38 MP	3,0	3	6	38
S1-3,0/3-11-38 MP	3,0	3	11	38
S1-2,0/4-6-50 MP	2,0	4	6	50
S1-3,0/4-6-50 MP	3,0	4	6	50
S1-3,0/4-11-50 MP	3,0	4	11	50
S1-4,0/4-6-50 MP	4,0	4	6	50
S1-4,0/4-12-50 MP	4,0	4	12	50
S1-4,0/4-14-50 MP	4,0	4	14	50
S1-4,0/4-22-50 MP	4,0	4	22	50
S1-2,0/4,365-4-165 MP	2,0	4,365	4	165
S1-3,0/4,365-4-165 MP	3,0	4,365	4	165
S1-2,0/6-6-50 MP	2,0	6	6	50
S1-2,5/6-6-50 MP	2,5	6	6	50
S1-3,0/6-6-50 MP	3,0	6	6	50
S1-3,0/6-11-50 MP	3,0	6	11	50
S1-3,0/6-14-50 MP	3,0	6	14	50
S1-3,5/6-12-50 MP	3,5	6	12	50
S1-4,0/6-6-50 MP	4,0	6	6	50
S1-4,0/6-12-50 MP	4,0	6	12	50
S1-4,0/6-14-50 MP	4,0	6	14	50
S1-4,0/6-22-50 MP	4,0	6	22	50
S1-5,0/6-12-50 MP	5,0	6	12	50
S1-5,0/6-16-50 MP	5,0	6	16	50
S1-5,0/6-22-50 MP	5,0	6	22	50
S1-6,0/6-12-50 MP	6,0	6	12	50
S1-6,0/6-22-50 MP	6,0	6	22	50
S1-6,0/6-32-64 MP	6,0	6	32	64
S1-6,0/6-32-100 MP	6,0	6	32	100
S1-8,0/8-22-64 MP	8,0	8	22	64
S1-8,0/8-32-64 MP	8,0	8	32	64
S1-8,0/8-42-76 MP	8,0	8	42	76
S1-8,0/8-42-100 MP	8,0	8	42	100
S1-10,0/10-22-64 MP	10,0	10	22	64
S1-10,0/10-32-76 MP	10,0	10	32	76
S1-10,0/10-42-76 MP	10,0	10	42	76
S1-10,0/10-55-100 MP	10,0	10	55	100



S1 = Single flute routing tools
d = Cutting diameter
D = Shank diameter
ℓ = Length of cut
L = Total length
MP= Multi-Purpose
B = Balanced
DC = Down-cut

Performs better.
Lasts longer.

DOWN-CUT



Art.no. DOWN-CUT	d	D	ℓ	L
S1-1,0/3-2-38 MP-DC	1,0	3	2	38
S1-1,5/3-3-38 MP-DC	1,5	3	3	38
S1-2,0/3-4-38 MP-DC	2,0	3	4	38
S1-3,0/3-6-38 MP-DC	3,0	3	6	38
S1-3,0/3-11-38 MP-DC	3,0	3	11	38
S1-4,0/4-12-50 MP-DC	4,0	4	12	50
S1-2,0/6-4-50 MP-DC	2,0	6	4	50
S1-3,0/6-6-50 MP-DC	3,0	6	6	50
S1-3,0/6-11-50 MP-DC	3,0	6	11	50
S1-4,0/6-8-50 MP-DC	4,0	6	8	50
S1-4,0/6-12-50 MP-DC	4,0	6	12	50
S1-5,0/6-12-50 MP-DC	5,0	6	12	50
S1-5,0/6-22-60 MP-DC	5,0	6	22	60
S1-6,0/6-12-50 MP-DC	6,0	6	12	50
S1-6,0/6-22-60 MP-DC	6,0	6	22	60
S1-8,0/8-22-64 MP-DC	8,0	8	22	64
S1-8,0/8-32-70 MP-DC	8,0	8	32	70
S1-10,0/10-22-64 MP-DC	10,0	10	22	64

From small to large scale manufacturing,
the Crown Norge range of tools perform perfectly



BALANCED
single flute
routing tools

Art.no. UP-CUT	d	D	ℓ	L
S1-5,0/6-12-50 MP-B	5,0	6	12	50
S1-5,0/6-22-58 MP-B	5,0	6	22	58
S1-6,0/6-12-50 MP-B	6,0	6	12	50
S1-6,0/6-22-58 MP-B	6,0	6	22	58
S1-6,0/6-32-64 MP-B	6,0	6	32	64
S1-8,0/8-22-64 MP-B	8,0	8	22	64
S1-8,0/8-32-64 MP-B	8,0	8	32	64
S1-8,0/8-42-76 MP-B	8,0	8	42	76
S1-10,0/10-22-64 MP-B	10,0	10	22	64
S1-10,0/10-32-76 MP-B	10,0	10	32	76
S1-10,0/10-42-76 MP-B	10,0	10	42	76
S1-10,0/10-55-100 MP-B	10,0	10	55	100

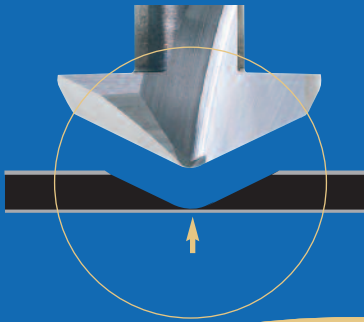
Balanced routing tools should
always be used in high frequency
spindles. In all spindles, tools
Ø 8.0 mm and larger should be
balanced.



V grooving ACM

30 m/min!

SOLID CARBIDE • BALANCED



Rounded tip
for more precise bending.

90° - 120° - 135°

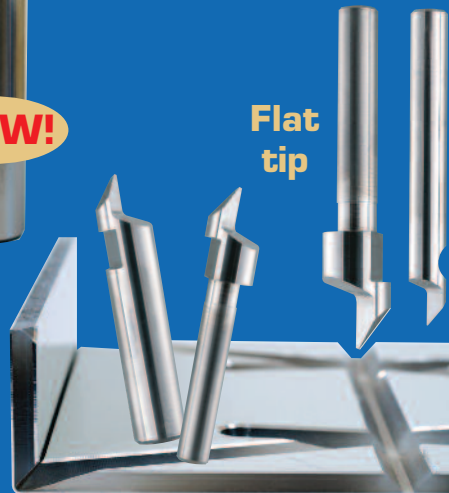


NEW!

NEW!

Flat tip

Also excellent for acrylic, plastics and wood.

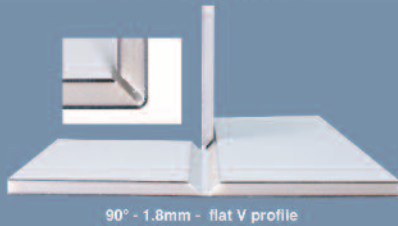
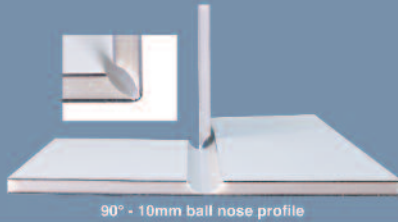
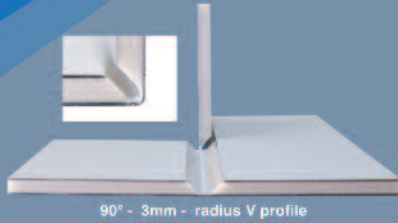
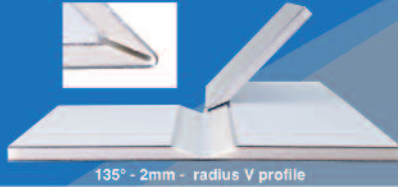
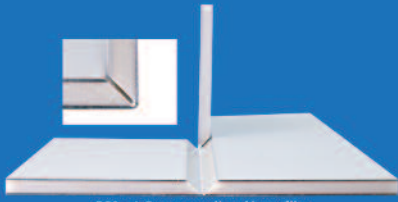


Art.no. ACM routing tools	V	d	D	L	X	FLAT TIP	ROUNDED TIP	For maximum material thickness			
								3mm	4mm	5mm	6mm
ACM 6,0/6-50-92° *	92°	6,0	6	50	0.2	•		•			
ACM 10,0/6-45-92° * *	92°	10,0	6	45	1.8	•		•	•		
ACM 10,0/10-45-92° * *	92°	10,0	10	45	1.8	•		•	•		
B2-ACM 10,0/6-50-92° *	92°	10,0	6	50	1.8		•	•	•		
B2-ACM 10,0/10-50-92° *	92°	10,0	10	50	1.8		•	•	•		
B2-ACM 10,0/10-50-90° *	90°	10,0	10	50	3.0		•	•	•		
B2-ACM 13,0/6-50-92° *	92°	13,0	6	50	1.8		•	•	•	•	
B2-ACM 11,5/6-50-120° *	120°	11,5	6	50	1.8		•	•			
B2-ACM 11,5/8-50-120° *	120°	11,5	8	50	1.8		•	•			
B2-ACM 15,0/6-50-120° *	120°	15,0	6	50	1.8		•	•	•		
B2-ACM 15,5/6-50-135° *	135°	15,5	6	50	1.8		•	•			
B2-ACM 15,5/8-50-135° *	135°	15,5	8	50	1.8		•	•			
B2-ACM 20,5/8-50-135° *	135°	20,5	8	50	1.8		•	•	•		
B2-ACM 21,0/8-50-135° *	135°	21,0	8	50	2.0		•	•	•		

B = Ball nose
2 = 2 flute

ACM = Aluminium Composite Material
* = Also in stock with DLC coating
* = Also in stock with SUPERIOR coating
* = Only available with SUPERIOR coating

Folding Tools



Fold Profile	Bend Point	ACM, FR & Solid Aluminium	Mineral Core A2
	Centre	B2-ACM 10.0/10-10-50 92° Sup Also available on 6mm shank Max material thickness = 4mm	
	Centre	B2-ACM 21.008-50 135° Sup Max material thickness = 4mm	B2-ACM 21.008-50 135° PCD Polycrystalline Diamond Max material thickness = 4mm
	Centre	B2-ACM 10.0/10-10-50 90° Sup Max material thickness = 4mm	B1-ACM 10.0/10-10-50 90° PCD Polycrystalline Diamond Max material thickness = 4mm
	Centre	B1-10.0/10-10-50 MP-B Sup Balanced Max material thickness = 4mm	B2-ACM 10.0/10-10-50 PCD Polycrystalline Diamond Max material thickness = 4mm
	Across 1.8mm	ACM 10.0/10-10-45-52 Sup ACM 10.0/10-10-45-52 DLC Also available on 6mm shank Max material thickness = 4mm	



PCD Routing tools developed for mineral core ACM

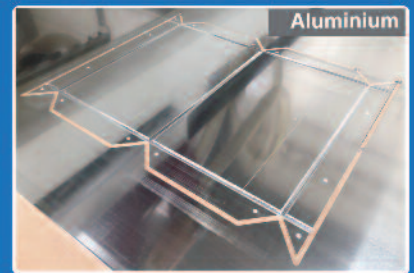
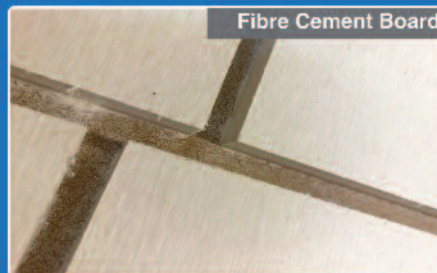
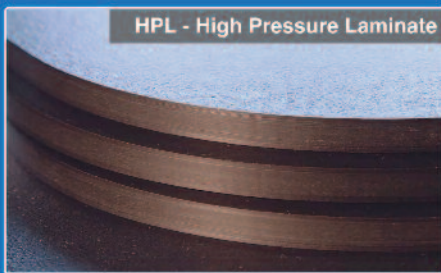
Amazing results in FR, A1 & A2



2 flute, coated routing tools for stainless/hardened steel.

r = radius

Art. no. 2 FLUTE	d	D	L	r
S2-1.5/3-3-35	1.5	3	35	0.2
S2-2.0/3-4-35	2.0	3	35	0.2
S2-3.0/3-5-35	3.0	3	35	0.2
S2-1.0/6-2-40	1.0	6	40	0.1
S2-1.5/6-3-40	1.5	6	40	0.2
S2-2.0/6-4-40	2.0	6	40	0.2
S2-3.0/6-5-40	3.0	6	40	0.2
S2-4.0/6-5-40	4.0	6	40	0.2



Mineral Core A2

Max material thickness 8mm

S1-6.0/6-8-50 PCD Mineral Core

Polycrystalline Diamond

Cutting Ø 6mm

Fibre Cement Board

Max material thickness 14mm

S1-6.0/6-14-50 PCD

Polycrystalline Diamond

Cutting Ø 6mm

ACM, FR, HPL & Solid Aluminium

S1-3.0/6-6-50 MP Superior

Cutting Ø 3mm

S1-4.0/6-6-50 MP Superior

Cutting Ø 4mm

S1-5.0/6-12-50 MP Superior

Cutting Ø 5mm

S1-6.0/6-12-50 MP Superior

Cutting Ø 6mm

DIAMOND POLISHING TOOLS FOR ACRYLIC

Designed for clear cast or extruded acrylic, these tools give a superior polished surface finish when used with the correct machine. We recommend using a high end, rigid CNC router with a strong vacuum hold down and good extraction to avoid excessive vibration.

BALANCED for 60,000 RPM

MCD (Monocrystalline)

MCVD (Mono chemical vapor deposition)

Art.no.	ℓ	L	d	D	L3
MCD ℓ4 - L50 - d4 - D6	4	50	4	6	13
MCD ℓ6 - L50 - d6 - D6	6	50	6	6	15
MCVD ℓ7 - L50 - d6 - D6	7	50	6	6	17
MCVD ℓ8 - L50 - d6 - D6	8	50	6	6	17
MCVD ℓ11 - L50 - d6 - D6	11	50	6	6	23
MCVD ℓ11 - L60 - d6 - D8	11	60	6	8	23
MCVD ℓ12 - L50 - d6 - D6 *	12	50	6	6	23
MCVD ℓ12 - L60 - d6 - D8 *	12	60	6	8	23
MCVD ℓ14 - L50 - d6 - D6	14	50	6	6	23
MCVD ℓ14 - L60 - d6 - D8	14	60	6	8	27
MCVD ℓ17 - L60 - d8 - D8 *	17	60	8	8	27
MCVD ℓ22 - L60 - d8 - D8	22	60	8	8	34
MCVD ℓ27,4 - L76 - d10 - D10	27,4	76	10	10	35
MCD Chamfering tool 45° (Total 90°)	6	50		6	
MCD Chamfering tool 45° (Total 90°)	6	60		8	
MCD Engraving tool 30° (Total 60°) Tip size 0,4mm	3	50		6	
MCD Chamfering-/engraving tool 45° (Total 90°) Tip size 0,4mm	6	50		6	



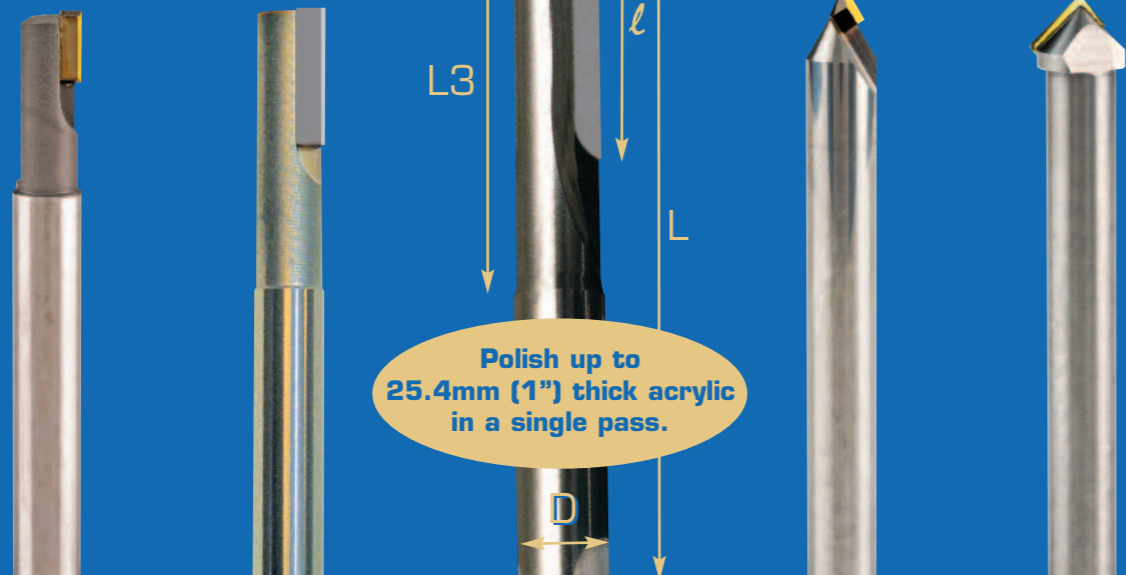
Generates no tension in the material

Glass clear surface finish in acrylic.



* Not in stock. Delivery time 4-6 weeks.

The MCD and MCVD tools achieve the same quality of polishing and tool life in clear acrylics.



Polish up to 25.4mm (1") thick acrylic in a single pass.

PCD (Polycrystalline)

Art.no.	ℓ	L	d	D	L3
PCD ℓ14 - L50 - d6 - D6	14	50	6	6	22
PCD ℓ22 - L60 - d8 - D8	22	60	8	8	33
PCD ℓ33 - L75 - d8 - D10	33	75	8	10	43

Lengths of cut PCD:
14-22-33 mm



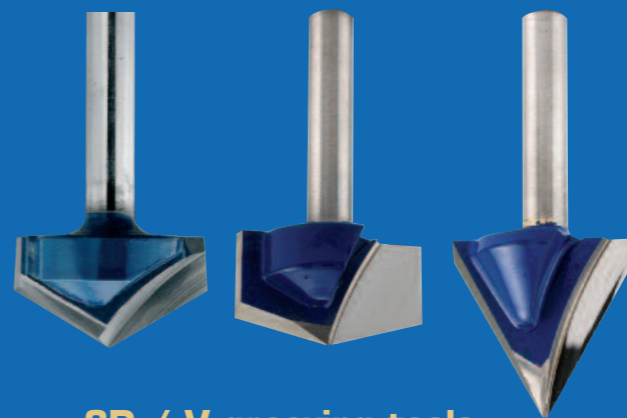
Single flute BALL NOSE routing tools for wood, acrylic, plastics and rubber.

Art.no. BALL NOSE	d	D	ℓ	L
b1-2,0/3-8-50-A	2,0	3	8	50
b1-3,0/3-11-50-A	3,0	3	11	50
b1-4,0/4-12-75-A	4,0	4	12	75
b1-5,0/6-12-60-A	5,0	6	12	60
b1-6,0/6-12-80-A	6,0	6	12	80
b1-6,0/6-22-80-A	6,0	6	22	80
b1-8,0/8-22-80-A	8,0	8	22	80
b1-10,0/10-22-80-A	10,0	10	22	80



Solid carbide, 2 flute routing tools with negative radius for rounded corners. Excellent for acrylic, plastics and wood.

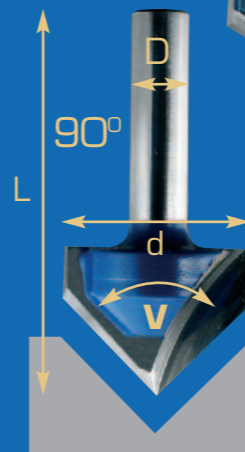
Art.no.	d	D	L	r	X
NR2 10,0/6	10	6	50	4.1	1.8



3D / V grooving tools

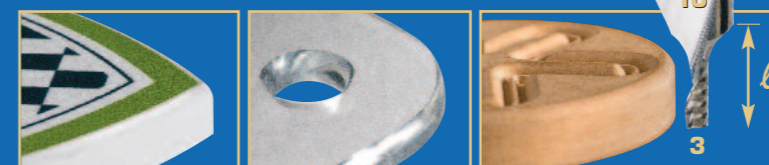
for plastics/wood/MDF. Solide carbide core, 5 mm thick. Very stable. Extremely long life.

Art.no. V grooving	V	d	D	ℓ	L
3D-32/8-60°	60°	32	8	28	72
3D-16/6-90°	90°	16	6	8	55
3D-16/8-90°	90°	16	8	8	55
3D-32/8-90°	90°	32	8	16	65
3D-32/12-90°	90°	32	12	16	65
3D-32/8-120°	120°	32	8	10	58
3D-32/8-150°	150°	32	8	5	58



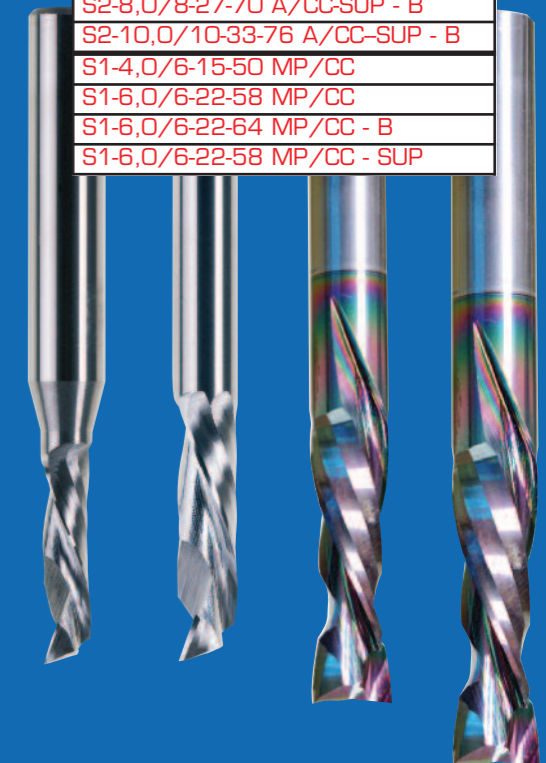
"ROUND & ROUT"

ℓ 5.2 - 10.2 - 13.0 mm
Balanced for 60,000 RPM
Cutting lengths matched to 5 mm, 10 mm and 12,7 mm (1/2") thicknesses



Art.no. "Round & Rout"	d	D	ℓ	L	r
NR1 3,0-10/6 - 5,2 - 52	3,0-10	6	5.2	52	3.5
NR1 3,0-10/6 - 10,2 - 56	3,0-10	6	10.2	56	3.5
NR1 3,0-10/6 - 13,0 - 60	3,0-10	6	13.0	60	3.5

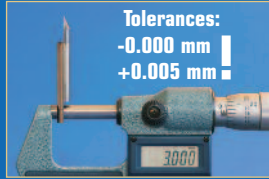
Art.no.
S1-4,0/6-15-50 A/CC
S1-6,0/6-22-58 A/CC
S1-6,0/6-22-64 A/CC - B
S2-8,0/8-27-70 A/CC-SUP - B
S2-10,0/10-33-76 A/CC-SUP - B
S1-4,0/6-15-50 MP/CC
S1-6,0/6-22-58 MP/CC
S1-6,0/6-22-64 MP/CC - B
S1-6,0/6-22-58 MP/CC - SUP



NO. 1 FOR STAINLESS/HARDENED STEEL!

"THE NANO GRAVER"

Excellent for fine engraving in steel.
(Only for rigid machines with high frequency spindles.)



"THE MICRO GRAVER"

Also excellent for brass and aluminium.



"THE NANO GRAVER"

D L
4,0mmx38mm (7) HR-SE(30°)
4,0mmx38mm (9 + 9) HR-DE(30°)

D: Shank diameter
L: Total length
(): Length of flat
HR: Half round
QR: Quarter round
SE: Single end
DE: Double end = balanced
(): Cutting angle

HIGHEST QUALITY
TUNGSTEN CARBIDE WITH SUPER THIN COATING,
ONLY 0.5 MICRON THICK.

"THE MICRO GRAVER"

D L
3,0mmx38mm (7) HR-SE(30°)
4,0mmx38mm (8) HR-SE(15°,30°)
4,0mmx38mm (9+9) HR-DE(30°)
4,0mmx45mm (10 + 10) HR-DE(30°)
6,0mmx45mm (12) HR-SE(15°,30°,45°)
6,0mmx45mm (12/10) QR-SE(30°)
6,0mmx50mm (12 + 12) HR-DE(30°)
4,365mmx165mm (13) HR(30°)
4,365mmx165mm (13/11) QR(30°)

"An unbeatable team: LANG milling- and engraving machines and tools from Crown Norge!"

Joachim Steidel, Sales Manager, Graphics & Mint Industry, LANG GmbH & Co. KG

Engraving cutters for acrylic, plastics



Polished and balanced

A-GR-6,0/40° (0,4)
A-GR-6,0/60° (0,4)
* A-GR-6,0/92° (0,2)

*Also excellent for V grooving 3 mm ACM!

Engraving diamonds



Drag diamonds:

90° and 120°
3,175 x 28mm
3,175 x 114mm
4,365 x 165mm

Rotating diamonds:

3,175 x 127mm
4,365 x 178mm

Tip size:

0,125mm
0,25mm
0,38mm
0,51mm
0,64mm
0,76mm
1,02mm (Only in dimension 4,365 x 178 mm)



SCHWEIZERISCHER
VERBAND DER GRAVEURE

Norsk Gravermester Forening

- Member of the engravers associations in Switzerland and Norway -



Norway
Tel: (+47) 69 33 75 83
post@crow-norge.no
www.crow-norge.no



95121 Catania - Italy
Uff ed Amm.ne: Via Alfredo Agosta, Zona Industriale
tel. (+39) 095.350791- 095.360894- 095.292682
fax (+39) 095.350135
www.sineronline.com - email: info@sineronline.com

Bank
accounts:
N, S, DE, CH