



CROMSON

Expertise - Quality - Innovation

MILLING



DRILLING



TAPPING



MICRO



CUTTING TOOLS CATALOGUE

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CROMSON

Expertise ■ Quality ■ Innovation

EDITORIAL

For the past two years, CROMSON has distinguished itself in the Canadian market by offering a product line of high-quality tools and abrasives. Thanks to our dedicated team of experts, we're continuously on the lookout for new and innovative products that meet the rigorous demands of today's customers.

Our one motto and enduring goal:
EXPERTISE - QUALITY - INNOVATION

CROMSON has gone one step further by bringing together highly competent tradesmen and tradeswomen to ensure the design of new cutting tool products!

From the smallest of drilling dimensions of \varnothing .004 in. (0.1mm), to a 1.000 in. (25.4mm) diameter end mill, the same passion serves to offer a top-quality product that surpasses current standards.

Choose the best product option with our easy to use quick start guide supplied with each product line. If any further technical information is required for a specific application, please contact one of our exclusive distributors, their experienced technicians and customer service representatives will be pleased to get you the products and information that you need.

CROMSON will quickly become your standard for cuttings tools!

Find all the CROMSON products and innovations available exclusively through distribution partners of the FICODIS group throughout Canada.

SUMMARY

MILLING		DRILLING		TAPPING		MICRO	
9	RECORD Steels - stainless steel 2 - 4 fl. (square, radius and ball nose)	69	EFFICIENCY - C1000 Materials < 48 HRC External fluid (3xD)	165	CRP3 Materials < 25 HRc Spiral Point and Spiral Flute	194	CENTER DRILL 60° (double) HSS / carbide Short and long M01
17	STAR Stainless steel - cast iron - alloyed steel 4 - 5 - 7 fl. (square, radius)	76	EFFICIENCY - C1100 Materials < 48HRc Internal coolant supply (3xD)	168	CRPS Din / ANSI / NPT Materials < 35 HRc Spiral Point and Spiral Flute	195	MULTI-STEPS DRILL HSS-E Thin sheet material M02
22	ALLIANCE Titanium 4 - 5 fl. (square, radius)	90	CROMINOX - C2100 Stainless steel - titanium - inconel Internal coolant supply (3-5xD)	177	CRM Stainless steel - alloyed steel Spiral Point and Spiral Flute	196	MINIATURE DRILL Carbide 0.10 to 1.00mm External fluid M03
26	PISTON Hardened steel up to 60 HRc 6 fl. (square, radius)	99	MINIATURE - C3100 Steels - stainless steel - PH Internal coolant supply (5-8-12xD)	179	CRS Tool steel - titanium - nickel Spiral Point and Spiral Flute	197	PROFILING END DRILL Carbide Micro ball nose 220° M12
29	TURBINE Roughing, steels - stainless steel - exotic 4 fl. (chamfer)	104	CROMSTEEL - C4100 Steels - cast iron - hardened steel Internal coolant supply (3-5-8xD)	181	CRN Aluminum - Steel <25 HRc Spiral Point and Spiral Flute Rolled thread	197	BALL NOSE END MILL Carbide Micro hemispherical M04
32	OXYGEN High Speed Machining (HSM) <60 HRc. 4-5 fl. (wide radius for high feed)	118	CONCENTRICITY - C5100 Concentricity - coaxiality Internal coolant supply (5-8-12xD) Double margin	184	HAND TAP Ferrous and non-ferrous Taper, plug and bottoming	198	CHAMFERING END MILL Carbide - 90° and 60° Profiling M05
35	TAPERMILL Pre-machining NPT Thread 4 fl. (conical)	132	HIGH PRECISION - C6100 Surface finish, tolerance Internal coolant supply (5xD) 4 fl.			200	THREADING END MILL Carbide (thread M0.8 to M10) CNC interpolation M06
38	DRIVER Finishing mold (up to 60 HRc) 2 fl. (ball nose)	137	DRILLREAM - C7100 Simultaneous drilling / boring Internal coolant supply (3-5xD) Triple margin			200	ENGRAVING TOOL Carbide Tip : .05 to .20mm M07
41	MOTION Aluminum 2-3 fl. (square, radius and ball nose)	143	CROMALU - C8100 Aluminum - Brass - Copper Internal coolant supply (3-5-12xD)			201	COUNTERSINK HSS-E and carbide 90° and 82° M08
47	BOSS Roughing - aluminum 3 fl. (chamfer)	152	HIGH PERFORMANCE C9100 Steels - stainless steel - cast iron (high feed) Internal coolant supply (3-5-8xD)			202	CORNER ROUNDING END MILL Carbide Radius : 0.5 to 3.0mm M09
50	MAGNAT Steels - stainless steel - exotic 5 fl. (square, radius)					203	MICRO END MILL Carbide (1.5-5-8xD) Steel - hardened steel <67 HRc. titanium, aluminum M10
54	PERFORMANCE Titanium - super Alloys - stainless steel - 4 fl. (square, radius and ball nose)					206	O-RING AND CIRCLIP END MILL Carbide 1.4 to 3.8mm M11
60	BOOSTER Super Alloys - titanium - stainless steel 5-7-9 fl. (square, radius)						

DISCOVER OUR

MILLING



Milling

NOMENCLATURE

CROMSON «ENDMILL»

- FLUTES

DIAMETER

CREM-Ti-5RC-0500-R010 Cr95

APPLICATIONS

AL- Aluminum
ALR- Aluminum Roughing
DM- Die & Mold
HD- Hard Material
HF- High Feed
SA (SAX)- Super Alloy
ST- Steel
SST- Stainless Steel
Ti- Titanium
TiX- Titanium HP
TP- Taper (NPT)

TOOL TYPE

S- Stub Length
M- Medium Length
R- Reg. Length
L- Long Length
E- Extended Length
N- Necking

C- Cylindrical Shank
W- Weldon Shank






RADIUS/CHAMFER

BN- Ball Nose
C- Chamfer
R- Radius
SQ- Square

COATING

Cr20- Uncoated
Cr35- AlCrN
Cr55- TiAlN
Cr75- TiAlN+
Cr95- TiAlCN

Summary application chart-Milling




























































Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	RECORD ST	STAR SST	ALLIANCE TI
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425			
Medium carbon steels <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375			
Tool & die steels <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375			
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275			
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375			
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350			
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300			
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	400 500			
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 400			
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D	250 325			
Aluminum alloys 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000			
Titanium alloys 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300			
High temperature alloys Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95			



Highly recommended

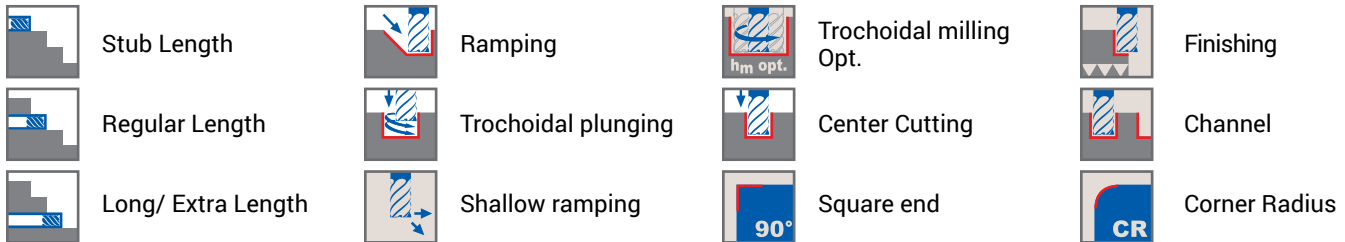


Suitable for some applications

PISTON HD	TURBINE SRGH	OXYGEN HF	TAPER-MILL TP	DRIVER DM	MOTION AL	BOSS ALR	MAGNAT STX	PERFORMANCE TIX	BOOSTER SA
									
									
									
									
									
									
									
									
									
									
									
									
									

** The machining values shown are guidelines.
The optimum data for a particular machining process should be determined in trials or during machining.

Explanation of Milling symbols



Grades chart & Milling application

CROMSON offers a variety of coating upon special request to meet the demands of every customer's needs and unique application demands. Through extensive testing, research and real world applications, CROMSON has worked to develop a full range of high performance coatings. These coating options allow us to address a multitude of situations with optimal results.

Please refer to the chart below for the various coatings available.

CROMSON GRADE	Cr20	Cr35	Cr55	Cr75	Cr95
Proprietary	Uncoated	AlCrN	TiAlN	TiAlN+	TiAlCN
Coating process		PVD	PVD	PVD	PVD
Layer structure		Nano structure	Nano structure	Nano structure	Nano structure
Hardness (HV)		3000	3300	3300	3060
Coefficient of friction (fetting)		0.25	0.30-0.35	0.25	0.35
Thermal stability (C)		1100	900	900	1000
General Information		New generation PVD coating providing a high level of wear and abrasion resistance in combination with a micro grain carbide substrate for use in all ferrous materials at elevated cutting speed.	A thick PVD coating on a balanced wear resistance/tough fine grain carbide substrate provides users with predictable consistent results in general purpose applications in all materials.	In combination with a tough submicron grain carbide substrate and advanced PVD coating technology a high level of security and wear resistance is seen in demanding applications in titanium and steel up to 52 HRC.	New generation PVD coating providing a high level of wear. lower coefficient of friction combination with a micro grain carbide substrate for use in stainless steel and nickel-based high temperature alloys.

CARBIDE END MILL

RECORD ST SERIES

- ⦿ High Performance end mills feature differential flute spacing to achieve virtually chatter free machining in a wide range of materials
- ⦿ Excellent results can be achieved on all steels from carbon to alloy as well as stainless and even exotic materials
- ⦿ With this superior Cr55 TiAlN (PVD) coating you can expect excellent levels of performance in your general steel machining applications
- ⦿ Available in cylindrical or weldon style shank
- ⦿ Square end and wide range of radius choice (including ball nose) available with stub, standard, long and extra long lengths
- ⦿ h6 tolerance for conventional and shrink fit applications

Work Material	Type of cut	Axial DOC	Radial DOC	Speed (SFM)
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425
Medium carbon steels <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool & die steels <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350
Titanium alloys 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300
High temperature alloys Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95



CARBIDE END MILL - SQUARE OR RADIUS
2 FLUTES

TECHNICAL DETAILS

Tool Diameter Range 0.250-1.000 in
 Shank tolerance h6
 Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
 Number of flutes 2
 Coating TiAlN (PVD)
 Center cutting Yes
 Variable pitch Variable
 Variable helix Standard
 Helix angle 38°



70
35
10 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000040	CREM-ST-2RC-0250-SQ Cr55	1/4	3/4	2.1/2	---	Cr55	2
72000045	CREM-ST-2RC-0250-R020- Cr55	1/4	3/4	2.1/2	.020	Cr55	2
72000050	CREM-ST-2RC-0250-R040- Cr55	1/4	3/4	2.1/2	.040	Cr55	2
72000055	CREM-ST-2RC-0312- SQ Cr55	5/16	13/16	2.1/2	---	Cr55	2
72000060	CREM-ST-2RC-0312-R020- Cr55	5/16	13/16	2.1/2	.020	Cr55	2
72000065	CREM-ST-2RC-0375- SQ Cr55	3/8	7/8	2.1/2	---	Cr55	2
72000070	CREM-ST-2RC-0375-R020- Cr55	3/8	7/8	2.1/2	.020	Cr55	2
72000075	CREM-ST-2RC-0375-R040- Cr55	3/8	7/8	2.1/2	.040	Cr55	2
72000080	CREM-ST-2RC-0437- SQ Cr55	7/16	1	2.3/4	---	Cr55	2
72000085	CREM-ST-2RC-0500- SQ Cr55	1/2	1	3	---	Cr55	2
72000090	CREM-ST-2RC-0500-R030- Cr55	1/2	1	3	.030	Cr55	2
72000095	CREM-ST-2RC-0500-R060- Cr55	1/2	1	3	.060	Cr55	2
72000100	CREM-ST-2RC-0562- SQ Cr55	9/16	1.1/4	3.1/2	---	Cr55	2
72000105	CREM-ST-2RC-0625- SQ Cr55	5/8	1.1/4	3.1/2	---	Cr55	2
72000110	CREM-ST-2RC-0625-R030- Cr55	5/8	1.1/4	3.1/2	.030	Cr55	2
72000115	CREM-ST-2RC-0625-R060- Cr55	5/8	1.1/4	3.1/2	.060	Cr55	2
72000120	CREM-ST-2RC-0750- SQ Cr55	3/4	1.1/2	4	---	Cr55	2
72000125	CREM-ST-2RC-0750-R030- Cr55	3/4	1.1/2	4	.030	Cr55	2
72000130	CREM-ST-2RC-0750-R060- Cr55	3/4	1.1/2	4	.060	Cr55	2
72000135	CREM-ST-2RC-0875- SQ Cr55	7/8	1.1/2	4	---	Cr55	2
72000140	CREM-ST-2RC-1000- SQ Cr55	1	1.1/2	4	---	Cr55	2
72000145	CREM-ST-2RW-0500-SQ Cr55	1/2	1	3	---	Cr55	2
72000150	CREM-ST-2RW-0562-SQ Cr55	9/16	1.1/4	3.1/2	---	Cr55	2
72000155	CREM-ST-2RW-0625-SQ Cr55	5/8	1.1/4	3.1/2	---	Cr55	2
72000160	CREM-ST-2RW-0750-SQ Cr55	3/4	1.1/2	4	---	Cr55	2
72000165	CREM-ST-2RW-0875-SQ Cr55	7/8	1.1/2	4	---	Cr55	2
72000170	CREM-ST-2RW-1000-SQ Cr55	1	1.1/2	4	---	Cr55	2

CARBIDE END MILL - BALL NOSE 2 FLUTES

TECHNICAL DETAILS

Tool Diameter Range 0.250-1.000 in

 Shank tolerance h6
 Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
 Number of flutes 2
 Coating TiAlN (PVD)
 Center cutting Yes
 Variable pitch Variable
 Variable helix Standard
 Helix angle 38°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000005	CREM-ST-2RC-0250-BN Cr55	1/4	3/4	2.1/2	.125	Cr55	2
72000010	CREM-ST-2RC-0312-BN Cr55	5/16	13/16	2.1/2	.156	Cr55	2
72000015	CREM-ST-2RC-0375-BN Cr55	3/8	7/8	2.1/2	.1875	Cr55	2
72000020	CREM-ST-2RC-0500-BN Cr55	1/2	1	3	.250	Cr55	2
72000025	CREM-ST-2RC-0625-BN Cr55	5/8	1.1/4	3.1/2	.3125	Cr55	2
72000030	CREM-ST-2RC-0750-BN Cr55	3/4	1.1/2	4	.375	Cr55	2
72000035	CREM-ST-2RC-1000-BN Cr55	1	1.1/2	4	.500	Cr55	2

70 35 0 HARDNESS (HRC)

CARBIDE END MILL - SQUARE OR RADIUS
4 FLUTES

TECHNICAL DETAILS

Tool Diameter Range	0.125-1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4
Coating	TiAlN (PVD)
Center cutting	Yes
Variable pitch	Variable
Variable helix	Standard
Helix angle	38°



70
35
10 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000250	CREM-ST-4SC-0125- SQ Cr55	1/8	1/4	1.1/2	---	Cr55	4
72000255	CREM-ST-4SC-0125-R010- Cr55	1/8	1/4	1.1/2	.010	Cr55	4
72000260	CREM-ST-4SC-0125-R015- Cr55	1/8	1/4	1.1/2	.015	Cr55	4
72000265	CREM-ST-4RC-0125- SQ Cr55	1/8	1/2	2	---	Cr55	4
72000270	CREM-ST-4RC-0125-R010- Cr55	1/8	1/2	2	.010	Cr55	4
72000275	CREM-ST-4SC-0187- SQ Cr55	3/16	5/16	1.1/2	---	Cr55	4
72000280	CREM-ST-4SC-0187-R015- Cr55	3/16	5/16	1.1/2	.015	Cr55	4
72000285	CREM-ST-4RC-0187- SQ Cr55	3/16	5/8	2	---	Cr55	4
72000290	CREM-ST-4RC-0187-R015- Cr55	3/16	5/8	2	.015	Cr55	4
72000295	CREM-ST-4EC-0187- SQ Cr55	3/16	7/8	2.1/2	---	Cr55	4
72000300	CREM-ST-4SC-0250- SQ Cr55	1/4	3/8	2	---	Cr55	4
72000305	CREM-ST-4SC-0250-R015- Cr55	1/4	3/8	2	.015	Cr55	4
72000310	CREM-ST-4SC-0250-R030- Cr55	1/4	3/8	2	.030	Cr55	4
72000315	CREM-ST-4RC-0250- SQ Cr55	1/4	3/4	2.1/2	---	Cr55	4
72000320	CREM-ST-4RC-0250-R020- Cr55	1/4	3/4	2.1/2	.020	Cr55	4
72000325	CREM-ST-4RC-0250-R030- Cr55	1/4	3/4	2.1/2	.030	Cr55	4
72000330	CREM-ST-4RC-0250-R060- Cr55	1/4	3/4	2.1/2	.060	Cr55	4
72000335	CREM-ST-4LC-0250- SQ Cr55	1/4	1.1/4	3	---	Cr55	4
72000340	CREM-ST-4LC-0250-R020- Cr55	1/4	1.1/4	3	.020	Cr55	4
72000345	CREM-ST-4SC-312- SQ Cr55	5/16	1/2	2	---	Cr55	4
72000350	CREM-ST-4SC-0312-R020- Cr55	5/16	1/2	2	.020	Cr55	4
72000355	CREM-ST-4RC-0312- SQ Cr55	5/16	13/16	2.1/2	---	Cr55	4
72000360	CREM-ST-4RC-0312-R020- Cr55	5/16	13/16	2.1/2	.020	Cr55	4
72000365	CREM-ST-4SC-0375- SQ Cr55	3/8	1/2	2	---	Cr55	4
72000370	CREM-ST-4SC-0375-R020- Cr55	3/8	1/2	2	.020	Cr55	4
72000375	CREM-ST-4SC-0375-R030- Cr55	3/8	1/2	2	.030	Cr55	4
72000380	CREM-ST-4RC-0375- SQ Cr55	3/8	7/8	2.1/2	---	Cr55	4
72000385	CREM-ST-4RC-0375-R020- Cr55	3/8	7/8	2.1/2	.020	Cr55	4
72000390	CREM-ST-4RC-0375-R030- Cr55	3/8	7/8	2.1/2	.030	Cr55	4
72000395	CREM-ST-4RC-0375-R060- Cr55	3/8	7/8	2.1/2	.060	Cr55	4
72000400	CREM-ST-4RC-0375-R120- Cr55	3/8	7/8	2.1/2	.120	Cr55	4
72000405	CREM-ST-4EC-0375- SQ Cr55	3/8	1.1/8	3	---	Cr55	4
72000410	CREM-ST-4EC-0375-R020- Cr55	3/8	1.1/8	3	.020	Cr55	4
72000415	CREM-ST-4LC-0375- SQ Cr55	3/8	1.1/2	3.1/2	---	Cr55	4

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000420	CREM-ST-4LC-0375-R030- Cr55	3/8	1.1/2	3.1/2	.030	Cr55	4
72000425	CREM-ST-4RC-0437- SQ Cr55	7/16	1	2.3/4	---	Cr55	4
72000430	CREM-ST-4SC-0500- SQ Cr55	1/2	5/8	2.1/2	---	Cr55	4
72000435	CREM-ST-4SC-0500-R020- Cr55	1/2	5/8	2.1/2	.020	Cr55	4
72000440	CREM-ST-4SC-0500-R030- Cr55	1/2	5/8	2.1/2	.030	Cr55	4
72000445	CREM-ST-4RC-0500- SQ Cr55	1/2	1	3	---	Cr55	4
72000450	CREM-ST-4RC-0500-R030- Cr55	1/2	1	3	.030	Cr55	4
72000455	CREM-ST-4RC-0500-R060- Cr55	1/2	1	3	.060	Cr55	4
72000460	CREM-ST-4EC-0500- SQ Cr55	1/2	1.1/4	3	---	Cr55	4
72000465	CREM-ST-4EC-0500-R020- Cr55	1/2	1.1/4	3	.020	Cr55	4
72000470	CREM-ST-4EC-0500-R030- Cr55	1/2	1.1/4	3	.030	Cr55	4
72000475	CREM-ST-4EC-0500-R060- Cr55	1/2	1.1/4	3	.060	Cr55	4
72000480	CREM-ST-4EC-0500-R090- Cr55	1/2	1.1/4	3	.090	Cr55	4
72000485	CREM-ST-4EC-0500-R120- Cr55	1/2	1.1/4	3	.120	Cr55	4
72000490	CREM-ST-4MC-0500- SQ Cr55	1/2	1.5/8	3.1/2	---	Cr55	4
72000495	CREM-ST-4LC-0500- SQ Cr55	1/2	2	4	---	Cr55	4
72000500	CREM-ST-4LC-0500-R030- Cr55	1/2	2	4	.030	Cr55	4
72000505	CREM-ST-4RC-0562- SQ Cr55	9/16	1.1/4	3.1/2	---	Cr55	4
72000510	CREM-ST-4RC-0625- SQ Cr55	5/8	1.1/4	3.1/2	---	Cr55	4
72000515	CREM-ST-4RC-0625-R030- Cr55	5/8	1.1/4	3.1/2	.030	Cr55	4
72000520	CREM-ST-4RC-0625-R060- Cr55	5/8	1.1/4	3.1/2	.060	Cr55	4
72000525	CREM-ST-4EC-0625- SQ Cr55	5/8	1.5/8	3.1/2	---	Cr55	4
72000530	CREM-ST-4EC-0625-R030- Cr55	5/8	1.5/8	3.1/2	.030	Cr55	4
72000535	CREM-ST-4SC-0750- SQ Cr55	3/4	7/8	3	---	Cr55	4
72000540	CREM-ST-4SC-0750-R030- Cr55	3/4	7/8	3	.030	Cr55	4
72000545	CREM-ST-4SC-0750-R060- Cr55	3/4	7/8	3	.060	Cr55	4
72000550	CREM-ST-4RC-0750- SQ Cr55	3/4	1.1/2	4	---	Cr55	4
72000555	CREM-ST-4RC-0750-R030- Cr55	3/4	1.1/2	4	.030	Cr55	4
72000560	CREM-ST-4RC-0750-R060- Cr55	3/4	1.1/2	4	.060	Cr55	4
72000565	CREM-ST-4RC-0750-R090- Cr55	3/4	1.1/2	4	.090	Cr55	4
72000570	CREM-ST-4RC-0750-R120- Cr55	3/4	1.1/2	4	.120	Cr55	4
72000575	CREM-ST-4EC-0750- SQ Cr55	3/4	1.3/4	4	---	Cr55	4
72000580	CREM-ST-4EC-0750-R030- Cr55	3/4	1.3/4	4	.030	Cr55	4
72000585	CREM-ST-4EC-0750-R060- Cr55	3/4	1.3/4	4	.060	Cr55	4
72000590	CREM-ST-4EC-0750-R120- Cr55	3/4	1.3/4	4	.120	Cr55	4
72000595	CREM-ST-4MC-0750- SQ Cr55	3/4	2.3/8	5	---	Cr55	4
72000600	CREM-ST-4RC-1000- SQ Cr55	1	1.1/2	4	---	Cr55	4
72000605	CREM-ST-4RC-1000-R030- Cr55	1	1.1/2	4	.030	Cr55	4
72000610	CREM-ST-4RC-1000-R060- Cr55	1	1.1/2	4	.060	Cr55	4
72000615	CREM-ST-4RC-1000-R120- Cr55	1	1.1/2	4	.120	Cr55	4
72000620	CREM-ST-4RW-0500- SQ Cr55	1/2	1	3	---	Cr55	4
72000625	CREM-ST-4RW-0500-R015- Cr55	1/2	1	3	.015	Cr55	4
72000630	CREM-ST-4RW-0500-R030- Cr55	1/2	1	3	.030	Cr55	4
72000635	CREM-ST-4RW-0500-R060- Cr55	1/2	1	3	.060	Cr55	4
72000640	CREM-ST-4EW-0500- SQ Cr55	1/2	1.1/4	3	---	Cr55	4
72000645	CREM-ST-4EW-0500-R030- Cr55	1/2	1.1/4	3	.030	Cr55	4
72000650	CREM-ST-4EW-0500-R060- Cr55	1/2	1.1/4	3	.060	Cr55	4
72000655	CREM-ST-4MW-0500- SQ Cr55	1/2	1.5/8	3.1/2	---	Cr55	4

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0 HARDNESS (HRC)

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0 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000660	CREM-ST-4RW-0562- SQ Cr55	9/16	1.1/4	3.1/2	---	Cr55	4
72000665	CREM-ST-4RW-0625- SQ Cr55	5/8	1.1/4	3.1/2	---	Cr55	4
72000670	CREM-ST-4RW-0625-R030- Cr55	5/8	1.1/4	3.1/2	.030	Cr55	4
72000675	CREM-ST-4RW-0625-R060- Cr55	5/8	1.1/4	3.1/2	.060	Cr55	4
72000680	CREM-ST-4EW-0625- SQ Cr55	5/8	1.5/8	3.1/2	---	Cr55	4
72000685	CREM-ST-4EW-0625-R030- Cr55	5/8	1.5/8	3.1/2	.030	Cr55	4
72000690	CREM-ST-4SW-0750- SQ Cr55	3/4	7/8	3	---	Cr55	4
72000695	CREM-ST-4SW-0750-R030- Cr55	3/4	7/8	3	.030	Cr55	4
72000700	CREM-ST-4SW-0750-R060- Cr55	3/4	7/8	3	.060	Cr55	4
72000705	CREM-ST-4RW-0750- SQ Cr55	3/4	1.1/2	4	---	Cr55	4
72000710	CREM-ST-4RW-0750-R030- Cr55	3/4	1.1/2	4	.030	Cr55	4
72000715	CREM-ST-4RW-0750-R060- Cr55	3/4	1.1/2	4	.060	Cr55	4
72000720	CREM-ST-4RW-0750-R090- Cr55	3/4	1.1/2	4	.090	Cr55	4
72000725	CREM-ST-4RW-0750-R120- Cr55	3/4	1.1/2	4	.120	Cr55	4
72000730	CREM-ST-4EW-0750- SQ Cr55	3/4	1.3/4	4	---	Cr55	4
72000735	CREM-ST-4EW-0750-R030- Cr55	3/4	1.3/4	4	.030	Cr55	4
72000740	CREM-ST-4RW-1000- SQ Cr55	1	1.1/2	4	---	Cr55	4
72000745	CREM-ST-4RW-1000-R030- Cr55	1	1.1/2	4	.030	Cr55	4
72000750	CREM-ST-4RW-1000-R060- Cr55	1	1.1/2	4	.060	Cr55	4
72000755	CREM-ST-4RW-1000-R120- Cr55	1	1.1/2	4	.120	Cr55	4
72000760	CREM-ST-4MW-1000- SQ Cr55	1	2	5	---	Cr55	4
72000765	CREM-ST-4LW-1000- SQ Cr55	1	4	7	---	Cr55	4

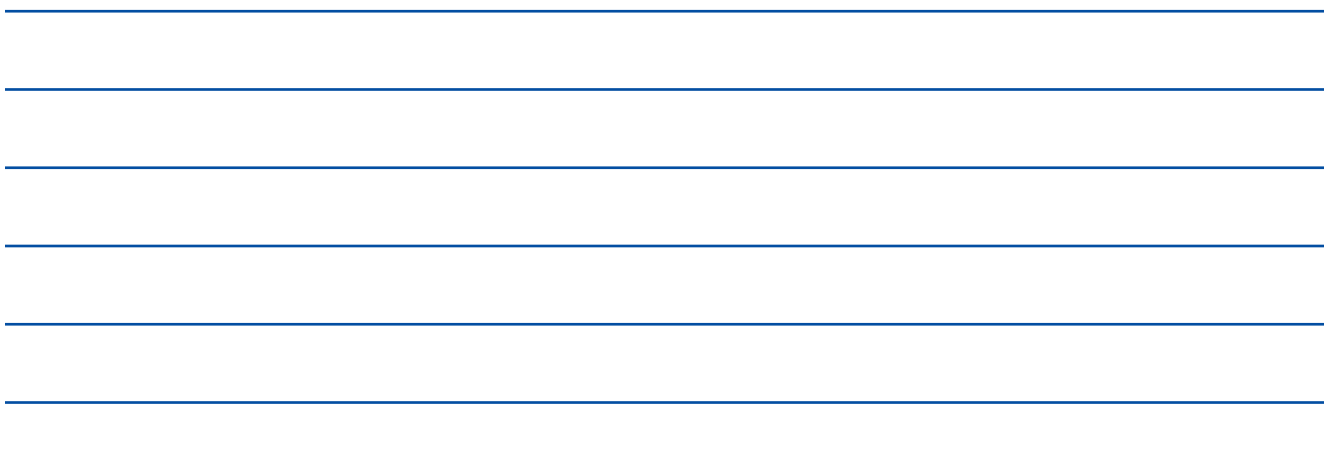
CARBIDE END MILL - BALL NOSE
4 FLUTES

TECHNICAL DETAILS

Tool Diameter Range 0.125-1.000 in
 Shank tolerance h6
 Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
 Number of flutes 4
 Coating TiAlN (PVD)
 Center cutting Yes
 Variable pitch Variable
 Variable helix Standard
 Helix angle 38°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000175	CREM-ST-4RC-0125-BN Cr55	1/8	1/2	2	.0625	Cr55	4
72000180	CREM-ST-4RC-0187-BN Cr55	3/16	5/8	2	.0935	Cr55	4
72000185	CREM-ST-4EC-0187-BN Cr55	3/16	7/8	2.1/2	.0935	Cr55	4
72000190	CREM-ST-4RC-0250-BN Cr55	1/4	3/4	2.1/2	.125	Cr55	4
72000195	CREM-ST-4RC-0312-BN Cr55	5/16	13/16	2.1/2	.156	Cr55	4
72000200	CREM-ST-4RC-0375-BN Cr55	3/8	7/8	2.1/2	.1875	Cr55	4
72000205	CREM-ST-4RC-0500-BN Cr55	1/2	1	3	.250	Cr55	4
72000210	CREM-ST-4RC-0625-BN Cr55	5/8	1.1/4	3.1/2	.3125	Cr55	4
72000215	CREM-ST-4RC-0750-BN Cr55	3/4	1.1/2	4	.375	Cr55	4
72000220	CREM-ST-4RC-1000-BN Cr55	1	1.1/2	4	.500	Cr55	4
72000225	CREM-ST-4RW-0375-BN Cr55	3/8	7/8	2.1/2	.1875	Cr55	4
72000230	CREM-ST-4RW-0500-BN Cr55	1/2	1	3	.250	Cr55	4
72000235	CREM-ST-4RW-0625-BN Cr55	5/8	1.1/4	3.1/2	.3125	Cr55	4
72000240	CREM-ST-4RW-0750-BN Cr55	3/4	1.1/2	4	.375	Cr55	4
72000245	CREM-ST-4RW-1000-BN Cr55	1	1.1/2	4	.500	Cr55	4



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0 HARDNESS (HRC)

RECORD-ST		Feed (inches Per Tooth)									
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425	.0008 .0010	.0016 .0020	.0024 .0030	.0032 .0040	.0040 .0050	.0048 .0060	.0064 .0080
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

STAR SST SERIES

- ⊙ High performance end mills feature differential flute spacing along with variable helix angle
- ⊙ Eccentric relief is suited for high strength steels, cast iron and stainless steel application
- ⊙ Cr35 AlCrN (PVD) coating design for high level of wear resistance for the 4 and 5 flutes design
- ⊙ Edge preparation and post coat process assure a longer tool life than most common brands on the market
- ⊙ Corner protection will also give an edge on this series
- ⊙ 7 flute designs have been developed for trochoidal milling applications and are offered in our new grade Cr75 TiAlN+ (PVD) for high wear resistance in demanding applications like titanium and steel up to 52 HRc
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in stub, standard and extra long lengths

Work Material	Operation	Axial DOC	Radial DOC	Speed (SFM)
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D	1 x D	325
		1.5 x D	0.5 x D	375
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D	1 x D	225
		1 x D	0.5 x D	275
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D	1 x D	300
		1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D	1 x D	275
		1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D	1 x D	250
		1 x D	0.5 x D	300
Cast iron Grey	Slotting Peripheral - Rough	1 x D	1 x D	400
		1.5 x D	0.5 x D	500
Cast iron Ductile	Slotting Peripheral - Rough	1 x D	1 x D	300
		1.5 x D	0.5 x D	400
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D	1 x D	250
		1 x D	.75 x D	325
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D	1 x D	250
		1 x D	0.5 x D	300
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D	1 x D	70
		1 x D	.25 x D	95



CARBIDE END MILL - SQUARE OR RADIUS

TECHNICAL DETAILS

Tool Diameter Range	0.125-1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4, 5 or 7
Coating	AlCrN (Cr35) ou TiAlN+ (Cr75)
Center cutting	Yes
Variable pitch	Variable
Variable helix	Variable
Helix angle	35° to 38°



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0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000770	CREM-SST-4RC-0125- SQ Cr35	1/8	1/2	2	---	Cr35	4
72000775	CREM-SST-4RC-0125-R010- Cr35	1/8	1/2	2	.010	Cr35	4
72000780	CREM-SST-4RC-0187- SQ Cr35	3/16	5/8	2	---	Cr35	4
72000785	CREM-SST-4RC-0187-R015- Cr35	3/16	5/8	2	.015	Cr35	4
72000790	CREM-SST-4EC-0187- SQ Cr35	3/16	7/8	2.1/2	---	Cr35	4
72000795	CREM-SST-4RC-0250- SQ Cr35	1/4	3/4	2.1/2	---	Cr35	4
72000800	CREM-SST-4RC-0250-R020- Cr35	1/4	3/4	2.1/2	.020	Cr35	4
72000805	CREM-SST-4RC-0250-R030- Cr35	1/4	3/4	2.1/2	.030	Cr35	4
72000810	CREM-SST-4RC-0250-R060- Cr35	1/4	3/4	2.1/2	.060	Cr35	4
72000815	CREM-SST-4LC-0250- SQ Cr35	1/4	1.1/4	3	---	Cr35	4
72000820	CREM-SST-4LC-0250-R020- Cr35	1/4	1.1/4	3	.020	Cr35	4
72000825	CREM-SST-4RC-0312- Cr35	5/16	13/16	2.1/2	---	Cr35	4
72000830	CREM-SST-4RC-0312-R020- Cr35	5/16	13/16	2.1/2	.020	Cr35	4
72000835	CREM-SST-4RC-0375- SQ Cr35	3/8	7/8	2.1/2	---	Cr35	4
72000840	CREM-SST-4RC-0375-R020- Cr35	3/8	7/8	2.1/2	.020	Cr35	4
72000845	CREM-SST-4RC-0375-R030- Cr35	3/8	7/8	2.1/2	.030	Cr35	4
72000850	CREM-SST-4RC-0375-R060- Cr35	3/8	7/8	2.1/2	.060	Cr35	4
72000855	CREM-SST-4RC-0375-R120- Cr35	3/8	7/8	2.1/2	.120	Cr35	4
72000860	CREM-SST-4EC-0375- SQ Cr35	3/8	1.1/8	3	---	Cr35	4
72000865	CREM-SST-4EC-0375-R020- Cr35	3/8	1.1/8	3	.020	Cr35	4
72000870	CREM-SST-4LC-0375- SQ Cr35	3/8	1.1/2	3.1/2	---	Cr35	4
72000875	CREM-SST-4LC-0375-R030- Cr35	3/8	1.1/2	3.1/2	.030	Cr35	4
72000880	CREM-SST-4RC-0437- SQ Cr35	7/16	1	2.3/4	---	Cr35	4
72000885	CREM-SST-4RC-0500- SQ Cr35	1/2	1	3	---	Cr35	4
72000890	CREM-SST-4RC-0500-R030- Cr35	1/2	1	3	.030	Cr35	4
72000895	CREM-SST-4RC-0500-R060- Cr35	1/2	1	3	.060	Cr35	4
72000900	CREM-SST-4EC-0500- SQ Cr35	1/2	1.1/4	3	---	Cr35	4
72000905	CREM-SST-4EC-0500-R020- Cr35	1/2	1.1/4	3	.020	Cr35	4
72000910	CREM-SST-4EC-0500-R030- Cr35	1/2	1.1/4	3	.030	Cr35	4
72000915	CREM-SST-4EC-0500-R060- Cr35	1/2	1.1/4	3	.060	Cr35	4
72000920	CREM-SST-4EC-0500-R090- Cr35	1/2	1.1/4	3	.090	Cr35	4

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72000925	CREM-SST-4EC-0500-R120- Cr35	1/2	1.1/4	3	.120	Cr35	4
72000930	CREM-SST-4MC-0500- SQ Cr35	1/2	1.5/8	3.1/2	---	Cr35	4
72000935	CREM-SST-4LC-0500- SQ Cr35	1/2	2	4	---	Cr35	4
72000940	CREM-SST-4LC-0500-R030- Cr35	1/2	2	4	.030	Cr35	4
72000945	CREM-SST-4RC-0562- SQ Cr35	9/16	1.1/4	3.1/2	---	Cr35	4
72000950	CREM-SST-4RC-0625- SQ Cr35	5/8	1.1/4	3.1/2	---	Cr35	4
72000955	CREM-SST-4RC-0625-R030- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	4
72000960	CREM-SST-4RC-0625-R060- Cr35	5/8	1.1/4	3.1/2	.060	Cr35	4
72000965	CREM-SST-4EC-0625- SQ Cr35	5/8	1.5/8	3.1/2	---	Cr35	4
72000970	CREM-SST-4EC-0625-R030- Cr35	5/8	1.5/8	3.1/2	.030	Cr35	4
72000975	CREM-SST-4RC-0750- SQ Cr35	3/4	1.1/2	4	---	Cr35	4
72000980	CREM-SST-4RC-0750-R030- Cr35	3/4	1.1/2	4	.030	Cr35	4
72000985	CREM-SST-4RC-0750-R060- Cr35	3/4	1.1/2	4	.060	Cr35	4
72000990	CREM-SST-4RC-0750-R090- Cr35	3/4	1.1/2	4	.090	Cr35	4
72000995	CREM-SST-4RC-0750-R120- Cr35	3/4	1.1/2	4	.120	Cr35	4
72001000	CREM-SST-4EC-0750- SQ Cr35	3/4	1.3/4	4	---	Cr35	4
72001005	CREM-SST-4EC-0750-R030- Cr35	3/4	1.3/4	4	.030	Cr35	4
72001010	CREM-SST-4EC-0750-R060- Cr35	3/4	1.3/4	4	.060	Cr35	4
72001015	CREM-SST-4EC-0750-R120- Cr35	3/4	1.3/4	4	.120	Cr35	4
72001020	CREM-SST-4MC-0750- SQ Cr35	3/4	2.3/8	5	---	Cr35	4
72001025	CREM-SST-4RC-1000- SQ Cr35	1	1.1/2	4	---	Cr35	4
72001030	CREM-SST-4RC-1000-R030- Cr35	1	1.1/2	4	.030	Cr35	4
72001035	CREM-SST-4RC-1000-R060- Cr35	1	1.1/2	4	.060	Cr35	4
72001040	CREM-SST-4RC-1000-R120- Cr35	1	1.1/2	4	.120	Cr35	4
72001045	CREM-SST-5RC-0187- SQ Cr35	3/16	5/8	2	---	Cr35	5
72001050	CREM-SST-5RC-0187-R015- Cr35	3/16	5/8	2	.015	Cr35	5
72001055	CREM-SST-5EC-0187- SQ Cr35	3/16	7/8	2.1/2	---	Cr35	5
72001060	CREM-SST-5RC-0250- SQ Cr35	1/4	3/4	2.1/2	---	Cr35	5
72001065	CREM-SST-5RC-0250-R020- Cr35	1/4	3/4	2.1/2	.020	Cr35	5
72001070	CREM-SST-5RC-0250-R030- Cr35	1/4	3/4	2.1/2	.030	Cr35	5
72001075	CREM-SST-5RC-0250-R060- Cr35	1/4	3/4	2.1/2	.060	Cr35	5
72001080	CREM-SST-5RC-0312- SQ Cr35	5/16	13/16	2.1/2	---	Cr35	5
72001085	CREM-SST-5RC-0312-R020- Cr35	5/16	13/16	2.1/2	.020	Cr35	5
72001090	CREM-SST-5RC-0375- SQ Cr35	3/8	7/8	2.1/2	---	Cr35	5
72001095	CREM-SST-5RC-0375-R020- Cr35	3/8	7/8	2.1/2	.020	Cr35	5
72001100	CREM-SST-5RC-0375-R030- Cr35	3/8	7/8	2.1/2	.030	Cr35	5
72001105	CREM-SST-5RC-0375-R060- Cr35	3/8	7/8	2.1/2	.060	Cr35	5
72001110	CREM-SST-5RC-0375-R120- Cr35	3/8	7/8	2.1/2	.120	Cr35	5
72001115	CREM-SST-5EC-0375- SQ Cr35	3/8	1.1/8	3	---	Cr35	5
72001120	CREM-SST-5EC-0375-R020- Cr35	3/8	1.1/8	3	.020	Cr35	5
72001125	CREM-SST-5RC-0500- SQ Cr35	1/2	1	3	---	Cr35	5
72001130	CREM-SST-5RC-0500-R030- Cr35	1/2	1	3	.030	Cr35	5
72001135	CREM-SST-5RC-0500-R060- Cr35	1/2	1	3	.060	Cr35	5
72001140	CREM-SST-5EC-0500- SQ Cr35	1/2	1.1/4	3	---	Cr35	5
72001145	CREM-SST-5EC-0500-R020- Cr35	1/2	1.1/4	3	.020	Cr35	5
72001150	CREM-SST-5EC-0500-R030- Cr35	1/2	1.1/4	3	.030	Cr35	5
72001155	CREM-SST-5EC-0500-R060- Cr35	1/2	1.1/4	3	.060	Cr35	5
72001160	CREM-SST-5EC-0500-R090- Cr35	1/2	1.1/4	3	.090	Cr35	5
72001165	CREM-SST-5EC-0500-R120- Cr35	1/2	1.1/4	3	.120	Cr35	5
72001170	CREM-SST-5RC-0562- SQ Cr35	9/16	1.1/4	3.1/2	---	Cr35	5

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0 HARDNESS (HRC)

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0 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72001175	CREM-SST-5RC-0625- SQ Cr35	5/8	1.1/4	3.1/2	---	Cr35	5
72001180	CREM-SST-5RC-0625-R030- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	5
72001185	CREM-SST-5RC-0625-R060- Cr35	5/8	1.1/4	3.1/2	.060	Cr35	5
72001190	CREM-SST-5EC-0625- SQ Cr35	5/8	1.5/8	3.1/2	---	Cr35	5
72001195	CREM-SST-5EC-0625-R030- Cr35	5/8	1.5/8	3.1/2	.030	Cr35	5
72001200	CREM-SST-5RC-0750- SQ Cr35	3/4	1.1/2	4	---	Cr35	5
72001205	CREM-SST-5RC-0750-R030- Cr35	3/4	1.1/2	4	.030	Cr35	5
72001210	CREM-SST-5RC-0750-R060- Cr35	3/4	1.1/2	4	.060	Cr35	5
72001215	CREM-SST-5RC-0750-R090- Cr35	3/4	1.1/2	4	.090	Cr35	5
72001220	CREM-SST-5RC-0750-R120- Cr35	3/4	1.1/2	4	.120	Cr35	5
72001225	CREM-SST-5EC-0750- SQ Cr35	3/4	1.3/4	4	---	Cr35	5
72001230	CREM-SST-5EC-0750-R030- Cr35	3/4	1.3/4	4	.030	Cr35	5
72001235	CREM-SST-5EC-0750-R060- Cr35	3/4	1.3/4	4	.060	Cr35	5
72001240	CREM-SST-5EC-0750-R120- Cr35	3/4	1.3/4	4	.120	Cr35	5
72001245	CREM-SST-5RC-1000- SQ Cr35	1	1.1/2	4	---	Cr35	5
72001250	CREM-SST-5RC-1000-R030- Cr35	1	1.1/2	4	.030	Cr35	5
72001255	CREM-SST-5RC-1000-R060- Cr35	1	1.1/2	4	.060	Cr35	5
72001260	CREM-SST-5RC-1000-R120- Cr35	1	1.1/2	4	.120	Cr35	5
72001265	CREM-SST-7LC-C0375- SQ Cr75	3/8	1.1/8	3	---	Cr75	7
72001270	CREM-SST-7LC-C0375-R030- Cr75	3/8	1.1/8	3	.030	Cr75	7
72001275	CREM-SST-7LC-C0375-R060- Cr75	3/8	1.1/8	3	.060	Cr75	7
72001280	CREM-SST-7LC-C0500- SQ Cr75	1/2	1.1/2	3.1/2	---	Cr75	7
72001285	CREM-SST-7LC-C0500-R030- Cr75	1/2	1.1/2	3.1/2	.030	Cr75	7
72001290	CREM-SST-7LC-C0500-R060- Cr75	1/2	1.1/2	3.1/2	.060	Cr75	7
72001295	CREM-SST-7LC-C0625- SQ Cr75	5/8	1.7/8	4	---	Cr75	7
72001300	CREM-SST-7LC-C0625-R030- Cr75	5/8	1.7/8	4	.030	Cr75	7
72001305	CREM-SST-7LC-C0750- SQ Cr75	3/4	2.1/4	5	---	Cr75	7
72001310	CREM-SST-7LC-C0750-R030- Cr75	3/4	2.1/4	5	.030	Cr75	7
72001315	CREM-SST-7LC-C0750-R060- Cr75	3/4	2.1/4	5	.060	Cr75	7
72001320	CREM-SST-7LC-C0750-R120- Cr75	3/4	2.1/4	5	.120	Cr75	7
72001325	CREM-SST-7LC-C1000- SQ Cr75	1	3	6	---	Cr75	7
72001330	CREM-SST-7LC-C1000-R030- Cr75	1	3	6	.030	Cr75	7
72001335	CREM-SST-7LC-C1000-R060- Cr75	1	3	6	.060	Cr75	7
72001340	CREM-SST-7LC-C1000-R120- Cr75	1	3	6	.120	Cr75	7
72001345	CREM-SST-7EC-C0375- SQ Cr75	3/8	1.1/2	3	---	Cr75	7
72001350	CREM-SST-7EC-C0375-R030- Cr75	3/8	1.1/2	3	.030	Cr75	7
72001355	CREM-SST-7EC-C0375-R060- Cr75	3/8	1.1/2	3	.060	Cr75	7
72001360	CREM-SST-7EC-C0500- SQ Cr75	1/2	2	3.1/2	---	Cr75	7
72001365	CREM-SST-7EC-C0500-R030- Cr75	1/2	2	3.1/2	.030	Cr75	7
72001370	CREM-SST-7EC-C0500-R060- Cr75	1/2	2	3.1/2	.060	Cr75	7
72001375	CREM-SST-7EC-C0625- SQ Cr75	5/8	2.1/2	4	---	Cr75	7
72001380	CREM-SST-7EC-C0625-R030- Cr75	5/8	2.1/2	4	.030	Cr75	7
72001385	CREM-SST-7EC-C0750- SQ Cr75	3/4	3	5	---	Cr75	7
72001390	CREM-SST-7EC-C0750-R120- Cr75	3/4	3	5	.120	Cr75	7
72001395	CREM-SST-7EC-C0750-R030- Cr75	3/4	3	5	.030	Cr75	7
72001400	CREM-SST-7EC-C0750-R060- Cr75	3/4	3	5	.060	Cr75	7
72001405	CREM-SST-7EC-C1000- SQ Cr75	1	4	7	---	Cr75	7
72001410	CREM-SST-7EC-C1000-R120- Cr75	1	4	7	.120	Cr75	7
72001415	CREM-SST-7EC-C1000-R030- Cr75	1	4	7	.030	Cr75	7
72001420	CREM-SST-7EC-C1000-R060- Cr75	1	4	7	.060	Cr75	7

STAR-SST		Feed (inches Per Tooth)									
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425							
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375							
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39RHc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064
Moderately difficult stainless steel 304, 316, Invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	400 500	.0006 .0007	.0012 .0015	.0019 .0023	.0025 .0030	.0031 .0037	.0038 .0046	.0050 .0060
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 400	.0006 .0007	.0012 .0014	.0018 .0021	.0023 .0028	.0029 .0035	.0035 .0042	.0046 .0056
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D	250 325	.0004 .0005	.0008 .0011	.0012 .0016	.0015 .0022	.0019 .0027	.0023 .0033	.0030 .0044
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000							
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

ALLIANCE TI SERIES

- ⊙ High performance end mills feature differential flute spacing along with variable helix angle
- ⊙ Customized land relief is suited for titanium application
- ⊙ Ultra fine carbide rod assures optimised results
- ⊙ Controlled edge preparation and post coat process assure a longer tool life than most common brands on the market
- ⊙ Corner protection will also give an edge on this series
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in long and extra long lengths
- ⊙ Cr35 AlCrN (PVD) coating design for high wear and abrasion resistance



Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95

CARBIDE END MILL - SQUARE OR RADIUS

TECHNICAL DETAILS

Tool Diameter Range	0.250-1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4 or 5
Coating	TiAlN+ (PVD)
Center cutting	Yes
Variable pitch	Variable
Variable helix	Variable
Helix angle	35° to 38°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72001425	CREM-TI-4RC-0250- SQ Cr75	1/4	3/4	2.1/2	---	Cr75	4
72001430	CREM-TI-4RC-0250-R020- Cr75	1/4	3/4	2.1/2	.020	Cr75	4
72001435	CREM-TI-4RC-0250-R030- Cr75	1/4	3/4	2.1/2	.030	Cr75	4
72001440	CREM-TI-4RC-0250-R060- Cr75	1/4	3/4	2.1/2	.060	Cr75	4
72001445	CREM-TI-4LC-0250- SQ Cr75	1/4	1.1/4	3	---	Cr75	4
72001450	CREM-TI-4LC-0250-R020- Cr75	1/4	1.1/4	3	.020	Cr75	4
72001455	CREM-TI-4RC-0312- SQ Cr75	5/16	13/16	2.1/2	---	Cr75	4
72001460	CREM-TI-4RC-0312-R020- Cr75	5/16	13/16	2.1/2	.020	Cr75	4
72001465	CREM-TI-4RC-0375- SQ Cr75	3/8	7/8	2.1/2	---	Cr75	4
72001470	CREM-TI-4RC-0375-R020- Cr75	3/8	7/8	2.1/2	.020	Cr75	4
72001475	CREM-TI-4RC-0375-R030- Cr75	3/8	7/8	2.1/2	.030	Cr75	4
72001480	CREM-TI-4RC-0375-R060- Cr75	3/8	7/8	2.1/2	.060	Cr75	4
72001485	CREM-TI-4EC-0375- SQ Cr75	3/8	1.1/8	3	---	Cr75	4
72001490	CREM-TI-4EC-0375-R020- Cr75	3/8	1.1/8	3	.020	Cr75	4
72001495	CREM-TI-4RC-0500- SQ Cr75	1/2	1	3	---	Cr75	4
72001500	CREM-TI-4RC-0500-R030- Cr75	1/2	1	3	.030	Cr75	4
72001505	CREM-TI-4RC-0500-R060- Cr75	1/2	1	3	.060	Cr75	4
72001510	CREM-TI-4EC-0500- SQ Cr75	1/2	1.1/4	3	---	Cr75	4
72001515	CREM-TI-4EC-0500-R030- Cr75	1/2	1.1/4	3	.030	Cr75	4
72001520	CREM-TI-4EC-0500-R060- Cr75	1/2	1.1/4	3	.060	Cr75	4
72001525	CREM-TI-4EC-0500-R090- Cr75	1/2	1.1/4	3	.090	Cr75	4
72001530	CREM-TI-4EC-0500-R120- Cr75	1/2	1.1/4	3	.120	Cr75	4
72001535	CREM-TI-4RC-0625- SQ Cr75	5/8	1.1/4	3.1/2	---	Cr75	4
72001540	CREM-TI-4RC-0625-R030- Cr75	5/8	1.1/4	3.1/2	.030	Cr75	4
72001545	CREM-TI-4RC-0625-R060- Cr75	5/8	1.1/4	3.1/2	.060	Cr75	4
72001550	CREM-TI-4EC-0625- SQ Cr75	5/8	1.5/8	3.1/2	---	Cr75	4
72001555	CREM-TI-4EC-0625-R030- Cr75	5/8	1.5/8	3.1/2	.030	Cr75	4
72001560	CREM-TI-4RC-0750- SQ Cr75	3/4	1.1/2	4	---	Cr75	4
72001565	CREM-TI-4RC-0750-R030- Cr75	3/4	1.1/2	4	.030	Cr75	4
72001570	CREM-TI-4RC-0750-R060- Cr75	3/4	1.1/2	4	.060	Cr75	4

70
35
0 HARDNESS (HRC)

70

35

0 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72001575	CREM-TI-4RC-0750-R090- Cr75	3/4	1.1/2	4	.090	Cr75	4
72001580	CREM-TI-4RC-0750-R120- Cr75	3/4	1.1/2	4	.120	Cr75	4
72001585	CREM-TI-4EC-0750- SQ Cr75	3/4	1.3/4	4	---	Cr75	4
72001590	CREM-TI-4EC-0750-R030- Cr75	3/4	1.3/4	4	.030	Cr75	4
72001595	CREM-TI-4EC-0750-R060- Cr75	3/4	1.3/4	4	.060	Cr75	4
72001600	CREM-TI-4EC-0750-R120- Cr75	3/4	1.3/4	4	.120	Cr75	4
72001605	CREM-TI-4RC-1000- SQ Cr75	1	1.1/2	4	---	Cr75	4
72001610	CREM-TI-4RC-1000-R030- Cr75	1	1.1/2	4	.030	Cr75	4
72001615	CREM-TI-4RC-1000-R060- Cr75	1	1.1/2	4	.060	Cr75	4
72001620	CREM-TI-4RC-1000-R120- Cr75	1	1.1/2	4	.120	Cr75	4
72001625	CREM-TI-5RC-0250- SQ Cr75	1/4	3/4	2.1/2	---	Cr75	5
72001630	CREM-TI-5RC-0250-R020- Cr75	1/4	3/4	2.1/2	.020	Cr75	5
72001635	CREM-TI-5RC-0250-R030- Cr75	1/4	3/4	2.1/2	.030	Cr75	5
72001640	CREM-TI-5RC-0250-R060- Cr75	1/4	3/4	2.1/2	.060	Cr75	5
72001645	CREM-TI-5RC-0312- SQ Cr75	5/16	13/16	2.1/2	---	Cr75	5
72001650	CREM-TI-5RC-0312-R020- Cr75	5/16	13/16	2.1/2	.020	Cr75	5
72001655	CREM-TI-5RC-0375- SQ Cr75	3/8	7/8	2.1/2	---	Cr75	5
72001660	CREM-TI-5RC-0375-R020- Cr75	3/8	7/8	2.1/2	.020	Cr75	5
72001665	CREM-TI-5RC-0375-R030- Cr75	3/8	7/8	2.1/2	.030	Cr75	5
72001670	CREM-TI-5RC-0375-R060- Cr75	3/8	7/8	2.1/2	.060	Cr75	5
72001675	CREM-TI-5RC-0375-R120- Cr75	3/8	7/8	2.1/2	.120	Cr75	5
72001680	CREM-TI-5EC-0375- SQ Cr75	3/8	1.1/8	3	---	Cr75	5
72001685	CREM-TI-5EC-0375-R030- Cr75	3/8	1.1/8	3	.020	Cr75	5
72001690	CREM-TI-5EC-0500- SQ Cr75	1/2	1.1/4	3	---	Cr75	5
72001695	CREM-TI-5EC-0500-R020- Cr75	1/2	1.1/4	3	.020	Cr75	5
72001700	CREM-TI-5EC-0500-R030- Cr75	1/2	1.1/4	3	.030	Cr75	5
72001705	CREM-TI-5EC-0500-R060- Cr75	1/2	1.1/4	3	.060	Cr75	5
72001710	CREM-TI-5EC-0500-R090- Cr75	1/2	1.1/4	3	.090	Cr75	5
72001715	CREM-TI-5EC-0500-R120- Cr75	1/2	1.1/4	3	.120	Cr75	5
72001720	CREM-TI-5RC-0625- SQ Cr75	5/8	1.1/4	3.1/2	---	Cr75	5
72001725	CREM-TI-5RC-0625-R030- Cr75	5/8	1.1/4	3.1/2	.030	Cr75	5
72001730	CREM-TI-5RC-0625-R060- Cr75	5/8	1.1/4	3.1/2	.060	Cr75	5
72001735	CREM-TI-5EC-0625- SQ Cr75	5/8	1.5/8	3.1/2	---	Cr75	5
72001740	CREM-TI-5EC-0625-R030- Cr75	5/8	1.5/8	3.1/2	.030	Cr75	5
72001745	CREM-TI-5RC-0750- SQ Cr75	3/4	1.1/2	4	---	Cr75	5
72001750	CREM-TI-5RC-0750-R030- Cr75	3/4	1.1/2	4	.030	Cr75	5
72001755	CREM-TI-5RC-0750-R060- Cr75	3/4	1.1/2	4	.060	Cr75	5
72001760	CREM-TI-5RC-0750-R090- Cr75	3/4	1.1/2	4	.090	Cr75	5
72001765	CREM-TI-5RC-0750-R120- Cr75	3/4	1.1/2	4	.120	Cr75	5
72001770	CREM-TI-5EC-0750- SQ Cr75	3/4	1.3/4	4	---	Cr75	5
72001775	CREM-TI-5EC-0750-R030- Cr75	3/4	1.3/4	4	.030	Cr75	5
72001780	CREM-TI-5EC-0750-R060- Cr75	3/4	1.3/4	4	.060	Cr75	5
72001785	CREM-TI-5EC-0750-R120- Cr75	3/4	1.3/4	4	.120	Cr75	5
72001790	CREM-TI-5RC-1000- SQ Cr75	1	1.1/2	4	---	Cr75	5
72001795	CREM-TI-5RC-1000-R030- Cr75	1	1.1/2	4	.030	Cr75	5
72001800	CREM-TI-5RC-1000-R060- Cr75	1	1.1/2	4	.060	Cr75	5
72001805	CREM-TI-5RC-1000-R120- Cr75	1	1.1/2	4	.120	Cr75	5

ALLIANCE-TI		Feed (inches Per Tooth)									
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRC 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D"	1 x D 0.5 x D								
Medium carbon steel <= 38HRC 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool & die steel <= 38HRC A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool steel 39HRC to 48HRC	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Moderately difficult stainless steel 304, 316, invar, Kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

PISTON HD SERIES

- ⊙ Primary and secondary relief angle design to finish all materials up to 60 HRc hardness
- ⊙ Ultra fine carbide rod is selected to achieve optimum results
- ⊙ Controlled edge preparation and post coat process assure a longer tool life
- ⊙ Corner protection will also give an edge on this series
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in standard lengths
- ⊙ Cr75 TiAlN+ (PVD) coating design for high heat applications like titanium



Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70

CARBIDE END MILL - SQUARE OR RADIUS

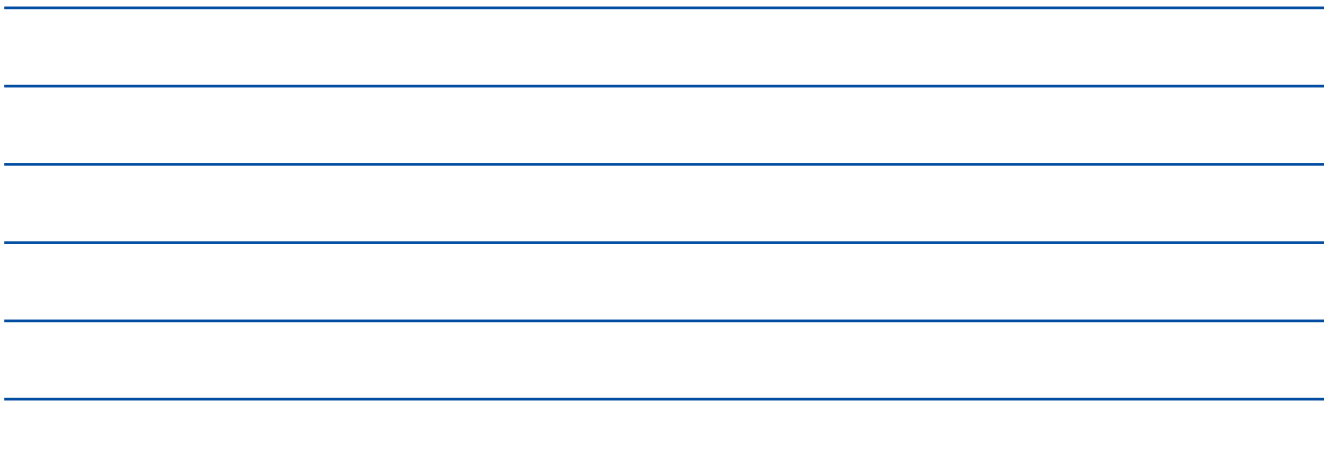
TECHNICAL DETAILS



Tool Diameter Range	0.250-0.750 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	6
Coating	TiAlN+ (PVD)
Center cutting	Yes
Variable pitch	Standard
Variable helix	Standard
Helix angle	50°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72001810	CREM-HD-6RC-0250- SQ Cr75	1/4	3/4	2.1/2	---	Cr75	6
72001815	CREM-HD-6RC-0250-R020- Cr75	1/4	3/4	2.1/2	.020	Cr75	6
72001820	CREM-HD-6RC-0312- SQ Cr75	5/16	13/16	2.1/2	---	Cr75	6
72001825	CREM-HD-6RC-0312-R020- Cr75	5/16	13/16	2.1/2	.020	Cr75	6
72001830	CREM-HD-6RC-0375- SQ Cr75	3/8	1	3	---	Cr75	6
72001835	CREM-HD-6RC-0375-R030- Cr75	3/8	1	3	.030	Cr75	6
72001840	CREM-HD-6RC-0437- SQ Cr75	7/16	1	2.3/4	---	Cr75	6
72001845	CREM-HD-6RC-0437-R030- Cr75	7/16	1	2.3/4	.030	Cr75	6
72001850	CRRM-HD-6RC-0500- SQ Cr75	1/2	1.1/4	3	---	Cr75	6
72001855	CRRM-HD-6RC-0500-R030- Cr75	1/2	1.1/4	3	.030	Cr75	6
72001860	CRRM-HD-6RC-0625- SQ Cr75	5/8	1.5/8	3.1/2	---	Cr75	6
72001865	CRRM-HD-6RC-0625-R030- Cr75	5/8	1.5/8	3.1/2	.030	Cr75	6
72001870	CRRM-HD-6RC-0750- SQ Cr75	3/4	1.5/8	4	---	Cr75	6
72001875	CRRM-HD-6RC-0750-R030- Cr75	3/4	1.5/8	4	.030	Cr75	6



70
55
0 HARDNESS (HRC)

PISTON-HD				Feed (inches Per Tooth)							
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRC 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Medium carbon steel <= 38HRC 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool & die steel <= 38HRC A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39HRC to 48HRC	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

TURBINE SRGH SERIES

- ⊙ High Performance ROUGHING end mills feature differential flute spacing to achieve virtually chatter free machining in a wide range of materials
- ⊙ Excellent results can be achieved on all steels from carbon to alloy as well as stainless and even exotic materials
- ⊙ With this Superior Cr35 AlCrN (PVD) coating you can expect excellent wear and abrasion resistance in your general roughing applications
- ⊙ Available in cylindrical or Weldon style shank
- ⊙ Several radius sizes complete this product range which is offered in standard and long lengths
- ⊙ h6 tolerance for conventional and shrink fit applications

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300



CARBIDE END MILL - CHAMFER

TECHNICAL DETAILS

Tool Diameter Range	0.250-1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4
Coating	AlCrN (PVD)
Variable pitch	Yes
Variable pitch	Variable
Variable helix	Standard
Helix angle	38°



70
35
0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer	Cromson Grade	# Flutes
72001880	CREM-SRGH-4-0250-C10- Cr35	1/4	3/4	2.1/2	.010	Cr35	4
72001885	CREM-SRGH-4-0375-C10- Cr35	3/8	7/8	2.1/2	.010	Cr35	4
72001890	CREM-SRGH-4EC-0500-C20- Cr35	1/2	1.1/4	3	.020	Cr35	4
72001895	CREM-SRGH-4-0625-C30- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	4
72001900	CREM-SRGH-4-0750-C30- Cr35	3/4	1.1/2	4	.030	Cr35	4
72001905	CREM-SRGH-4-1000-C30- Cr35	1	1.1/2	4	.030	Cr35	4
72001910	CREM-SRGH-4EW-0500-C20- Cr35	1/2	1.1/4	3	.020	Cr35	4
72001915	CREM-SRGH-4RW-0625-C30- Cr35	5/8	1.1/4	3.1/2	.030	Cr35	4
72001920	CREM-SRGH-4RW-0750-C30- Cr35	3/4	1.1/2	4	.030	Cr35	4
72001925	CREM-SRGH-4RW-1000-C30- Cr35	1	1.1/2	4	.030	Cr35	4

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed (inches Per Tooth)					
					1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425	.0016	.0024	.0032	.0040	.0048	.0064
					.0020	.0030	.0040	.0050	.0060	.0080
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0013	.0020	.0027	.0034	.0040	.0054
					.0017	.0026	.0035	.0044	.0053	.0070
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0013	.0020	.0027	.0034	.0040	.0054
					.0017	.0026	.0035	.0044	.0053	.0070
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275	.0010	.0015	.0020	.0025	.0030	.0040
					.0012	.0017	.0023	.0029	.0035	.0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0012	.0018	.0025	.0031	.0037	.0050
					.0016	.0024	.0032	.0040	.0048	.0064
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0011	.0016	.0022	.0027	.0033	.0044
					.0015	.0023	.0032	.0037	.0045	.0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0009	.0012	.0018	.0022	.0027	.0036
					.0011	.0016	.0022	.0028	.0033	.0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D							
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D							
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D							
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D							
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0010	.0015	.0020	.0025	.0030	.0040
					.0012	.0017	.0023	.0029	.0035	.0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D							

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

OXYGEN HF SERIES

- ⊙ Double radius geometry for high metal removal rates
- ⊙ 4 flutes to improved chip evacuation for low hardness materials
- ⊙ 5 flutes for high strength and high hardness material up to 60 HRc
- ⊙ With this superior Cr35 AlCrN (PVD) coating you can expect excellent wear and abrasion resistance in High Speed Machining (HSM) applications
- ⊙ Available in cylindrical shank
- ⊙ h6 tolerance for conventional and shrink fit applications

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting	1 x D	1 x D	350
	Peripheral - Rough	1.5 x D	0.5 x D	425
Medium carbon steel <= 38HRc 4140, 4340	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool steel 39HRc to 48HRc	Slotting	.75 x D	1 x D	225
	Peripheral - Rough	1 x D	0.5 x D	275
Easy to machine stainless steel 416, 410, 302, 303	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting	.75 x D	1 x D	275
	Peripheral - Rough	1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
Cast iron Grey	Slotting	1 x D	1 x D	400
	Peripheral - Rough	1.5 x D	0.5 x D	500
Cast iron Ductile	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	400
Cast iron Malleable	Slotting	.75 x D	1 x D	250
	Peripheral - Rough	1 x D	.75 x D	325



OXYGEN-HF							Feed (inches Per Tooth)				
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/4	5/16	3/8	1/2	3/4		
Low carbon steel <= 38HRC 1018, 12L14, 8620	Slotting Peripheral - Rough	0.05 x D	0.50 x D	500 600	.010-.014	.012-.016	.016-.020	.020-.025	.024-.029		
Medium carbon steel <= 38HRC 4140, 4340	Slotting Peripheral - Rough	0.05 x D	0.50 x D	480 600	.010-.014	.012-.017	.016-.021	.020-.026	.024-.030		
Tool & die steel <= 38HRC A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	0.05 x D	0.50 x D	375 525	.006-.010	.008-.012	.012-.014	.016-.020	.018-.024		
Tool steel 39HRC to 48HRC	Slotting Peripheral - Rough	0.05 x D	0.50 x D	250 375	.006-.010	.008-.012	.012-.014	.016-.020	.018-.024		
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	0.05 x D	0.50 x D	275 350	.008-.012	.010-.014	.014-.018	.018-.022	.020-.027		
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	0.05 x D	0.50 x D	250 300	.008-.013	.010-.015	.014-.019	.018-.023	.020-.027		
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.05 x D	0.50 x D	400 500	.010-.014	.012-.016	.016-.020	.020-.025	.024-.029		
Cast iron Grey	Slotting Peripheral - Rough	0.05 x D	0.50 x D	300 500	.006-.010	.008-.012	.012-.014	.016-.022	.018-.024		
Cast iron Ductile	Slotting Peripheral - Rough	0.05 x D	0.50 x D	250 325	.006-.010	.008-.012	.012-.014	.016-.022	.018-.024		
Cast iron Malleable	Slotting Peripheral - Rough	0.05 x D	0.50 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	0.05 x D	0.50 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.05 x D	0.50 x D								
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	0.05 x D	0.50 x D								

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

TAPERMILL TP SERIES

Ⓞ NPT preparation tools prior to tapping

Ⓞ These tools feature our Cr55 TiAlN (PVD) coating offering predictable and consistent results in general purpose application

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300



CARBIDE END MILL - CONICAL

TECHNICAL DETAILS

Tool Diameter Range	0.375-0.500 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4
Coating	TiAlN (PVD)
Center cutting	No
Variable pitch	Standard
Variable helix	Standard
Helix angle	38°



70
35
0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Thread Diam.	Cromson Grade	# Flutes
72001965	CREM-TP-4RC-0375- Cr55	3/8	.95	3	1/8" - 1" NPT	Cr55	4
72001970	CREM-TP-4RC-0500- Cr55	1/2	1.1/4	3.1/2	1/4" - 3" NPT	Cr55	4
72001975	CREM-TP-4LC-0500- Cr55	1/2	1.1/4	6	1/4" - 3" NPT	Cr55	4

Work Material		Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed (inches Per Tooth)						
						1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRC 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425	.0008	.0016	.0024	.0032	.0040	.0048	.0064	
					.0010	.0020	.0030	.0040	.0050	.0060	.0080	
Medium carbon steel <= 38HRC 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006	.0013	.0020	.0027	.0034	.0040	.0054	
					.0008	.0017	.0026	.0035	.0044	.0053	.0070	
Tool & die steel <= 38HRC A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006	.0013	.0020	.0027	.0034	.0040	.0054	
					.0008	.0017	.0026	.0035	.0044	.0053	.0070	
Tool steel 39HRC to 48HRC	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D									
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006	.0012	.0018	.0025	.0031	.0037	.0050	
					.0008"	.0016	.0024	.0032	.0040	.0048	.0064	
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005	.0011	.0016	.0022	.0027	.0033	.0044	
					.0007	.0015	.0023	.0032	.0037	.0045	.0064	
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004	.0009	.0012	.0018	.0022	.0027	.0036	
					.0005	.0011	.0016	.0022	.0028	.0033	.0044	
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D									
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D									
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D									
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D									
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D									
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D									

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

DRIVER DM SERIES

- ⊙ Primary and secondary relief angle design to finish all materials hardness up to 60 HRc application
- ⊙ Ultra-fine carbide rod is selected to achieve optimum results
- ⊙ Controlled edge preparation and post coat process assure a longer tool life
- ⊙ Corner protection will also give an edge on this series
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in standard lengths
- ⊙ Cr75 TiAlN+ (PVD) coating design for high heat application and hard materials



Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275

CARBIDE END MILL - BALL NOSE

TECHNICAL DETAILS

Tool Diameter Range	0.125-0.500 in 3.00-12.00 mm
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	2
Coating	TiAlN+ (PVD)
Center cutting	Yes
Variable pitch	Standard
Variable helix	Standard
Helix angle	50°



Neck Diam.

70
55
0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Length	Cromson Grade	Neck Diam.
72001980	CREM-DM-2RC-0125-NK-BN Cr75	1/8	1/8	3	3/8 (Neck relief)	Cr75	.118
72001985	CREM-DM-2RC-0187-NK-BN Cr75	3/16	3/16	3	.563 (Neck relief)	Cr75	.176
72001990	CREM-DM-2RC-0250-NK-BN Cr75	1/4	1/4	3	1.5/8 (Neck relief)	Cr75	.235
72001995	CREM-DM-2RC-0312-NK-BN Cr75	5/16	5/16	4	2.1/4 (Neck relief)	Cr75	.297
72002000	CREM-DM-2RC-0375-NK-BN Cr75	3/8	3/8	4	2.1/4 (Neck relief)	Cr75	.355
72002005	CREM-DM-2RC-0500-NK-BN Cr75	1/2	1/2	4	2.1/4 (Neck relief)	Cr75	.455
72002010	CREM-DM-2RC-0125-BN Cr75	1/8	1/8	3		Cr75	
72002015	CREM-DM-2RC-0187-BN Cr75	3/16	3/16	3		Cr75	
72002020	CREM-DM-2RC-0250-BN Cr75	1/4	1/4	3		Cr75	
72002025	CREM-DM-2RC-0312-BN Cr75	5/16	5/16	4		Cr75	
72002030	CREM-DM-2RC-0375-BN Cr75	3/8	3/8	4		Cr75	
72002035	CREM-DM-2RC-0500-BN Cr75	1/2	1/2	4		Cr75	
72002040	CREM-DM-2RC-03MM-NK-BN Cr75	3	3	75	9 (Neck relief)	Cr75	2.8
72002045	CREM-DM-2RC-04MM-NK-BN Cr75	4	4	75	12 (Neck relief)	Cr75	3.8
72002050	CREM-DM-2RC-05MM-NK-BN Cr75	5	5	75	15 (Neck relief)	Cr75	4.7
72002055	CREM-DM-2RC-06MM-NK-BN Cr75	6	6	75	40 (Neck relief)	Cr75	5.4
72002060	CREM-DM-2RC-08MM-NK-BN Cr75	8	8	100	55 (Neck relief)	Cr75	7.2
72002065	CREM-DM-2RC-10MM-NK-BN Cr75	10	10	100	55 (Neck relief)	Cr75	9.0
72002070	CREM-DM-2RC-12MM-NK-BN Cr75	12	12	100	55 (Neck relief)	Cr75	10.8
72002075	CREM-DM-2RC-03MM-BN Cr75	3	3	75		Cr75	
72002080	CREM-DM-2RC-04MM-BN Cr75	4	4	75		Cr75	
72002085	CREM-DM-2RC-05MM-BN Cr75	5	5	75		Cr75	
72002090	CREM-DM-2RC-06MM-BN Cr75	6	6	75		Cr75	
72002095	CREM-DM-2RC-08MM-BN Cr75	8	8	100		Cr75	
72002100	CREM-DM-2RC-10MM-BN Cr75	10	10	100		Cr75	
72002105	CREM-DM-2RC-12MM-BN Cr75	12	12	100		Cr75	

DRIVER-DM			Feed (inches Per Tooth)								
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Moderately difficult stainless steel 304, 316, Invar, Kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D								

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

MOTION AL SERIES

- ⦿ Polished flutes to ensure effective chip evacuation and reduce friction
- ⦿ Specifically designed to machine aluminum
- ⦿ Coated option available including Diamond Like Coating (DLC) for optimum results
- ⦿ Controlled edge preparation assures a longer tool life
- ⦿ h6 tolerance for conventional and shrink fit applications
- ⦿ Available in 2 and 3 flutes design with multiple lengths and radius available (Ball Nose also available)
- ⦿ Cutting speed is only limited by your machine (tool balancing for higher speeds recommended)

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000



MOTION-AL

CARBIDE END MILL - SQUARE OR RADIUS
2 FLUTES

TECHNICAL DETAILS

Tool Diameter Range	0.125 - 1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	2
Coating	No
Center cutting	Yes
Variable pitch	Standard
Variable helix	Standard
Helix angle	45°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002190	CREM-AL-2RC-0125- SQ Cr20	1/8	3/8	1.1/2	---	Cr20	2
72002195	CREM-AL-2EC-0125- SQ Cr20	1/8	1/2	1.1/2	---	Cr20	2
72002200	CREM-AL-2LC-0125- SQ Cr20	1/8	3/4	2.1/2	---	Cr20	2
72002205	CREM-AL-2RC-0187- SQ Cr20	3/16	5/16	2	---	Cr20	2
72002210	CREM-AL-2EC-0187- SQ Cr20	3/16	9/16	2	---	Cr20	2
72002215	CREM-AL-2RC-0250- SQ Cr20	1/4	1/2	2.1/2	---	Cr20	2
72002220	CREM-AL-2RC-0250-R015- Cr20	1/4	1/2	2.1/2	.015	Cr20	2
72002225	CREM-AL-2RC-0250-R030- Cr20	1/4	1/2	2.1/2	.030	Cr20	2
72002230	CREM-AL-2RC-0250-R060- Cr20	1/4	1/2	2.1/2	.060	Cr20	2
72002235	CREM-AL-2EC-0250- SQ Cr20	1/4	3/4	2.1/2	---	Cr20	2
72002240	CREM-AL-2EC-0250-R015- Cr20	1/4	3/4	2.1/2	.015	Cr20	2
72002245	CREM-AL-2LC-0250- SQ Cr20	1/4	1.1/8	2.1/2	---	Cr20	2
72002250	CREM-AL-2LC-0250-R015- Cr20	1/4	1.1/8	2.1/2	.015	Cr20	2
72002255	CREM-AL-2RC-0312- SQ Cr20	5/16	5/8	2.1/2	---	Cr20	2
72002260	CREM-AL-2RC-0312-R030- Cr20	5/16	5/8	2.1/2	.030	Cr20	2
72002265	CREM-AL-2LC-0312- SQ Cr20	5/16	1.1/8	3	---	Cr20	2
72002270	CREM-AL-2RC-0375- SQ Cr20	3/8	3/4	2.1/2	---	Cr20	2
72002275	CREM-AL-2RC-0375-R030- Cr20	3/8	3/4	2.1/2	.030	Cr20	2
72002280	CREM-AL-2EC-0375- SQ Cr20	3/8	1.1/8	3	---	Cr20	2
72002285	CREM-AL-2EC-0375-R030- Cr20	3/8	1.1/8	3	.030	Cr20	2
72002290	CREM-AL-2LC-0375- SQ Cr20	3/8	2	4	---	Cr20	2
72002295	CREM-AL-2LC-0375-R030- Cr20	3/8	2	4	.030	Cr20	2
72002300	CREM-AL-2RC-0500- SQ Cr20	1/2	1	3	---	Cr20	2
72002305	CREM-AL-2RC-0500-R030- Cr20	1/2	1	3	.030	Cr20	2
72002310	CREM-AL-2EC-0500- SQ Cr20	1/2	1.1/4	3	---	Cr20	2
72002315	CREM-AL-2EC-0500-R030- Cr20	1/2	1.1/4	3	.030	Cr20	2
72002320	CREM-AL-2EC-0500-R060- Cr20	1/2	1.1/4	3	.060	Cr20	2
72002325	CREM-AL-2LC-0500- SQ Cr20	1/2	2	4	---	Cr20	2
72002330	CREM-AL-2LC-0500-R030- Cr20	1/2	2	4	.030	Cr20	2
72002335	CREM-AL-2RC-0625- SQ Cr20	5/8	1.1/4	3.1/2	---	Cr20	2
72002340	CREM-AL-2RC-0625-R030- Cr20	5/8	1.1/4	3.1/2	.030	Cr20	2

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HARDNESS (HRC)

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EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002345	CREM-AL-2RC-0625-R060- Cr20	5/8	1.1/4	3.1/2	.060	Cr20	2
72002350	CREM-AL-2EC-0625- SQ Cr20	5/8	1.5/8	3.1/2	---	Cr20	2
72002355	CREM-AL-2EC-0625-R030- Cr20	5/8	1.5/8	3.1/2	.030	Cr20	2
72002360	CREM-AL-2LC-0625- SQ Cr20	5/8	2	4	---	Cr20	2
72002365	CREM-AL-2RC-0750- SQ Cr20	3/4	1.1/2	4	---	Cr20	2
72002370	CREM-AL-2RC-0750-R030- Cr20	3/4	1.1/2	4	.030	Cr20	2
72002375	CREM-AL-2EC-0750- SQ Cr20	3/4	1.3/4	4	---	Cr20	2
72002380	CREM-AL-2EC-0750-R030- Cr20	3/4	1.3/4	4	.030	Cr20	2
72002385	CREM-AL-2LC-0750- SQ Cr20	3/4	3	6	---	Cr20	2
72002390	CREM-AL-2RC-1000- SQ Cr20	1	1.1/2	4	---	Cr20	2
72002395	CREM-AL-2EC-1000- SQ Cr20	1	2	4.1/2	---	Cr20	2
72002400	CREM-AL-2EC-1000-R030- Cr20	1	2	4.1/2	.030	Cr20	2
72002405	CREM-AL-2LC-1000-SQ Cr20	1	3	6	---	Cr20	2

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0 HARDNESS (HRC)

CARBIDE END MILL - BALL NOSE
2 FLUTES

TECHNICAL DETAILS

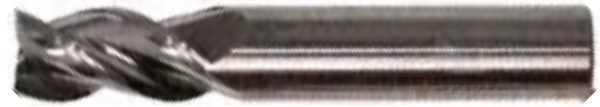


Tool Diameter Range	0.250-0.750 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	2
Coating	No
Center cutting	yes
Variable pitch	Standard
Variable helix	Standard
Helix angle	45°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002130	CREM-AL-2RC-0250-BN Cr20	1/4	3/4	2.1/2	.125	Cr20	2
72002135	CREM-AL-2RC-0312-BN Cr20	5/16	13/16	2.1/2	.156	Cr20	2
72002140	CREM-AL-2RC-0375-BN Cr20	3/8	3/4	2.1/2	.188	Cr20	2
72002145	CREM-AL-2EC-0500-BN Cr20	1/2	1.1/4	3	.250	Cr20	2
72002150	CREM-AL-2RC-0625-BN Cr20	5/8	1.1/4	3.1/2	.313	Cr20	2
72002155	CREM-AL-2RC-0750-BN Cr20	3/4	1.1/2	4	.375	Cr20	2

CARBIDE END MILL - SQUARE OR RADIUS
3 FLUTES
TECHNICAL DETAILS



Tool Diameter Range 0.125 - 1.000 in

Shank tolerance h6
Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
Number of flutes 3
Coating No
Center cutting Yes
Variable pitch Standard
Variable helix Standard
Helix angle 41°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002410	CREM-AL-3RC-0125-SQ Cr20	1/8	3/8	1.1/2	---	Cr20	3
72002415	CREM-AL-3EC-0125-SQ Cr20	1/8	1/2	1.1/2	---	Cr20	3
72002420	CREM-AL-3LC-0125-SQ Cr20	1/8	3/4	2.1/2	---	Cr20	3
72002425	CREM-AL-3RC-0187-SQ Cr20	3/16	5/16	2	---	Cr20	3
72002430	CREM-AL-3EC-0187-SQ Cr20	3/16	9/16	2	---	Cr20	3
72002435	CREM-AL-3RC-0250-SQ Cr20	1/4	1/2	2.1/2	---	Cr20	3
72002440	CREM-AL-3RC-0250-R015- Cr20	1/4	1/2	2.1/2	.015	Cr20	3
72002445	CREM-AL-3EC-0250- SQ Cr20	1/4	3/4	2.1/2	---	Cr20	3
72002450	CREM-AL-3EC-0250-R015- Cr20	1/4	3/4	2.1/2	.015	Cr20	3
72002455	CREM-AL-3LC-0250- SQ Cr20	1/4	1.1/8	2.1/2	---	Cr20	3
72002460	CREM-AL-3LC-0250-R015- Cr20	1/4	1.1/8	2.1/2	.015	Cr20	3
72002465	CREM-AL-3RC-0312- SQ Cr20	5/16	5/8	2.1/2	---	Cr20	3
72002470	CREM-AL-3RC-0312-R030- Cr20	5/16	5/8	2.1/2	.030	Cr20	3
72002475	CREM-AL-3LC-0312- SQ Cr20	5/16	1.1/8	3	---	Cr20	3
72002480	CREM-AL-3RC-0375- SQ Cr20	3/8	3/4	2.1/2	---	Cr20	3
72002485	CREM-AL-3RC-0375-R030- Cr20	3/8	3/4	2.1/2	.030	Cr20	3
72002490	CREM-AL-3EC-0375- SQ Cr20	3/8	1.1/8	3	---	Cr20	3
72002495	CREM-AL-3EC-0375-R030- Cr20	3/8	1.1/8	3	.030	Cr20	3
72002500	CREM-AL-3LC-0375- SQ Cr20	3/8	2	4	---	Cr20	3
72002505	CREM-AL-3LC-0375-R030- Cr20	3/8	2	4	.030	Cr20	3
72002510	CREM-AL-3RC-0500- SQ Cr20	1/2	1	3	---	Cr20	3
72002515	CREM-AL-3RC-0500-R030- Cr20	1/2	1	3	.030	Cr20	3
72002520	CREM-AL-3EC-0500- SQ Cr20	1/2	1.1/4	3	---	Cr20	3
72002525	CREM-AL-3EC-0500-R030- Cr20	1/2	1.1/4	3	.030	Cr20	3
72002530	CREM-AL-3LC-0500- SQ Cr20	1/2	2	4	---	Cr20	3
72002535	CREM-AL-3LC-0500-R030- Cr20	1/2	2	4	.030	Cr20	3
72002540	CREM-AL-3RC-0625- SQ Cr20	5/8	1.1/4	3.1/2	---	Cr20	3
72002545	CREM-AL-3RC-0625-R030- Cr20	5/8	1.1/4	3.1/2	.030	Cr20	3
72002550	CREM-AL-3EC-0625- SQ Cr20	5/8	1.5/8	3.1/2	---	Cr20	3
72002555	CREM-AL-3EC-0625-R030- Cr20	5/8	1.5/8	3.1/2	.030	Cr20	3

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10 HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002560	CREM-AL-3LC-0625- SQ Cr20	5/8	2	4	---	Cr20	3
72002565	CREM-AL-3LC-0625-R030- Cr20	5/8	2	4	.030	Cr20	3
72002570	CREM-AL-3RC-0750- SQ Cr20	3/4	1.1/2	4	---	Cr20	3
72002575	CREM-AL-3RC-0750-R030- Cr20	3/4	1.1/2	4	.030	Cr20	3
72002580	CREM-AL-3EC-0750- SQ Cr20	3/4	1.3/4	4	---	Cr20	3
72002585	CREM-AL-3EC-0750-R030- Cr20	3/4	1.3/4	4	.030	Cr20	3
72002590	CREM-AL-3LC-0750- SQ Cr20	3/4	3	6	---	Cr20	3
72002595	CREM-AL-3LC-0750-R030- Cr20	3/4	3	6	.030	Cr20	3
72002600	CREM-AL-3RC-1000- SQ Cr20	1	1.1/2	4	---	Cr20	3
72002605	CREM-AL-3RC-1000-R030- Cr20	1	1.1/2	4	.030	Cr20	3
72002610	CREM-AL-3EC-1000- SQ Cr20	1	2	4.1/2	---	Cr20	3
72002615	CREM-AL-3EC-1000-R030- Cr20	1	2	4.1/2	.030	Cr20	3
72002620	CREM-AL-3LC-1000- SQ Cr20	1	3	6	---	Cr20	3
72002625	CREM-AL-3LC-1000-R030- Cr20	1	3	6	.030	Cr20	3

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0 HARDNESS (HRC)

**CARBIDE END MILL - BALL NOSE
3 FLUTES**

TECHNICAL DETAILS

- Tool Diameter Range 0.250-0.750 in
- Shank tolerance h6
- Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
- Number of flutes 3
- Coating No
- Center cutting Yes
- Variable pitch Standard
- Variable helix Standard
- Helix angle 41°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
72002160	CREM-AL-3RC-0250-BN Cr20	1/4	3/4	2.1/2	.125	Cr20	3
72002165	CREM-AL-3RC-0312-BN Cr20	5/16	13/16	2.1/2	.156	Cr20	3
72002170	CREM-AL-3RC-0375-BN Cr20	3/8	3/4	2.1/2	.188	Cr20	3
72002175	CREM-AL-3EC-0500-BN Cr20	1/2	1.1/4	3	.250	Cr20	3
72002180	CREM-AL-3RC-0625-BN Cr20	5/8	1.1/4	3.1/2	.313	Cr20	3
72002185	CREM-AL-3RC-0750-BN Cr20	3/4	1.1/2	4	.375	Cr20	3

MOTION-AL			Feed (inches Per Tooth)								
Work Material	Type of Cut	Axiale DOC	Radiale DOC	Vitesse (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D"	1 x D 0.5 x D								
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 2000	.0008 .0010	.0018 .0043	.0027 .0052	.0036 .0061	.0045 .0075"	.0054 .0081	.0072 .0110
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D								

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

BOSS ALR SERIES

- ⦿ High performance end mills feature differential flute spacing to achieve virtually chatter free in ROUGHING operation for aluminum
- ⦿ Excellent results can be achieved because of the various features. This special design end mill offers: polished flutes, roughing (chipbreaker) grooves and controlled edge preparation
- ⦿ Available in cylindrical style shank
- ⦿ Several radius available with standard and long lengths
- ⦿ h6 tolerance for conventional and shrink fit applications
- ⦿ Coated options available including Diamond Like Coating (DLC) for longer tool life

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	800 1000



CARBIDE END MILL - CHAMFER



TECHNICAL DETAILS

Tool Diameter Range	0.125-1.000 in
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	3
Coating	No
Center cutting	Yes
Variable pitch	Variable
Variable helix	Standard
Helix angle	41°

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0 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer	Cromson Grade	# Flutes
72002630	CREM-ALR-3RC-0250-C10 Cr20	1/4	3/4	2.1/2	.010	Cr20	3
72002635	CREM-ALR-3RC-0375-C10- Cr20	3/8	7/8	2.1/2	.010	Cr20	3
72002640	CREM-ALR-3EC-0375-C10- Cr20	3/8	1.1/8	3	.010	Cr20	3
72002645	CREM-ALR-3MC-0375-C10- Cr20	3/8	1.1/2	3	.010	Cr20	3
72002650	CREM-ALR-3EC-0500-C20- Cr20	1/2	1.1/4	3	.020	Cr20	3
72002655	CREM-ALR-3LC-0500-C20- Cr20	1/2	2	4	.020	Cr20	3
72002660	CREM-ALR-3RC-0625-C30- Cr20	5/8	1.1/4	3.1/2	.030	Cr20	3
72002665	CREM-ALR-3LC-0625-C30- Cr20	5/8	2	4	.030	Cr20	3
72002670	CREM-ALR-3RC-0750-C30- Cr20	3/4	1.1/4	4	.030	Cr20	3
72002675	CREM-ALR-3SP-0750-C30- Cr20	3/4	1.5/8	4	.030	Cr20	3
72002680	CREM-ALR-3EC-0750-C30- Cr20	3/4	1.3/4	4	.030	Cr20	3
72002685	CREM-ALR-3MC-0750-C30- Cr20	3/4	2.1/4	4.1/2	.030	Cr20	3
72002690	CREM-ALR-3LC-0750-C30- Cr20	3/4	3	6	.030	Cr20	3
72002700	CREM-ALR-3EC-1000-C50- Cr20	1	1.1/2	4	.050	Cr20	3
72002705	CREM-ALR-3MC-1000-C50- Cr20	1	2	4.1/2	.050	Cr20	3
72002710	CREM-ALR-3LC-1000-C50- Cr20	1	3	6	.050	Cr20	3
72002715	CREM-ALR-3EW-0500-C20- Cr20	1/2	1.1/4	3	.020	Cr20	3
72002720	CREM-ALR-3RW-0625-C30- Cr20	5/8	1.1/4	3.1/2	.030	Cr20	3
72002725	CREM-ALR-3RW-0750-C30- Cr20	3/4	1.1/2	4	.030	Cr20	3
72002730	CREM-ALR-3RW-1000-C50- Cr20	1	1.1/2	4	.050	Cr20	3

BOSS-ALR			Feed (inches Per Tooth)								
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/4	5/16	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRC 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Medium carbon steel <= 38HRC 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool & die steel <= 38HRC A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool steel 39HRC to 48HRC	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D	700 2000	.0023 .0054	.0030 .0063	.0034 .0068	.0045 .0076	.0056 .0094	.0068 .0100	.0090 .0138
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D								
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D								

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

CARBIDE END MILL

MAGNAT STX SERIES

- ⦿ Increase tool life by up to 30% with our 5 flutes performance end mill
- ⦿ Enhanced edge strength increases productivity and lowers costs per part
- ⦿ A stable, robust cutter that allows for heavier chip loads
- ⦿ Cr95 coating significantly lowers operating cutting temperatures compared to other coatings
- ⦿ Available in stub, standard, extra long and long reach lengths
- ⦿ h6 tolerance for conventional and shrink fit applications
- ⦿ Chipbreakers available on request

Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting	1 x D	1 x D	350
	Peripheral - Rough	1.5 x D	0.5 x D	425
Medium carbon steel <= 38HRc 4140, 4340	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool steel 39HRc to 48HRc	Slotting	.75 x D	1 x D	225
	Peripheral - Rough	1 x D	0.5 x D	275
Easy to machine stainless steel 416, 410, 302, 303	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting	.75 x D	1 x D	275
	Peripheral - Rough	1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
Cast iron Grey	Slotting	1 x D	1 x D	400
	Peripheral - Rough	1.5 x D	0.5 x D	500
Cast iron Ductile	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	400
Cast iron Malleable	Slotting	.75 x D	1 x D	250
	Peripheral - Rough	1 x D	.75 x D	325
Titanium alloy 6Al4V	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D	1 x D	70
		1 x D	.25 x D	95



CARBIDE END MILL - SQUARE OR RADIUS

TECHNICAL DETAILS

Tool Diameter Range (0.125-1.000 in)
3.00-25.00 mm

Shank tolerance h6
Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
Number of flutes 5
Coating TiAlCN (PVD)
Center cutting Yes
Variable pitch Variable
Variable helix Variable
Helix angle -



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000000	CREM-STX-5RC-0125-R0010-Cr95	.125	.156	2.000	.010	Cr95	5
73000005	CREM-STX-5RNC-01875-R0010-Cr95	.188	.218	2.000	.010	Cr95	5
73000010	CREM-STX-5MNC-01875-R0010-Cr95	.188	.218	2.500	.010	Cr95	5
73000015	CREM-STX-5RC-0250-SQ-Cr95	.250	.375	2.000	---	Cr95	5
73000020	CREM-STX-5RC-0250-R0020-Cr95	.250	.375	2.000	.020	Cr95	5
73000025	CREM-STX-5RC-0250-R0030-Cr95	.250	.375	2.000	.030	Cr95	5
73000030	CREM-STX-5MC-0250-SQ-Cr95	.250	.750	2.500	-	Cr95	5
73000035	CREM-STX-5RC-0250-R0020-Cr95	.250	.750	2.500	.020	Cr95	5
73000040	CREM-STX-5RC-0250-R0030-Cr95	.250	.750	2.500	.030	Cr95	5
73000045	CREM-STX-5RC-0250-R0060-Cr95	.250	.750	2.500	.060	Cr95	5
73000050	CREM-STX-5LC-0250-SQ-Cr95	.250	1.250	3.000	---	Cr95	5
73000055	CREM-STX-5RC-03125-SQ-Cr95	.313	.875	2.500	---	Cr95	5
73000060	CREM-STX-5RC-03125-R0030-Cr95	.313	.875	2.500	.030	Cr95	5
73000065	CREM-STX-5RC-03125-R0060-Cr95	.313	.875	2.500	.060	Cr95	5
73000070	CREM-STX-5RC-0375-SQ-Cr95	.375	.500	2.500	---	Cr95	5
73000075	CREM-STX-5RC-0375-R0020-Cr95	.375	.500	2.500	.020	Cr95	5
73000080	CREM-STX-5RC-0375-R0060-Cr95	.375	.500	2.500	.060	Cr95	5
73000085	CREM-STX-5RC-0375-R0120-Cr95	.375	.500	2.500	.120	Cr95	5
73000090	CREM-STX-5MC-0375-SQ-Cr95	.375	1.000	2.500	---	Cr95	5
73000095	CREM-STX-5RC-0375-R0020-Cr95	.375	1.000	2.500	.020	Cr95	5
73000100	CREM-STX-5RC-0375-R0030-Cr95	.375	1.000	2.500	.030	Cr95	5
73000105	CREM-STX-5MC-0375-R0060-Cr95	.375	1.000	2.500	.060	Cr95	5
73000110	CREM-STX-5RC-0375-R0090-Cr95	.375	1.000	2.500	.090	Cr95	5
73000115	CREM-STX-5RC-0375-R0120-Cr95	.375	1.000	2.500	.120	Cr95	5
73000120	CREM-STX-5LC-0375-SQ-Cr95	.375	1.250	3.000	---	Cr95	5
73000125	CREM-STX-5EC-0375-R0020-Cr95	.375	2.000	4.000	.020	Cr95	5
73000130	CREM-STX-5EC-04375-SQ-Cr95	.438	2.000	4.000	---	Cr95	5
73000135	CREM-STX-5SC-0500-SQ-Cr95	.500	.625	3.000	---	Cr95	5
73000140	CREM-STX-5SC-0500-R0030-Cr95	.500	.625	3.000	.030	Cr95	5
73000145	CREM-STX-5RC-0500-SQ-Cr95	.500	1.000	3.000	---	Cr95	5
73000150	CREM-STX-5RC-0500-R0010-Cr95	.500	1.000	3.000	.010	Cr95	5

70
40
0 HARDNESS (HRC)

70
40
HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000155	CREM-STX-5RC-0500-R0020-Cr95	.500	1.000	3.000	.020	Cr95	5
73000160	CREM-STX-5RC-0500-R0030-Cr95	.500	1.000	3.000	.030	Cr95	5
73000165	CREM-STX-5RC-0500-R0060-Cr95	.500	1.000	3.000	.060	Cr95	5
73000170	CREM-STX-5RC-0500-R012-Cr95	.500	1.000	3.000	.120	Cr95	5
73000175	CREM-STX-5MC-0500-SQ-Cr95	.500	1.250	3.000	---	Cr95	5
73000180	CREM-STX-5MC-0500-R0030-Cr95	.500	1.250	3.000	.030	Cr95	5
73000185	CREM-STX-5LC-0500-R0060-Cr95	.500	1.250	3.000	.060	Cr95	5
73000190	CREM-STX-5LC-0500-SQ-Cr95	.500	1.625	4.000	---	Cr95	5
73000195	CREM-STX-5EC-0500-SQ-Cr95	.500	2.000	4.000	---	Cr95	5
73000200	CREM-STX-5EC-0500-R0030-Cr95	.500	2.000	4.000	.030	Cr95	5
73000205	CREM-STX-5SC-0625-SQ-Cr95	.625	.750	3.500	---	Cr95	5
73000210	CREM-STX-5SC-0625-R0030-Cr95	.625	.750	3.500	.030	Cr95	5
73000215	CREM-STX-5SC-0625-R0035-Cr95	.625	.750	3.500	.035	Cr95	5
73000220	CREM-STX-5RC-0625-R0060-Cr95	.625	.750	3.500	.060	Cr95	5
73000225	CREM-STX-5MC-0625-SQ-Cr95	.625	1.500	3.500	---	Cr95	5
73000230	CREM-STX-5RC-0625-R0030-Cr95	.625	1.500	3.500	.030	Cr95	5
73000235	CREM-STX-5RC-0625-R0035-Cr95	.625	1.500	3.500	.035	Cr95	5
73000240	CREM-STX-5RC-0625-R0120-Cr95	.625	1.500	3.500	.120	Cr95	5
73000245	CREM-STX-5LC-0625-R0120-Cr95	.625	1.625	4.000	.120	Cr95	5
73000250	CREM-STX-5EC-0625-R0035-Cr95	.625	2.250	5.000	.035	Cr95	5
73000255	CREM-STX-5SC-0750-SQ-Cr95	.750	1.500	4.000	---	Cr95	5
73000260	CREM-STX-5SC-0750-R0020-Cr95	.750	1.500	4.000	.020	Cr95	5
73000265	CREM-STX-5MC-0750-SQ-Cr95	.750	1.625	4.000	---	Cr95	5
73000270	CREM-STX-5RC-0750-SQ-Cr95	.750	2.250	5.000	---	Cr95	5
73000275	CREM-STX-5RC-0750-R0035-Cr95	.750	2.250	5.000	.035	Cr95	5
73000280	CREM-STX-5LC-0750-SQ-Cr95	.750	3.250	6.000	---	Cr95	5
73000285	CREM-STX-5RC-1000-SQ-Cr95	1.000	1.500	4.000	---	Cr95	5
73000290	CREM-STX-5RC-1000-R0060-Cr95	1.000	1.500	4.000	.060	Cr95	5
73000295	CREM-STX-5MC-1000-SQ-Cr95	1.000	2.250	5.000	---	Cr95	5
73000300	CREM-STX-5MC-1000-R0120-Cr95	1.000	2.250	5.000	.120	Cr95	5
73000305	CREM-STX-5LC-1000-SQ-Cr95	1.000	4.250	7.000	---	Cr95	5
73000310	CREM-STX-5RC-3-SQ-Cr95	3.00	6	38.00	---	Cr95	5
73000315	CREM-STX-5MC-3-SQ-Cr95	3.00	12	38.00	---	Cr95	5
73000320	CREM-STX-5RC-4-SQ-Cr95	4.00	8	50.00	---	Cr95	5
73000325	CREM-STX-5MC-4-SQ-Cr95	4.00	14	50.00	---	Cr95	5
73000330	CREM-STX-5RC-5-SQ-Cr95	5.00	16	64.00	---	Cr95	5
73000335	CREM-STX-5MC-6-SQ-Cr95	6.00	10	50.00	---	Cr95	5
73000340	CREM-STX-5RC-6-R04-Cr95	6.00	10	50.00	0,40	Cr95	5
73000345	CREM-STX-5MC-6-R1-Cr95	6.00	20	76.00	1,00	Cr95	5
73000350	CREM-STX-5RC-8-R05-Cr95	8.00	12	50.00	0,50	Cr95	5
73000355	CREM-STX-5MC-8-R1-Cr95	8.00	22	76.00	1,00	Cr95	5
73000360	CREM-STX-5RC-10-R05-Cr95	10.00	12	50.00	0,50	Cr95	5
73000365	CREM-STX-5MC-10-SQ-Cr95	10.00	25	89.00	-	Cr95	5
73000370	CREM-STX-5RC-12-R05-Cr95	12.00	16	63.00	0,50	Cr95	5
73000375	CREM-STX-5MC-12-R05-Cr95	12.00	25	76.00	0,50	Cr95	5
73000380	CREM-STX-5RC-16-SQ-Cr95	16.00	38	100.00	---	Cr95	5
73000385	CREM-STX-5MC-16-R05-Cr95	16.00	38	100.00	0,50	Cr95	5
73000390	CREM-STX-5RC-20-SQ-Cr95	20.00	38	100.00	---	Cr95	5
73000395	CREM-STX-5RC-25-SQ-Cr95	25.00	38	100.00	---	Cr95	5

MAGNAT-STX			Feed (inches Per Tooth)								
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	350 425	.0008 .0010	.0016 .0020	.0024 .0030	.0032 .0040	.0040 .0050	.0048 .0060	.0064 .0080
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	"1 x D 0.5 x D	225 275	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064
Moderately difficult stainless steel 304, 316, Invar, Kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	400 500	.0006 .0007	.0012 .0015	.0019 .0023	.0025 .0030	.0031 .0037"	.0038 .0046	.0050 .0060
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 400	.0006 .0007	.0012 .0014	.0018 .0021	.0023 .0028	.0029 .0035	.0035 .0042	.0046 .0056
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D	250 325	.0004 .0005	.0008 .0011	.0012 .0016	.0015 .0022	.0019 .0027	.0023 .0033	.0030 .0044
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 350	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 90	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

PERFORMANCE TIX SERIES

- ⊙ Dominates in stainless steels, super alloys and titanium
- ⊙ Performs exceptionally in High Speed Machining (HSM) and full diameter milling
- ⊙ Tool versatility that results in higher productivity, less tool changes and longer tool life
- ⊙ Produces excellent surface finishes
- ⊙ Cr95 coating significantly lowers operating cutting temperatures compared to other coatings
- ⊙ Available in stub and standard lengths



Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Easy to machine stainless steel 416, 410, 302, 303	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting	.75 x D	1 x D	275
	Peripheral - Rough	1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
Titanium alloy 6Al4V	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D	1 x D	70
		1 x D	.25 x D	95

CARBIDE END MILL - SQUARE OR RADIUS
4 FLUTES

TECHNICAL DETAILS

Tool Diameter Range 0.125-1.000 in
 3.00 - 12.00 mm

Shank tolerance h6
Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
Number of flutes 4
Coating TiAlCN (PVD)
Center cutting Yes
Variable pitch Variable
Variable helix Variable
Helix angle 38°



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000405	CREM-TiX-4RC-0125-SQ-Cr95	.125	.250	1.500	---	Cr95	4
73000410	CREM-TiX-4LC-0125-SQ-Cr95	.125	.500	2.000	---	Cr95	4
73000415	CREM-TiX-4RC-0125-R0010-Cr95	.125	.250	1.500	.010	Cr95	4
73000420	CREM-TiX-4LC-0125-R0010-Cr95	.125	.500	2.000	.010	Cr95	4
73000425	CREM-TiX-4RC-0125-R0020-Cr95	.125	.250	1.500	.020	Cr95	4
73000430	CREM-TiX-4SC-01875-R0010-Cr95	.188	.3135	2.000	.010	Cr95	4
73000435	CREM-TiX-4RC-01875-R0010-Cr95	.188	.563	2.500	.010	Cr95	4
73000440	CREM-TiX-4LC-01875-R0010-Cr95	.188	.750	2.500	.010	Cr95	4
73000445	CREM-TiX-4RC-01875-R0020-Cr95	.188	.563	2.500	.020	Cr95	4
73000450	CREM-TiX-4SC-01875-R0030-Cr95	.188	.313	2.000	.030	Cr95	4
73000470	CREM-TiX-4SC-0250-SQ-Cr95	.250	.500	2.500	---	Cr95	4
73000475	CREM-TiX-4RC-0250-SQ-Cr95	.250	.750	2.500	---	Cr95	4
73000480	CREM-TiX-4LC-0250-SQ-Cr95	.250	1.000	3.000	---	Cr95	4
73000485	CREM-TiX-4SC-0250-R0010-Cr95	.250	.375	2.000	.010	Cr95	4
73000490	CREM-TiX-4MC-0250-R0010-Cr95	.250	.500	2.500	.010	Cr95	4
73000495	CREM-TiX-4RC-0250-R0010-Cr95	.250	.750	2.500	.010	Cr95	4
73000500	CREM-TiX-4LC-0250-R0010-Cr95	.250	1.000	3.000	.010	Cr95	4
73000505	CREM-TiX-4SC-0250-R0020-Cr95	.250	.375	2.000	.020	Cr95	4
73000510	CREM-TiX-4MC-0250-R0020-Cr95	.250	.500	2.500	.020	Cr95	4
73000515	CREM-TiX-4RC-0250-R0020-Cr95	.250	.750	2.500	.020	Cr95	4
73000520	CREM-TiX-4LC-0250-R0020-Cr95	.250	1.000	3.000	.020	Cr95	4
73000525	CREM-TiX-4RC-0250-R0030-Cr95	.250	.750	2.500	.030	Cr95	4
73000530	CREM-TiX-4LC-0250-R0030-Cr95	.250	1.000	3.000	.030	Cr95	4
73000535	CREM-TiX-4LC-0250-R0060-Cr95	.250	1.000	3.000	.060	Cr95	4
73000540	CREM-TiX-4MC-03125-SQ-Cr95	.313	0.750	2.500	---	Cr95	4
73000545	CREM-TiX-4RC-03125-R0020-Cr95	.313	1.000	3.000	.020	Cr95	4
73000570	CREM-TiX-4SC-0375-SQ-Cr95	.375	0.500	2.500	---	Cr95	4
73000575	CREM-TiX-4MC-0375-SQ-Cr95	.375	0.750	2.500	---	Cr95	4
73000580	CREM-TiX-4RC-0375-SQ-Cr95	.375	1.000	3.000	---	Cr95	4
73000585	CREM-TiX-4LC-0375-SQ-Cr95	.375	1.250	3.000	---	Cr95	4
73000590	CREM-TiX-4SC-0375-R0010-Cr95	.375	.500	2.500	.010	Cr95	4

70
40
0 HARDNESS (HRC)

70
40
HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000595	CREM-TIX-4MC-0375-R0010-Cr95	.375	.750	2.500	.010	Cr95	4
73000600	CREM-TIX-4RC-0375-R0010-Cr95	.375	1.000	3.000	.010	Cr95	4
73000605	CREM-TIX-4LC-0375-R0010-Cr95	.375	1.500	3.500	.010	Cr95	4
73000610	CREM-TIX-4SC-0375-R0020-Cr95	.375	.500	2.500	.020	Cr95	4
73000615	CREM-TIX-4MC-0375-R0020-Cr95	.375	.750	2.500	.020	Cr95	4
73000620	CREM-TIX-4RC-0375-R0020-Cr95	.375	1.000	3.000	.020	Cr95	4
73000625	CREM-TIX-4LC-0375-R0030-Cr95	.375	.500	2.500	.030	Cr95	4
73000630	CREM-TIX-4RC-0375-R0030-Cr95	.375	1.000	3.000	.030	Cr95	4
73000635	CREM-TIX-4RC-0375-R0060-Cr95	.375	1.000	3.000	.060	Cr95	4
73000660	CREM-TIX-4SC-0500-R0010-Cr95	.500	.625	2.500	.010	Cr95	4
73000665	CREM-TIX-4MC-0500-R0010-Cr95	.500	1.000	3.000	.010	Cr95	4
73000670	CREM-TIX-4RC-0500-R0010-Cr95	.500	1.250	3.000	.010	Cr95	4
73000675	CREM-TIX-4LC-0500-R0010-Cr95	.500	1.625	4.000	.010	Cr95	4
73000680	CREM-TIX-4SC-0500-SQ-Cr95	.500	.625	2.500	---	Cr95	4
73000685	CREM-TIX-4RC-0500-SQ-Cr95	.500	1.000	3.000	---	Cr95	4
73000690	CREM-TIX-4SC-0500-R0020-Cr95	.500	.625	2.500	.020	Cr95	4
73000695	CREM-TIX-4RC-0500-R0020-Cr95	.500	1.000	3.000	.020	Cr95	4
73000700	CREM-TIX-4RC-0500-SQ-Cr95	.500	1.250	3.000	---	Cr95	4
73000705	CREM-TIX-4RC-0500-R0020-Cr95	.500	1.250	3.000	.020	Cr95	4
73000710	CREM-TIX-4LC-0500-R0020-Cr95	.500	1.625	4.000	.020	Cr95	4
73000715	CREM-TIX-4SC-0500-R0030-Cr95	.500	.625	2.500	.030	Cr95	4
73000720	CREM-TIX-4MC-0500-R0030-Cr95	.500	1.000	3.000	.030	Cr95	4
73000725	CREM-TIX-4RC-0500-R0030-Cr95	.500	1.250	3.000	.030	Cr95	4
73000730	CREM-TIX-4LC-0500-R0030-Cr95	.500	1.625	4.000	.030	Cr95	4
73000735	CREM-TIX-4EC-0500-R0030-Cr95	.500	2.000	4.000	.030	Cr95	4
73000740	CREM-TIX-4MC-0500-R0060-Cr95	.500	1.000	3.000	.060	Cr95	4
73000745	CREM-TIX-4RC-0500-R0060-Cr95	.500	1.250	3.000	.060	Cr95	4
73000750	CREM-TIX-4LC-0500-R0060-Cr95	.500	1.625	4.000	.060	Cr95	4
73000755	CREM-TIX-4MC-0500-R0120-Cr95	.500	1.000	3.000	.120	Cr95	4
73000760	CREM-TIX-4RC-0500-R0120-Cr95	.500	1.250	3.000	.120	Cr95	4
73000765	CREM-TIX-4LC-0500-R0120-Cr95	.500	1.625	4.000	.120	Cr95	4
73000770	CREM-TIX-4MC-0625-SQ-Cr95	.625	1.250	3.500	---	Cr95	4
73000775	CREM-TIX-4RC-0625-SQ-Cr95	.625	2.000	4.000	---	Cr95	4
73000780	CREM-TIX-4LC-0625-R0030-Cr95	.625	.750	3.500	.030	Cr95	4
73000785	CREM-TIX-4MC-0625-R0030-Cr95	.625	1.250	3.500	.030	Cr95	4
73000790	CREM-TIX-4RC-0625-R0030-Cr95	.625	1.625	3.500	.030	Cr95	4
73000795	CREM-TIX-4LC-0625-R0030-Cr95	.625	2.000	4.000	.030	Cr95	4
73000800	CREM-TIX-4SC-0750-R0030-Cr95	.750	1.000	3.000	.030	Cr95	4
73000805	CREM-TIX-4MC-0750-R0030-Cr95	.750	1.500	4.000	.030	Cr95	4
73000810	CREM-TIX-4RC-0750-R0030-Cr95	.750	2.000	5.000	.030	Cr95	4
73000815	CREM-TIX-4LC-0750-R0030-Cr95	.750	3.250	6.000	.030	Cr95	4
73000820	CREM-TIX-4RC-0750-SQ-Cr95	.750	1.500	4.000	---	Cr95	4
73000825	CREM-TIX-4SC-0750-R0060-Cr95	.750	1.000	3.000	.060	Cr95	4
73000830	CREM-TIX-4MC-0750-R0120-Cr95	.750	1.500	4.000	.120	Cr95	4
73000835	CREM-TIX-4RC-1000-R0060-Cr95	1.000	2.000	4.500	.060	Cr95	4
73000840	CREM-TIX-4LC-1000-R0250-Cr95	1.000	3.250	6.000	.250	Cr95	4
73000845	CREM-TIX-4LC-3-SQ-Cr95	3.00	10.00	38.00	---	Cr95	4
73000850	CREM-TIX-4RC-3-R025-Cr95	3.00	6.00	38.00	.250	Cr95	4
73000860	CREM-TIX-4RC-4-R025-Cr95	4.00	12.00	50.00	.250	Cr95	4

CARBIDE END MILL - BALL NOSE
4 FLUTES



TECHNICAL DETAILS

Tool Diameter Range	0.125-0.500 in 4.00-12.00 mm
Shank tolerance	h6
Cutter tolerance	(+0.00-0.002 in) +0.00-0.05 mm
Number of flutes	4
Coating	TiAlCN (PVD)
Center cutting	Yes
Variable pitch	Variable
Variable helix	Variable
Helix angle	38°

70
40
10 HARDNESS (HRC)



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000400	CREM-TiX-4RC-0125-BN-Cr95	.125	.250	1.500	.063	Cr95	4
73000455	CREM-TiX-4SC-0250-BN-Cr95	.250	.375	2.000	.125	Cr95	4
73000460	CREM-TiX-4RC-0250-BN-Cr95	.250	.750	2.500	.125	Cr95	4
73000465	CREM-TiX-4LC-0250-BN-Cr95	.250	1.000	3.000	.125	Cr95	4
73000550	CREM-TiX-4SC-0375-BN-Cr95	.375	.750	2.500	.156	Cr95	4
73000555	CREM-TiX-4MC-0375-BN-Cr95	.375	1.000	3.000	.156	Cr95	4
73000560	CREM-TiX-4RC-0375-BN-Cr95	.375	1.250	3.000	.156	Cr95	4
73000565	CREM-TiX-4LC-0375-BN-Cr95	.375	1.500	3.500	.156	Cr95	4
73000640	CREM-TiX-4SC-0500-BN-Cr95	.500	.625	2.500	.250	Cr95	4
73000645	CREM-TiX-4MC-0500-BN-Cr95	.500	1.000	3.000	.250	Cr95	4
73000650	CREM-TiX-4RC-0500-BN-Cr95	.500	1.250	3.000	.250	Cr95	4
73000655	CREM-TiX-4LC-0500-BN-Cr95	.500	2.000	4.000	.250	Cr95	4
73000855	CREM-TiX-4RC-4-BN-Cr95	4.00	12.00	50.000	2.00	Cr95	4
73000865	CREM-TiX-4RC-5-BN-Cr95	5.00	16.00	64.000	3.00	Cr95	4
73000870	CREM-TiX-4LC-6-BN-Cr95	6.00	20.00	64.000	3.00	Cr95	4
73000885	CREM-TiX-4RC-8-BN-Cr95	8.00	25.00	76.000	4.00	Cr95	4
73000890	CREM-TiX-4LC-8-BN-Cr95	8.00	32.00	100.000	4.00	Cr95	4
73000915	CREM-TiX-4RC-12-BN-Cr95	12.00	26.00	84.000	6.00	Cr95	4
73000920	CREM-TiX-4LC-12-BN-Cr95	12.00	50.00	100.000	6.00	Cr95	4

PERFORMANCE-TIX			Feed (inches Per Tooth)								
Work Material	Type of Cut	Axial DOC	Radial DOC	Vitess (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1
Low carbon steel <= 38Hrc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Medium carbon steel <= 38Hrc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Tool & die steel <= 38Hrc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070
Tool steel 39Hrc to 48Hrc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D								
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D								
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D								
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D								
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

BOOSTER SA SERIES

- ⊙ Optimized geometry combined with an advanced coating allows high feed rates in stainless steel, super alloys and titanium, resulting in increased productivity and lower cost per part
- ⊙ Our Cr95 coating lowers cutting temperature by an average of 150 degrees in lab testing
- ⊙ Produces excellent surface finishes and chip control
- ⊙ h6 tolerance for conventional and shrink fit applications
- ⊙ Available in stub, standard and extra long lengths



Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)
Medium carbon steel <= 38HRc 4140, 4340	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting	1 x D	1 x D	325
	Peripheral - Rough	1.5 x D	0.5 x D	375
Tool steel 39HRc to 48HRc	Slotting	.75 x D	1 x D	225
	Peripheral - Rough	1 x D	0.5 x D	275
Easy to machine stainless steel 416, 410, 302, 303	Slotting	1 x D	1 x D	300
	Peripheral - Rough	1.5 x D	0.5 x D	375
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting	.75 x D	1 x D	275
	Peripheral - Rough	1 x D	0.5 x D	350
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
Titanium alloy 6Al4V	Slotting	0.5 x D	1 x D	250
	Peripheral - Rough	1 x D	0.5 x D	300
High temperature alloy Inconel, haynes, stellite. hastelloy	Slotting	.25 x D	1 x D	70
		1 x D	.25 x D	95

CARBIDE END MILL - SQUARE OR RADIUS

TECHNICAL DETAILS

Tool Diameter Range 0.250-1.000 in
6.00-25.00 mm

Shank tolerance h6
Cutter tolerance (+0.00-0.002 in) +0.00-0.05 mm
Number of flutes 5, 7 or 9
Coating TiAlCN (PVD)
Center cutting Yes
Variable pitch Variable
Variable helix Standard
Helix angle -



EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73000970	CREM-SA-5SC-0250-R0015-Cr95	.250	.375	2.500	.015	Cr95	5
73000975	CREM-SA-5LC-0250-R0015-Cr95	.250	1.000	3.000	.015	Cr95	5
73000980	CREM-SA-5SC-0250-SQ-Cr95	.250	.375	2.500	---	Cr95	5
73000985	CREM-SA-5LC-0250-SQ-Cr95	.250	1.000	3.000	---	Cr95	5
73000990	CREM-SA-7RC-0375-R0015-Cr95	.375	.750	2.500	.015	Cr95	7
73000995	CREM-SA-7LC-0375-R0015-Cr95	.375	1.125	3.000	.015	Cr95	7
73001000	CREM-SA-7RC-0375-SQ-Cr95	.375	.750	2.500	---	Cr95	7
73001005	CREM-SA-7SC-0500-R0015-Cr95	.500	.625	2.500	.015	Cr95	7
73001010	CREM-SA-7SC-0500-R0030-Cr95	.500	.625	2.500	.030	Cr95	7
73001015	CREM-SA-7SC-0500-R0060-Cr95	.500	.625	2.500	.060	Cr95	7
73001020	CREM-SA-7LC-0500-R0015-Cr95	.500	1.500	4.000	.015	Cr95	7
73001025	CREM-SA-7LC-0500-R0030-Cr95	.500	1.500	4.000	.030	Cr95	7
73001030	CREM-SA-7LC-0500-R0060-Cr95	.500	1.500	4.000	.060	Cr95	7
73001035	CREM-SA-7MC-0500-R0015-Cr95	.500	1.000	3.000	.015	Cr95	7
73001040	CREM-SA-7MC-0500-R0030-Cr95	.500	1.000	3.000	.030	Cr95	7
73001045	CREM-SA-7MC-0500-R0060-Cr95	.500	1.000	3.000	.060	Cr95	7
73001050	CREM-SA-7MC-0500-SQ-Cr95	.500	1.000	3.000	---	Cr95	7
73001055	CREM-SA-7EC-0500-SQ-Cr95	.500	1.500	4.000	---	Cr95	7
73001060	CREM-SA-7RC-0500-SQ-Cr95	.500	1.250	3.000	---	Cr95	7
73001065	CREM-SA-7RC-0500-R0015-Cr95	.500	1.250	3.000	.015	Cr95	7
73001070	CREM-SA-7RC-0500-R0030-Cr95	.500	1.250	3.000	.030	Cr95	7
73001075	CREM-SA-7RC-0500-R0120-Cr95	.500	1.250	3.000	.120	Cr95	7
73001080	CREM-SA-9SC-0625-R0030-Cr95	.625	0.750	3.500	.030	Cr95	9
73001085	CREM-SA-9SC-0625-R0060-Cr95	.625	0.750	3.500	.060	Cr95	9
73001090	CREM-SA-9LC-0625-R0030-Cr95	.625	1.875	5.000	.030	Cr95	9
73001095	CREM-SA-9LC-0625-R0060-Cr95	.625	1.875	5.000	.060	Cr95	9
73001100	CREM-SA-9SC-0625-SQ-Cr95	.625	.750	3.500	---	Cr95	9
73001105	CREM-SA-9SC-0750-R0060-Cr95	.750	1.000	4.000	.060	Cr95	9
73001110	CREM-SA-9SC-0750-R0090-Cr95	.750	1.000	4.000	.090	Cr95	9
73001115	CREM-SA-9SC-0750-R0120-Cr95	.750	1.000	4.000	.120	Cr95	9
73001120	CREM-SA-9LC-0750-R0060-Cr95	.750	2.250	5.000	.060	Cr95	9

70
40
0 HARDNESS (HRC)

70
40
HARDNESS (HRC)

EDP Cromson	Cromson Description	Diam.	Length of cut	Overall length	Chamfer / radius	Cromson Grade	# Flutes
73001125	CREM-SA-9LC-0750-R0090-Cr95	.750	2.250	5.000	.090	Cr95	9
73001130	CREM-SA-9LC-0750-R0120-Cr95	.750	2.250	5.000	.120	Cr95	9
73001135	CREM-SA-9RC-0750-R0015-Cr95	.750	1.625	4.000	.015	Cr95	9
73001140	CREM-SA-9RC-0750-R0060-Cr95	.750	1.625	4.000	.060	Cr95	9
73001145	CREM-SA-9RC-0750-R0120-Cr95	.750	1.625	4.000	.120	Cr95	9
73001150	CREM-SA-9RC-0750-R0090-Cr95	.750	1.625	4.000	.090	Cr95	9
73001155	CREM-SA-9SC-0750-SQ-Cr95	.750	1.000	4.000	---	Cr95	9
73001160	CREM-SA-9RC-0750-SQ-Cr95	.750	1.625	4.000	---	Cr95	9
73001165	CREM-SA-9LC-0750-SQ-Cr95	.750	2.250	5.000	---	Cr95	9
73001170	CREM-SA-9SC-1000-R0060-Cr95	1000	1.250	4.000	.060	Cr95	9
73001175	CREM-SA-9SC-1000-R0090-Cr95	1000	1.250	4.000	.090	Cr95	9
73001180	CREM-SA-9SC-1000-R0120-Cr95	1000	1.250	4.000	.120	Cr95	9
73001185	CREM-SA-9RC-1000-R0060-Cr95	1000	3.000	6.000	.060	Cr95	9
73001190	CREM-SA-9RC-1000-R0090-Cr95	1000	3.000	6.000	.090	Cr95	9
73001195	CREM-SA-9RC-1000-R0120-Cr95	1000	3.000	6.000	.120	Cr95	9
73001200	CREM-SA-9RC-1000-SQ-Cr95	1000	3.000	6.000	---	Cr95	9
73001205	CREM-SA-5RC-6-SQ-Cr95	6.00	20.00	76.00	---	Cr95	5
73001210	CREM-SA-5RC-6-R05-Cr95	6.00	20.00	76.00	.50	Cr95	5
73001215	CREM-SA-5RC-6-R1-Cr95	6.00	20.00	76.00	1.00	Cr95	5
73001220	CREM-SA-7RC-8-SQ-Cr95	8.00	22.00	76.00	---	Cr95	7
73001225	CREM-SA-7RC-8-R05-Cr95	8.00	22.00	76.00	.50	Cr95	7
73001230	CREM-SA-7RC-8-R1-Cr95	8.00	22.00	76.00	1.00	Cr95	7
73001235	CREM-SA-7LC-8-R05-Cr95	8.00	30.00	76.00	.50	Cr95	7
73001240	CREM-SA-7MC-10-R05-Cr95	10.00	20.00	64.00	.50	Cr95	7
73001245	CREM-SA-7RC-10-R05-Cr95	10.00	30.00	76.00	.50	Cr95	7
73001250	CREM-SA-7RC-10-SQ-Cr95	10.00	30.00	76.00	---	Cr95	7
73001255	CREM-SA-7SC-12-R05-Cr95	12.00	16.00	63.00	.50	Cr95	7
73001260	CREM-SA-7SC-12-R25-Cr95	12.00	16.00	63.00	2.50	Cr95	7
73001265	CREM-SA-7LC-12-R05-Cr95	12.00	36.00	100.00	.50	Cr95	7
73001270	CREM-SA-7SC-12-R1-Cr95	12.00	16.00	63.00	1.00	Cr95	7
73001275	CREM-SA-7LC-12-R1-Cr95	12.00	36.00	100.00	1.00	Cr95	7
73001280	CREM-SA-7LC-12-SQ-Cr95	12.00	36.00	100.00	---	Cr95	7
73001285	CREM-SA-9SC-16-R15-Cr95	16.00	20.00	89.00	1.50	Cr95	9
73001290	CREM-SA-9LC-16-R15-Cr95	16.00	48.00	125.00	1.50	Cr95	9
73001295	CREM-SA-9SC-16-SQ-Cr95	16.00	20.00	89.00	---	Cr95	9
73001300	CREM-SA-9LC-16-SQ-Cr95	16.00	48.00	125.00	---	Cr95	9
73001305	CREM-SA-9SC-20-R15-Cr95	20.00	25.00	100.00	1.50	Cr95	9
73001310	CREM-SA-9SC-20-R25-Cr95	20.00	25.00	100.00	2.50	Cr95	9
73001315	CREM-SA-9SC-20-R3-Cr95	20.00	25.00	100.00	3.00	Cr95	9
73001320	CREM-SA-9RC-20-R15-Cr95	20.00	60.00	125.00	1.50	Cr95	9
73001325	CREM-SA-9RC-20-R25-Cr95	20.00	60.00	125.00	2.50	Cr95	9
73001330	CREM-SA-9RC-20-R3-Cr95	20.00	60.00	125.00	3.00	Cr95	9
73001335	CREM-SA-9SC-25-R15-Cr95	25.00	32.00	100.00	1.50	Cr95	9
73001340	CREM-SA-9SC-25-R25-Cr95	25.00	32.00	100.00	2.50	Cr95	9
73001345	CREM-SA-9SC-25-R3-Cr95	25.00	32.00	100.00	3.00	Cr95	9
73001350	CREM-SA-9RC-25-R15-Cr95	25.00	75.00	150.00	1.50	Cr95	9
73001355	CREM-SA-9RC-25-R25-Cr95	25.00	75.00	150.00	2.50	Cr95	9
73001360	CREM-SA-9RC-25-R3-Cr95	25.00	75.00	150.00	3.00	Cr95	9

BOOSTER-SA										Feed (inches Per Tooth)						
Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	1/4	3/8	1/2	5/8	3/4	1					
Low carbon steel <= 38HRc 1018, 12L14, 8620	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D													
Medium carbon steel <= 38HRc 4140, 4340	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070					
Tool & die steel <= 38HRc A2, D2, O1, S7, P20, H13	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	325 375	.0006 .0008	.0013 .0017	.0020 .0026	.0027 .0035	.0034 .0044	.0040 .0053	.0054 .0070					
Tool steel 39HRc to 48HRc	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	225 275	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046					
Easy to machine stainless steel 416, 410, 302, 303	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D	300 375	.0006 .0008	.0012 .0016	.0018 .0024	.0025 .0032	.0031 .0040	.0037 .0048	.0050 .0064					
Moderately difficult stainless steel 304, 316, invar, kovar	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D 0.5 x D	275 350	.0005 .0007	.0011 .0015	.0016 .0023	.0022 .0032	.0027 .0037	.0033 .0045	.0044 .0064					
Difficult to machine stainless steel 316L, 17-4PH, 15-5PH, 13-8Mo	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0004 .0005	.0009 .0011	.0012 .0016	.0018 .0022	.0022 .0028	.0027 .0033	.0036 .0044					
Cast iron Grey	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D													
Cast iron Ductile	Slotting Peripheral - Rough	1 x D 1.5 x D	1 x D 0.5 x D													
Cast iron Malleable	Slotting Peripheral - Rough	.75 x D 1 x D	1 x D .75 x D													
Aluminum alloy 2024, 6061, 7075	Slotting	1 x D	1 x D 0.5 x D													
Titanium alloy 6Al4V	Slotting Peripheral - Rough	0.5 x D 1 x D	1 x D 0.5 x D	250 300	.0005 .0006	.0010 .0012	.0015 .0017	.0020 .0023	.0025 .0029	.0030 .0035	.0040 .0046					
High temperature alloy Inconel, haynes, stellite, hastelloy	Slotting	.25 x D 1 x D	1 x D .25 x D	70 95	.0004 .0005	.0008 .0009	.0012 .0014	.0015 .0018	.0019 .0022	.0024 .0028	.0030 .0036					

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

DISCOVER OUR

DRILLING



Drilling

NOMENCLATURE

CROMSON «DRILL»

CUTTING FLUID

0 - External
1 - Internal

CRDR-HP-C2105-0300-Cr85

APPLICATIONS

G- General
HP- High Performance
 AC- Accuracy
 SF- Surface Finish
 SP- Spot Drill



TOOL TYPE

C1000- EFFICIENCY
C2100- CROMINOX
 C3100- MINIATURE
 C4100- CROMSTEEL
 C5100- CONCENTRICITY (Double margin)
 C6100- HIGH PRECISION QUALITY
 C7100- DRILL & REAM (Triple margin)
 C8100- CROMALU
 C9100- HIGH PERFORMANCE

COATING

Cr10- Uncoated
 Cr15- AlTiN
 Cr65- TiAlN
Cr85- TiAlN+

Summary application chart-Drilling

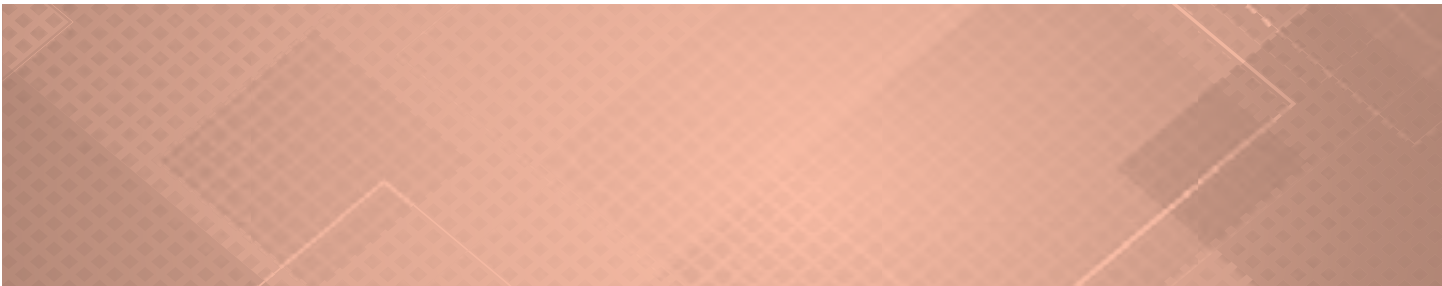
Work Material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			Series #		
	HRc	BHN	N/mm2	EFFICIENCY C1100 C1000	CROMINOX C2100	MINIATURE C3100
	Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700		
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000			
Stainless steel moderate 17-4PH, 15-5PH, 316L						
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2						
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850			
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40. GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650			
Aluminum (Si content >10%) 6061, 2025, 208, 360						
Aluminum (Si content <10%) 413, 385, A390						
Copper, brass, bronze beryllium copper, naval brass, AMPCO						
Titanium alloy TiAl4V						
High temperature alloy Inconel, haynes, waspaloy, hastelloy						
Chilled cast iron	38-48	350-450	1173-1527			
Hardened steel 50-60 HRc	50-55 56-60 61-65		1614-1870			



Highly recommended

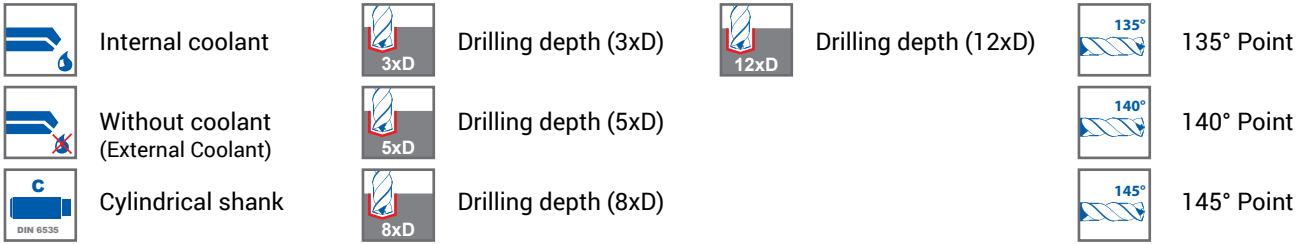


Suitable for some applications



Series #					
CROMSTEEL C4100	CONCENTRICITY C5100	HIGH PRECISION C6100	DRILLREAM C7100	CROMALU C8100	HIGH PERFORMANCE C9100

Explanation of Drilling symbols



GENERAL INFORMATION REGARDING THE CATALOG

d1 = Tool diameter (metric / imperial) l1 = Overall length l3 = Cutting length (maximum drilling)
 d2 = Shank diameter l2 = Groove length l4 = Shank length

Grades chart & Drilling application

CROMSON offers a variety of coatings upon special request to meet the demands of every customer's needs and application. Through extensive testing, research and real world applications, CROMSON has worked to develop a full range of high performance coatings, available to our customers. These coating options allow us to address a multitude of situations with optimal results.

Please refer to the chart below for the various coatings available.








CROMSON GRADE	Cr10	Cr15	Cr65	Cr85	CrXX
Proprietary	Uncoated	AlTiN	TiAlN	TiAlN+	DLC
Coating process		PVD	PVD	PVD	
Layer structure		Nano structure	Nano structure	Nano structure	
Hardness (HV)		3300	3300	3300	
Coefficient of friction (fetting)		0.30-0.35	0.20	0.25	
Thermal stability (C)		900	600	900	
General Information		Excellent thermal and chemical resistance allows for dry cutting and improvements in performance of carbide drills. High hardness of the coating gives great protection against abrasive wear and erosion.	CROMSON Cr65 coating processed further to help reduce the coefficient of friction even further. For extremely difficult drilling applications with a high tendency for material adhesion and built-up edge.	Offers all the advantages of TiAlN with a reduced coefficient of friction. Therefore ideal coating for drills: excellent chip removal and reduced cutting forces.	Available on request (SPECIAL)

CARBIDE DRILL

EFFICIENCY

C1000 - C1100 SERIES

- ⦿ The real meaning of EFFICIENCY is to have a tool on your machine that offers the best performance for your investment on material up to 48 HRc
- ⦿ With this in mind, CROMSON offers you the EFFICIENCY series where a good balance of these criteria have been taken into consideration
- ⦿ The versatility of these products will shows that this series is the best general drill available
- ⦿ Featured with our New PVD Coating Cr15 (AlTiN), this series is offered without Coolant in a diameter range from 1.00-20.00 mm (3xD) and with internal Coolant from 1.50-20.00 mm (3xD and 5xD)

Work Material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			C1000 C1100
	HRc	BHN	N/mm2	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410,416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				
Aluminum (Si content <10%) 413, 385, A390				
Copper, brass, bronze beryllium copper, naval, AMPCO				
Titanium alloy, TiAl4V				
High temperature alloy Inconel, haynes, waspaloy, hastelloy				



Highly recommended



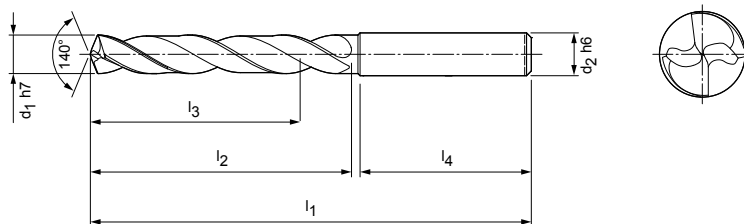
Suitable for some applications.

CARBIDE DRILL WITHOUT COOLANT FLUID (EXTERNAL COOLANT)

TECHNICAL DETAILS

Tool Diameter Range 0.0394-0.7874 in
 1.00-20.00 mm

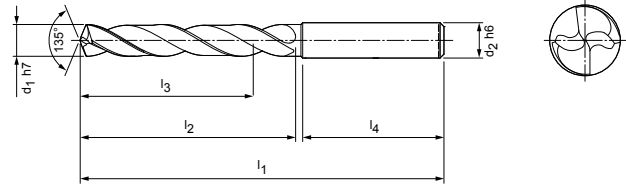
Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Standard point
Point angle 140°
Helix angle 30°
Coolant External



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74000000	CRDR-G-C1003-01000 Cr15	1.000	0.0394	4	5	58	28	Cr15	2
74000005	CRDR-G-C1003-01016 Cr15	1.016	0.0400	4	5	58	28	Cr15	2
74000010	CRDR-G-C1003-01041 Cr15	1.041	0.0410	4	5	58	28	Cr15	2
74000015	CRDR-G-C1003-01067 Cr15	1.067	0.0420	4	5	58	28	Cr15	2
74000020	CRDR-G-C1003-01092 Cr15	1.092	0.0430	4	5	58	28	Cr15	2
74000025	CRDR-G-C1003-01100 Cr15	1.100	0.0433	4	5	58	28	Cr15	2
74000030	CRDR-G-C1003-01181 Cr15	1.181	0.0465	4	5	58	28	Cr15	2
74000035	CRDR-G-C1003-01191 Cr15	1.191	3/64	4	5	58	28	Cr15	2
74000040	CRDR-G-C1003-01200 Cr15	1.200	0.0472	4	5	58	28	Cr15	2
74000045	CRDR-G-C1003-01300 Cr15	1.300	0.0512	4	5	58	28	Cr15	2
74000050	CRDR-G-C1003-01321 Cr15	1.321	0.0520	4	5	58	28	Cr15	2
74000055	CRDR-G-C1003-01397 Cr15	1.397	0.0550	4	5	58	28	Cr15	2
74000060	CRDR-G-C1003-01400 Cr15	1.400	0.0551	4	5	58	28	Cr15	2
74000065	CRDR-G-C1003-01500 Cr15	1.500	0.0591	4	6	58	28	Cr15	2
74000070	CRDR-G-C1003-01600 Cr15	1.600	1/16	4	6	58	28	Cr15	2
74000075	CRDR-G-C1003-01700 Cr15	1.700	0.0669	4	6	58	28	Cr15	2
74000080	CRDR-G-C1003-01800 Cr15	1.800	0.0709	4	6	58	28	Cr15	2
74000085	CRDR-G-C1003-01900 Cr15	1.900	0.0748	4	6	58	28	Cr15	2
74000090	CRDR-G-C1003-01984 Cr15	1.984	5/64	4	10	58	28	Cr15	2
74000095	CRDR-G-C1003-02000 Cr15	2.000	0.0787	4	10	58	28	Cr15	2
74000100	CRDR-G-C1003-02100 Cr15	2.100	0.0827	4	10	58	28	Cr15	2
74000105	CRDR-G-C1003-02200 Cr15	2.200	0.0866	4	10	58	28	Cr15	2
74000110	CRDR-G-C1003-02300 Cr15	2.300	0.0906	4	10	58	28	Cr15	2
74000115	CRDR-G-C1003-02383 Cr15	2.383	3/32	4	12	58	28	Cr15	2
74000120	CRDR-G-C1003-02400 Cr15	2.400	3/32	4	12	58	28	Cr15	2
74000125	CRDR-G-C1003-02439 Cr15	2.439	0.0960	4	12	58	28	Cr15	2
74000130	CRDR-G-C1003-02489 Cr15	2.489	0.0980	4	12	58	28	Cr15	2
74000135	CRDR-G-C1003-02500 Cr15	2.500	0.0984	4	12	58	28	Cr15	2
74000140	CRDR-G-C1003-02578 Cr15	2.578	0.1015	4	12	58	28	Cr15	2
74000145	CRDR-G-C1003-02600 Cr15	2.600	0.1024	4	12	58	28	Cr15	2
74000150	CRDR-G-C1003-02642 Cr15	2.642	0.1040	4	12	58	28	Cr15	2

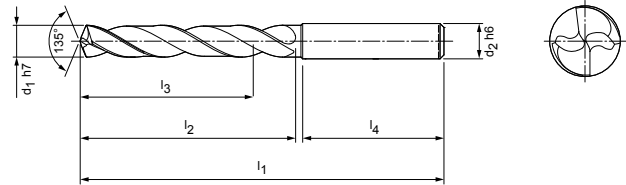
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (2)	OAL (1)	Shank length (4)	Cromson Grade	# Flutes
74000155	CRDR-G-C1003-02700 Cr15	2.700	0.1063	4	12	58	28	Cr15	2
74000160	CRDR-G-C1003-02705 Cr15	2.705	0.1065	4	12	58	28	Cr15	2
74000165	CRDR-G-C1003-02779 Cr15	2.779	7/64	4	12	58	28	Cr15	2
74000170	CRDR-G-C1003-02800 Cr15	2.800	0.1102	4	12	58	28	Cr15	2
74000175	CRDR-G-C1003-02820 Cr15	2.820	0.1110	4	12	58	28	Cr15	2
74000180	CRDR-G-C1003-02870 Cr15	2.870	0.1130	4	12	58	28	Cr15	2
74000185	CRDR-G-C1003-02900 Cr15	2.900	0.1142	4	12	58	28	Cr15	2
74000190	CRDR-G-C1003-02947 Cr15	2.947	0.1160	4	12	58	28	Cr15	2
74000195	CRDR-G-C1003-03000 Cr15	3.000	0.1181	6	14	62	36	Cr15	2
74000200	CRDR-G-C1003-03048 Cr15	3.048	0.1200	6	14	62	36	Cr15	2
74000205	CRDR-G-C1003-03100 Cr15	3.100	0.1220	6	14	62	36	Cr15	2
74000210	CRDR-G-C1003-03175 Cr15	3.175	1/8	6	14	62	36	Cr15	2
74000215	CRDR-G-C1003-03200 Cr15	3.200	0.1260	6	14	62	36	Cr15	2
74000220	CRDR-G-C1003-03264 Cr15	3.264	0.1285	6	14	62	36	Cr15	2
74000225	CRDR-G-C1003-03300 Cr15	3.300	0.1299	6	14	62	36	Cr15	2
74000230	CRDR-G-C1003-03400 Cr15	3.400	0.1339	6	14	62	36	Cr15	2
74000235	CRDR-G-C1003-03455 Cr15	3.455	0.1360	6	14	62	36	Cr15	2
74000240	CRDR-G-C1003-03500 Cr15	3.500	0.1378	6	14	62	36	Cr15	2
74000245	CRDR-G-C1003-03571 Cr15	3.571	9/64	6	14	62	36	Cr15	2
74000250	CRDR-G-C1003-03600 Cr15	3.600	0.1417	6	14	62	36	Cr15	2
74000255	CRDR-G-C1003-03658 Cr15	3.658	0.1440	6	14	62	36	Cr15	2
74000260	CRDR-G-C1003-03700 Cr15	3.700	0.1457	6	14	62	36	Cr15	2
74000265	CRDR-G-C1003-03734 Cr15	3.734	0.1470	6	14	62	36	Cr15	2
74000270	CRDR-G-C1003-03800 Cr15	3.800	0.1496	6	17	66	36	Cr15	2
74000275	CRDR-G-C1003-03900 Cr15	3.900	0.1535	6	17	66	36	Cr15	2
74000280	CRDR-G-C1003-03970 Cr15	3.970	5/32	6	17	66	36	Cr15	2
74000285	CRDR-G-C1003-04000 Cr15	4.000	0.1575	6	17	66	36	Cr15	2
74000290	CRDR-G-C1003-04039 Cr15	4.039	0.1590	6	17	66	36	Cr15	2
74000295	CRDR-G-C1003-04090 Cr15	4.090	0.1610	6	17	66	36	Cr15	2
74000300	CRDR-G-C1003-04100 Cr15	4.100	0.1614	6	17	66	36	Cr15	2
74000305	CRDR-G-C1003-04200 Cr15	4.200	0.1654	6	17	66	36	Cr15	2
74000310	CRDR-G-C1003-04217 Cr15	4.217	0.1660	6	17	66	36	Cr15	2
74000315	CRDR-G-C1003-04300 Cr15	4.300	0.1693	6	17	66	36	Cr15	2
74000320	CRDR-G-C1003-04366 Cr15	4.366	11/64	6	17	66	36	Cr15	2
74000325	CRDR-G-C1003-04400 Cr15	4.400	0.1732	6	17	66	36	Cr15	2
74000330	CRDR-G-C1003-04500 Cr15	4.500	0.1772	6	17	66	36	Cr15	2
74000335	CRDR-G-C1003-04600 Cr15	4.600	0.1811	6	17	66	36	Cr15	2
74000340	CRDR-G-C1003-04623 Cr15	4.623	0.1820	6	17	66	36	Cr15	2
74000345	CRDR-G-C1003-04700 Cr15	4.700	0.1850	6	17	66	36	Cr15	2
74000350	CRDR-G-C1003-04763 Cr15	4.763	3/16	6	20	66	36	Cr15	2
74000355	CRDR-G-C1003-04800 Cr15	4.800	0.1890	6	20	66	36	Cr15	2
74000360	CRDR-G-C1003-04852 Cr15	4.852	0.1910	6	20	66	36	Cr15	2
74000365	CRDR-G-C1003-04900 Cr15	4.900	0.1929	6	20	66	36	Cr15	2
74000370	CRDR-G-C1003-05000 Cr15	5.000	0.1969	6	20	66	36	Cr15	2
74000375	CRDR-G-C1003-05100 Cr15	5.100	0.2008	6	20	66	36	Cr15	2
74000380	CRDR-G-C1003-05106 Cr15	5.106	0.2010	6	20	66	36	Cr15	2
74000385	CRDR-G-C1003-05159 Cr15	5.159	13/64	6	20	66	36	Cr15	2
74000390	CRDR-G-C1003-05200 Cr15	5.200	0.2047	6	20	66	36	Cr15	2
74000395	CRDR-G-C1003-05300 Cr15	5.300	0.2087	6	20	66	36	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (2)	OAL (1)	Shank length (4)	Cromson Grade	# Flutes
74000400	CRDR-G-C1003-05400 Cr15	5.400	0.2126	6	20	66	36	Cr15	2
74000405	CRDR-G-C1003-05410 Cr15	5.410	0.2130	6	20	66	36	Cr15	2
74000410	CRDR-G-C1003-05500 Cr15	5.500	0.2165	6	20	66	36	Cr15	2
74000415	CRDR-G-C1003-05558 Cr15	5.558	7/32	6	20	66	36	Cr15	2
74000420	CRDR-G-C1003-05600 Cr15	5.600	0.2205	6	20	66	36	Cr15	2
74000425	CRDR-G-C1003-05616 Cr15	5.616	0.2211	6	20	66	36	Cr15	2
74000430	CRDR-G-C1003-05700 Cr15	5.700	0.2244	6	20	66	36	Cr15	2
74000435	CRDR-G-C1003-05800 Cr15	5.800	0.2283	6	20	66	36	Cr15	2
74000440	CRDR-G-C1003-05900 Cr15	5.900	0.2323	6	20	66	36	Cr15	2
74000445	CRDR-G-C1003-05954 Cr15	5.954	15/64	6	20	66	36	Cr15	2
74000450	CRDR-G-C1003-06000 Cr15	6.000	0.2362	6	20	66	36	Cr15	2
74000455	CRDR-G-C1003-06100 Cr15	6.100	0.2402	8	24	79	36	Cr15	2
74000460	CRDR-G-C1003-06200 Cr15	6.200	0.2441	8	24	79	36	Cr15	2
74000465	CRDR-G-C1003-06300 Cr15	6.300	0.2480	8	24	79	36	Cr15	2
74000470	CRDR-G-C1003-06350 Cr15	6.350	1/4	8	24	79	36	Cr15	2
74000475	CRDR-G-C1003-06400 Cr15	6.400	0.2520	8	24	79	36	Cr15	2
74000480	CRDR-G-C1003-06500 Cr15	6.500	0.2559	8	24	79	36	Cr15	2
74000485	CRDR-G-C1003-06528 Cr15	6.528	0.2570	8	24	79	36	Cr15	2
74000490	CRDR-G-C1003-06600 Cr15	6.600	0.2598	8	24	79	36	Cr15	2
74000495	CRDR-G-C1003-06630 Cr15	6.630	0.2610	8	24	79	36	Cr15	2
74000500	CRDR-G-C1003-06700 Cr15	6.700	0.2638	8	24	79	36	Cr15	2
74000505	CRDR-G-C1003-06746 Cr15	6.746	17/64	8	24	79	36	Cr15	2
74000510	CRDR-G-C1003-06800 Cr15	6.800	0.2677	8	24	79	36	Cr15	2
74000515	CRDR-G-C1003-06900 Cr15	6.900	0.2717	8	24	79	36	Cr15	2
74000520	CRDR-G-C1003-07000 Cr15	7.000	0.2756	8	29	79	36	Cr15	2
74000525	CRDR-G-C1003-07100 Cr15	7.100	0.2795	8	29	79	36	Cr15	2
74000530	CRDR-G-C1003-07145 Cr15	7.145	9/32	8	29	79	36	Cr15	2
74000535	CRDR-G-C1003-07200 Cr15	7.200	0.2835	8	29	79	36	Cr15	2
74000540	CRDR-G-C1003-07300 Cr15	7.300	0.2874	8	29	79	36	Cr15	2
74000545	CRDR-G-C1003-07400 Cr15	7.400	0.2913	8	29	79	36	Cr15	2
74000550	CRDR-G-C1003-07500 Cr15	7.500	0.2953	8	29	79	36	Cr15	2
74000555	CRDR-G-C1003-07541 Cr15	7.541	19/64	8	29	79	36	Cr15	2
74000560	CRDR-G-C1003-07600 Cr15	7.600	0.2992	8	29	79	36	Cr15	2
74000565	CRDR-G-C1003-07700 Cr15	7.700	0.3031	8	29	79	36	Cr15	2
74000570	CRDR-G-C1003-07800 Cr15	7.800	0.3071	8	29	79	36	Cr15	2
74000575	CRDR-G-C1003-07900 Cr15	7.900	0.3110	8	29	79	36	Cr15	2
74000580	CRDR-G-C1003-07938 Cr15	7.938	5/16	8	29	79	36	Cr15	2
74000585	CRDR-G-C1003-08000 Cr15	8.000	0.3150	8	29	79	36	Cr15	2
74000590	CRDR-G-C1003-08100 Cr15	8.100	0.3189	10	35	89	40	Cr15	2
74000595	CRDR-G-C1003-08200 Cr15	8.200	0.3228	10	35	89	40	Cr15	2
74000600	CRDR-G-C1003-08300 Cr15	8.300	0.3268	10	35	89	40	Cr15	2
74000605	CRDR-G-C1003-08334 Cr15	8.334	21/64	10	35	89	40	Cr15	2
74000610	CRDR-G-C1003-08400 Cr15	8.400	0.3307	10	35	89	40	Cr15	2
74000615	CRDR-G-C1003-08433 Cr15	8.433	0.3320	10	35	89	40	Cr15	2
74000620	CRDR-G-C1003-08500 Cr15	8.500	0.3346	10	35	89	40	Cr15	2
74000625	CRDR-G-C1003-08600 Cr15	8.600	0.3386	10	35	89	40	Cr15	2
74000630	CRDR-G-C1003-08700 Cr15	8.700	0.3425	10	35	89	40	Cr15	2
74000635	CRDR-G-C1003-08733 Cr15	8.733	11/32	10	35	89	40	Cr15	2
74000640	CRDR-G-C1003-08800 Cr15	8.800	0.3465	10	35	89	40	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74000645	CRDR-G-C1003-08900 Cr15	8.900	0.3504	10	35	89	40	Cr15	2
74000650	CRDR-G-C1003-09000 Cr15	9.000	0.3543	10	35	89	40	Cr15	2
74000655	CRDR-G-C1003-09100 Cr15	9.100	0.3583	10	35	89	40	Cr15	2
74000660	CRDR-G-C1003-09129 Cr15	9.129	23/64	10	35	89	40	Cr15	2
74000665	CRDR-G-C1003-09200 Cr15	9.200	0.3622	10	35	89	40	Cr15	2
74000670	CRDR-G-C1003-09300 Cr15	9.300	0.3661	10	35	89	40	Cr15	2
74000675	CRDR-G-C1003-09347 Cr15	9.347	0.3680	10	35	89	40	Cr15	2
74000680	CRDR-G-C1003-09400 Cr15	9.400	0.3701	10	35	89	40	Cr15	2
74000685	CRDR-G-C1003-09500 Cr15	9.500	0.3740	10	35	89	40	Cr15	2
74000690	CRDR-G-C1003-09525 Cr15	9.525	3/8	10	35	89	40	Cr15	2
74000695	CRDR-G-C1003-09600 Cr15	9.600	0.3780	10	35	89	40	Cr15	2
74000700	CRDR-G-C1003-09700 Cr15	9.700	0.3819	10	35	89	40	Cr15	2
74000705	CRDR-G-C1003-09800 Cr15	9.800	0.3858	10	35	89	40	Cr15	2
74000710	CRDR-G-C1003-09900 Cr15	9.900	0.3898	10	35	89	40	Cr15	2
74000715	CRDR-G-C1003-09921 Cr15	9.921	25/64	10	35	89	40	Cr15	2
74000720	CRDR-G-C1003-10000 Cr15	10.000	0.3937	10	35	89	40	Cr15	2
74000725	CRDR-G-C1003-10100 Cr15	10.100	0.3976	12	40	102	40	Cr15	2
74000730	CRDR-G-C1003-10200 Cr15	10.200	0.4016	12	40	102	45	Cr15	2
74000735	CRDR-G-C1003-10300 Cr15	10.300	0.4055	12	40	102	45	Cr15	2
74000740	CRDR-G-C1003-10320 Cr15	10.320	13/32	12	40	102	45	Cr15	2
74000745	CRDR-G-C1003-10400 Cr15	10.400	0.4094	12	40	102	45	Cr15	2
74000750	CRDR-G-C1003-10500 Cr15	10.500	0.4134	12	40	102	45	Cr15	2
74000755	CRDR-G-C1003-10600 Cr15	10.600	0.4173	12	40	102	45	Cr15	2
74000760	CRDR-G-C1003-10700 Cr15	10.700	0.4213	12	40	102	45	Cr15	2
74000765	CRDR-G-C1003-10716 Cr15	10.716	27/64	12	40	102	45	Cr15	2
74000770	CRDR-G-C1003-10800 Cr15	10.800	0.4252	12	40	102	45	Cr15	2
74000775	CRDR-G-C1003-10900 Cr15	10.900	0.4291	12	40	102	45	Cr15	2
74000780	CRDR-G-C1003-11000 Cr15	11.000	0.4331	12	40	102	45	Cr15	2
74000785	CRDR-G-C1003-11100 Cr15	11.100	0.4370	12	40	102	45	Cr15	2
74000790	CRDR-G-C1003-11113 Cr15	11.113	7/16	12	40	102	45	Cr15	2
74000795	CRDR-G-C1003-11200 Cr15	11.200	0.4409	12	40	102	45	Cr15	2
74000800	CRDR-G-C1003-11300 Cr15	11.300	0.4449	12	40	102	45	Cr15	2
74000805	CRDR-G-C1003-11400 Cr15	11.400	0.4488	12	40	102	45	Cr15	2
74000810	CRDR-G-C1003-11500 Cr15	11.500	0.4528	12	40	102	45	Cr15	2
74000815	CRDR-G-C1003-11509 Cr15	11.509	0.4531	12	40	102	45	Cr15	2
74000820	CRDR-G-C1003-11600 Cr15	11.600	0.4567	12	40	102	45	Cr15	2
74000825	CRDR-G-C1003-11700 Cr15	11.700	0.4606	12	40	102	45	Cr15	2
74000830	CRDR-G-C1003-11800 Cr15	11.800	0.4646	12	40	102	45	Cr15	2
74000835	CRDR-G-C1003-11900 Cr15	11.900	0.4685	12	40	102	45	Cr15	2
74000840	CRDR-G-C1003-11908 Cr15	11.908	0.4688	12	40	102	45	Cr15	2
74000845	CRDR-G-C1003-12000 Cr15	12.000	0.4724	12	40	102	45	Cr15	2
74000850	CRDR-G-C1003-12100 Cr15	12.100	0.4764	14	43	107	45	Cr15	2
74000855	CRDR-G-C1003-12200 Cr15	12.200	0.4803	14	43	107	45	Cr15	2
74000860	CRDR-G-C1003-12300 Cr15	12.300	0.4843	14	43	107	45	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74000865	CRDR-G-C1003-12304 Cr15	12.304	0.4844	14	43	107	45	Cr15	2
74000870	CRDR-G-C1003-12400 Cr15	12.400	0.4882	14	43	107	45	Cr15	2
74000875	CRDR-G-C1003-12500 Cr15	12.500	0.4921	14	43	107	45	Cr15	2
74000880	CRDR-G-C1003-12600 Cr15	12.600	0.4961	14	43	107	45	Cr15	2
74000885	CRDR-G-C1003-12700 Cr15	12.700	0.5000	14	43	107	45	Cr15	2
74000890	CRDR-G-C1003-12800 Cr15	12.800	0.5039	14	43	107	45	Cr15	2
74000895	CRDR-G-C1003-12900 Cr15	12.900	0.5079	14	43	107	45	Cr15	2
74000900	CRDR-G-C1003-13000 Cr15	13.000	0.5118	14	43	107	45	Cr15	2
74000905	CRDR-G-C1003-13096 Cr15	13.096	0.5156	14	43	107	45	Cr15	2
74000910	CRDR-G-C1003-13100 Cr15	13.100	0.5157	14	43	107	45	Cr15	2
74000915	CRDR-G-C1003-13200 Cr15	13.200	0.5197	14	43	107	45	Cr15	2
74000920	CRDR-G-C1003-13300 Cr15	13.300	0.5236	14	43	107	45	Cr15	2
74000925	CRDR-G-C1003-13400 Cr15	13.400	0.5276	14	43	107	45	Cr15	2
74000930	CRDR-G-C1003-13500 Cr15	13.500	0.5315	14	43	107	45	Cr15	2
74000935	CRDR-G-C1003-13600 Cr15	13.600	0.5354	14	43	107	45	Cr15	2
74000940	CRDR-G-C1003-13700 Cr15	13.700	0.5394	14	43	107	45	Cr15	2
74000945	CRDR-G-C1003-13800 Cr15	13.800	0.5433	14	43	107	45	Cr15	2
74000950	CRDR-G-C1003-13891 Cr15	13.891	0.5469	14	43	107	45	Cr15	2
74000955	CRDR-G-C1003-13900 Cr15	13.900	0.5472	14	43	107	45	Cr15	2
74000960	CRDR-G-C1003-14000 Cr15	14.000	0.5512	14	45	107	45	Cr15	2
74000965	CRDR-G-C1003-14100 Cr15	14.100	0.5551	16	45	115	48	Cr15	2
74000970	CRDR-G-C1003-14200 Cr15	14.200	0.5591	16	45	115	48	Cr15	2
74000975	CRDR-G-C1003-14288 Cr15	14.288	0.5625	16	45	115	48	Cr15	2
74000980	CRDR-G-C1003-14300 Cr15	14.300	0.5630	16	45	115	48	Cr15	2
74000985	CRDR-G-C1003-14400 Cr15	14.400	0.5669	16	45	115	48	Cr15	2
74000990	CRDR-G-C1003-14500 Cr15	14.500	0.5709	16	45	115	48	Cr15	2
74000995	CRDR-G-C1003-14600 Cr15	14.600	0.5748	16	45	115	48	Cr15	2
74001000	CRDR-G-C1003-14684 Cr15	14.684	37/64	16	45	115	48	Cr15	2
74001005	CRDR-G-C1003-14700 Cr15	14.700	0.5787	16	45	115	48	Cr15	2
74001010	CRDR-G-C1003-14800 Cr15	14.800	0.5827	16	45	115	48	Cr15	2
74001015	CRDR-G-C1003-14900 Cr15	14.900	0.5866	16	45	115	48	Cr15	2
74001020	CRDR-G-C1003-15000 Cr15	15.000	0.5906	16	45	115	48	Cr15	2
74001025	CRDR-G-C1003-15083 Cr15	15.083	19/32	16	45	115	48	Cr15	2
74001030	CRDR-G-C1003-15100 Cr15	15.100	0.5945	16	45	115	48	Cr15	2
74001035	CRDR-G-C1003-15200 Cr15	15.200	0.5984	16	45	115	48	Cr15	2
74001040	CRDR-G-C1003-15300 Cr15	15.300	0.6024	16	45	115	48	Cr15	2
74001045	CRDR-G-C1003-15400 Cr15	15.400	0.6063	16	45	115	48	Cr15	2
74001050	CRDR-G-C1003-15479 Cr15	15.479	0.6094	16	45	115	48	Cr15	2
74001055	CRDR-G-C1003-15500 Cr15	15.500	0.6102	16	45	115	48	Cr15	2
74001060	CRDR-G-C1003-15600 Cr15	15.600	0.6142	16	45	115	48	Cr15	2
74001065	CRDR-G-C1003-15700 Cr15	15.700	0.6181	16	45	115	48	Cr15	2
74001070	CRDR-G-C1003-15800 Cr15	15.800	0.6220	16	45	115	48	Cr15	2
74001075	CRDR-G-C1003-15875 Cr15	15.875	5/8	16	45	115	48	Cr15	2
74001080	CRDR-G-C1003-15900 Cr15	15.900	0.6260	16	45	115	48	Cr15	2
74001085	CRDR-G-C1003-16000 Cr15	16.000	0.6299	16	45	115	48	Cr15	2
74001090	CRDR-G-C1003-16100 Cr15	16.100	0.6339	18	51	123	48	Cr15	2
74001095	CRDR-G-C1003-16200 Cr15	16.200	0.6378	18	51	123	48	Cr15	2
74001100	CRDR-G-C1003-16271 Cr15	16.271	0.6406	18	51	123	48	Cr15	2
74001105	CRDR-G-C1003-16300 Cr15	16.300	0.6417	18	51	123	48	Cr15	2
74001110	CRDR-G-C1003-16400 Cr15	16.400	0.6457	18	51	123	48	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001115	CRDR-G-C1003-16500 Cr15	16.500	0.6496	18	51	123	48	Cr15	2
74001120	CRDR-G-C1003-16600 Cr15	16.600	0.6535	18	51	123	48	Cr15	2
74001125	CRDR-G-C1003-16670 Cr15	16.670	21/32	18	51	123	48	Cr15	2
74001130	CRDR-G-C1003-16700 Cr15	16.700	0.6575	18	51	123	48	Cr15	2
74001135	CRDR-G-C1003-16800 Cr15	16.800	0.6614	18	51	123	48	Cr15	2
74001140	CRDR-G-C1003-16900 Cr15	16.900	0.6654	18	51	123	48	Cr15	2
74001145	CRDR-G-C1003-17000 Cr15	17.000	0.6693	18	51	123	48	Cr15	2
74001150	CRDR-G-C1003-17100 Cr15	17.100	0.6732	18	51	123	48	Cr15	2
74001155	CRDR-G-C1003-17200 Cr15	17.200	0.6772	18	51	123	48	Cr15	2
74001160	CRDR-G-C1003-17300 Cr15	17.300	0.6811	18	51	123	48	Cr15	2
74001165	CRDR-G-C1003-17400 Cr15	17.400	0.6850	18	51	123	48	Cr15	2
74001170	CRDR-G-C1003-17463 Cr15	17.463	11/16	18	51	123	48	Cr15	2
74001175	CRDR-G-C1003-17500 Cr15	17.500	0.6890	18	51	123	48	Cr15	2
74001180	CRDR-G-C1003-17600 Cr15	17.600	0.6929	18	51	123	48	Cr15	2
74001185	CRDR-G-C1003-17700 Cr15	17.700	0.6969	18	51	123	48	Cr15	2
74001190	CRDR-G-C1003-17800 Cr15	17.800	0.7008	18	51	123	48	Cr15	2
74001195	CRDR-G-C1003-17859 Cr15	17.859	45/64	18	51	123	48	Cr15	2
74001200	CRDR-G-C1003-17900 Cr15	17.900	0.7047	18	51	123	48	Cr15	2
74001205	CRDR-G-C1003-18000 Cr15	18.000	0.7087	18	51	123	48	Cr15	2
74001210	CRDR-G-C1003-18100 Cr15	18.100	0.7126	20	55	131	50	Cr15	2
74001215	CRDR-G-C1003-18200 Cr15	18.200	0.7165	20	55	131	50	Cr15	2
74001220	CRDR-G-C1003-18258 Cr15	18.258	23/32	20	55	131	50	Cr15	2
74001225	CRDR-G-C1003-18300 Cr15	18.300	0.7205	20	55	131	50	Cr15	2
74001230	CRDR-G-C1003-18400 Cr15	18.400	0.7244	20	55	131	50	Cr15	2
74001235	CRDR-G-C1003-18500 Cr15	18.500	0.7283	20	55	131	50	Cr15	2
74001240	CRDR-G-C1003-18600 Cr15	18.600	0.7323	20	55	131	50	Cr15	2
74001245	CRDR-G-C1003-18654 Cr15	18.654	0.7344	20	55	131	50	Cr15	2
74001250	CRDR-G-C1003-18700 Cr15	18.700	0.7362	20	55	131	50	Cr15	2
74001255	CRDR-G-C1003-18800 Cr15	18.800	0.7402	20	55	131	50	Cr15	2
74001260	CRDR-G-C1003-18900 Cr15	18.900	0.7441	20	55	131	50	Cr15	2
74001265	CRDR-G-C1003-19000 Cr15	19.000	0.7480	20	55	131	50	Cr15	2
74001270	CRDR-G-C1003-19050 Cr15	19.050	3/4	20	55	131	50	Cr15	2
74001275	CRDR-G-C1003-19100 Cr15	19.100	0.7520	20	55	131	50	Cr15	2
74001280	CRDR-G-C1003-19200 Cr15	19.200	0.7559	20	55	131	50	Cr15	2
74001285	CRDR-G-C1003-19300 Cr15	19.300	0.7598	20	55	131	50	Cr15	2
74001290	CRDR-G-C1003-19400 Cr15	19.400	0.7638	20	55	131	50	Cr15	2
74001295	CRDR-G-C1003-19500 Cr15	19.500	0.7677	20	55	131	50	Cr15	2
74001300	CRDR-G-C1003-19600 Cr15	19.600	0.7717	20	55	131	50	Cr15	2
74001305	CRDR-G-C1003-19700 Cr15	19.700	0.7756	20	55	131	50	Cr15	2
74001310	CRDR-G-C1003-19800 Cr15	19.800	0.7795	20	55	131	50	Cr15	2
74001315	CRDR-G-C1003-19900 Cr15	19.900	0.7835	20	55	131	50	Cr15	2
74001320	CRDR-G-C1003-20000 Cr15	20.000	0.7874	20	55	131	50	Cr15	2

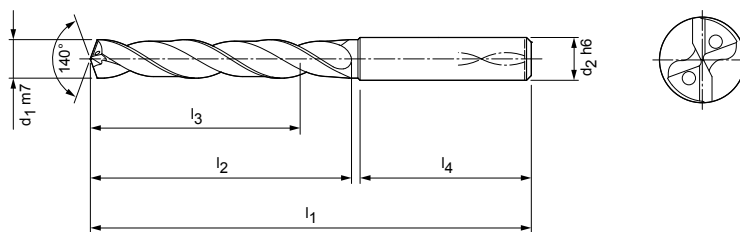
CARBIDE DRILL

TECHNICAL DETAILS



Tool Diameter Range 0.0591-0.7874 in
1.50-20.00 mm

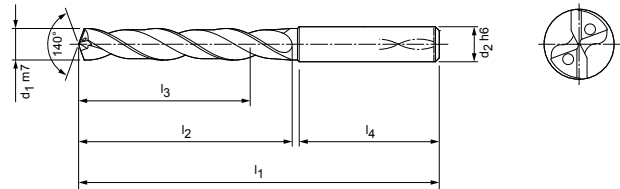
Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Standard point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001325	CRDR-G-C1103-01500 Cr15	1.500	0.0591	4	6	58	28	Cr15	2
74001330	CRDR-G-C1103-01600 Cr15	1.600	1/16	4	6	58	28	Cr15	2
74001335	CRDR-G-C1103-01700 Cr15	1.700	0.0669	4	6	58	28	Cr15	2
74001340	CRDR-G-C1103-01800 Cr15	1.800	0.0709	4	6	58	28	Cr15	2
74001345	CRDR-G-C1103-01900 Cr15	1.900	0.0748	4	6	58	28	Cr15	2
74001350	CRDR-G-C1103-01984 Cr15	1.984	5/64	4	10	58	28	Cr15	2
74001355	CRDR-G-C1103-02000 Cr15	2.000	0.0787	4	10	58	28	Cr15	2
74001360	CRDR-G-C1103-02100 Cr15	2.100	0.0827	4	10	58	28	Cr15	2
74001365	CRDR-G-C1103-02200 Cr15	2.200	0.0866	4	10	58	28	Cr15	2
74001370	CRDR-G-C1103-02300 Cr15	2.300	0.0906	4	10	58	28	Cr15	2
74001375	CRDR-G-C1103-02383 Cr15	2.383	3/32	4	12	58	28	Cr15	2
74001380	CRDR-G-C1103-02400 Cr15	2.400	3/32	4	12	58	28	Cr15	2
74001385	CRDR-G-C1103-02439 Cr15	2.439	0.0960	4	12	58	28	Cr15	2
74001390	CRDR-G-C1103-02489 Cr15	2.489	0.0980	4	12	58	28	Cr15	2
74001395	CRDR-G-C1103-02500 Cr15	2.500	0.0984	4	12	58	28	Cr15	2
74001400	CRDR-G-C1103-02578 Cr15	2.578	0.1015	4	12	58	28	Cr15	2
74001405	CRDR-G-C1103-02600 Cr15	2.600	0.1024	4	12	58	28	Cr15	2
74001410	CRDR-G-C1103-02642 Cr15	2.642	0.1040	4	12	58	28	Cr15	2
74001415	CRDR-G-C1103-02700 Cr15	2.700	0.1063	4	12	58	28	Cr15	2
74001420	CRDR-G-C1103-02705 Cr15	2.705	0.1065	4	12	58	28	Cr15	2
74001425	CRDR-G-C1103-02779 Cr15	2.779	7/64	4	12	58	28	Cr15	2
74001430	CRDR-G-C1103-02800 Cr15	2.800	0.1102	4	12	58	28	Cr15	2
74001435	CRDR-G-C1103-02820 Cr15	2.820	0.1110	4	12	58	28	Cr15	2
74001440	CRDR-G-C1103-02870 Cr15	2.870	0.1130	4	12	58	28	Cr15	2
74001445	CRDR-G-C1103-02900 Cr15	2.900	0.1142	4	12	58	28	Cr15	2
74001450	CRDR-G-C1103-02947 Cr15	2.947	0.1160	4	12	58	28	Cr15	2
74001455	CRDR-G-C1103-03000 Cr15	3.000	0.1181	6	14	62	36	Cr15	2
74001460	CRDR-G-C1103-03048 Cr15	3.048	0.1200	6	14	62	36	Cr15	2
74001465	CRDR-G-C1103-03100 Cr15	3.100	0.1220	6	14	62	36	Cr15	2
74001470	CRDR-G-C1103-03175 Cr15	3.175	1/8	6	14	62	36	Cr15	2
74001475	CRDR-G-C1103-03200 Cr15	3.200	0.1260	6	14	62	36	Cr15	2

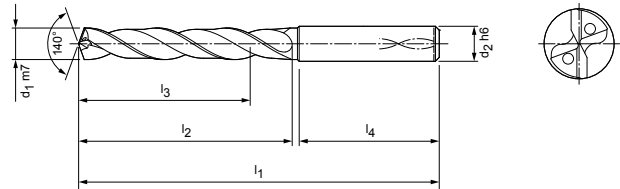
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001480	CRDR-G-C1103-03264 Cr15	3.264	0.1285	6	14	62	36	Cr15	2
74001485	CRDR-G-C1103-03300 Cr15	3.300	0.1299	6	14	62	36	Cr15	2
74001490	CRDR-G-C1103-03400 Cr15	3.400	0.1339	6	14	62	36	Cr15	2
74001495	CRDR-G-C1103-03455 Cr15	3.455	0.1360	6	14	62	36	Cr15	2
74001500	CRDR-G-C1103-03500 Cr15	3.500	0.1378	6	14	62	36	Cr15	2
74001505	CRDR-G-C1103-03571 Cr15	3.571	9/64	6	14	62	36	Cr15	2
74001510	CRDR-G-C1103-03600 Cr15	3.600	0.1417	6	14	62	36	Cr15	2
74001515	CRDR-G-C1103-03658 Cr15	3.658	0.1440	6	14	62	36	Cr15	2
74001520	CRDR-G-C1103-03700 Cr15	3.700	0.1457	6	14	62	36	Cr15	2
74001525	CRDR-G-C1103-03734 Cr15	3.734	0.1470	6	14	62	36	Cr15	2
74001530	CRDR-G-C1103-03800 Cr15	3.800	0.1496	6	17	66	36	Cr15	2
74001535	CRDR-G-C1103-03900 Cr15	3.900	0.1535	6	17	66	36	Cr15	2
74001540	CRDR-G-C1103-03970 Cr15	3.970	5/32	6	17	66	36	Cr15	2
74001545	CRDR-G-C1103-04000 Cr15	4.000	0.1575	6	17	66	36	Cr15	2
74001550	CRDR-G-C1103-04039 Cr15	4.039	0.1590	6	17	66	36	Cr15	2
74001555	CRDR-G-C1103-04090 Cr15	4.090	0.1610	6	17	66	36	Cr15	2
74001560	CRDR-G-C1103-04100 Cr15	4.100	0.1614	6	17	66	36	Cr15	2
74001565	CRDR-G-C1103-04200 Cr15	4.200	0.1654	6	17	66	36	Cr15	2
74001570	CRDR-G-C1103-04217 Cr15	4.217	0.1660	6	17	66	36	Cr15	2
74001575	CRDR-G-C1103-04300 Cr15	4.300	0.1693	6	17	66	36	Cr15	2
74001580	CRDR-G-C1103-04366 Cr15	4.366	11/64	6	17	66	36	Cr15	2
74001585	CRDR-G-C1103-04400 Cr15	4.400	0.1732	6	17	66	36	Cr15	2
74001590	CRDR-G-C1103-04500 Cr15	4.500	0.1772	6	17	66	36	Cr15	2
74001595	CRDR-G-C1103-04600 Cr15	4.600	0.1811	6	17	66	36	Cr15	2
74001600	CRDR-G-C1103-04623 Cr15	4.623	0.1820	6	17	66	36	Cr15	2
74001605	CRDR-G-C1103-04700 Cr15	4.700	0.1850	6	17	66	36	Cr15	2
74001610	CRDR-G-C1103-04763 Cr15	4.763	3/16	6	20	66	36	Cr15	2
74001615	CRDR-G-C1103-04800 Cr15	4.800	0.1890	6	20	66	36	Cr15	2
74001620	CRDR-G-C1103-04852 Cr15	4.852	0.1910	6	20	66	36	Cr15	2
74001625	CRDR-G-C1103-04900 Cr15	4.900	0.1929	6	20	66	36	Cr15	2
74001630	CRDR-G-C1103-05000 Cr15	5.000	0.1969	6	20	66	36	Cr15	2
74001635	CRDR-G-C1103-05100 Cr15	5.100	0.2008	6	20	66	36	Cr15	2
74001640	CRDR-G-C1103-05106 Cr15	5.106	0.2010	6	20	66	36	Cr15	2
74001645	CRDR-G-C1103-05159 Cr15	5.159	13/64	6	20	66	36	Cr15	2
74001650	CRDR-G-C1103-05200 Cr15	5.200	0.2047	6	20	66	36	Cr15	2
74001655	CRDR-G-C1103-05300 Cr15	5.300	0.2087	6	20	66	36	Cr15	2
74001660	CRDR-G-C1103-05400 Cr15	5.400	0.2126	6	20	66	36	Cr15	2
74001665	CRDR-G-C1103-05410 Cr15	5.410	0.2130	6	20	66	36	Cr15	2
74001670	CRDR-G-C1103-05500 Cr15	5.500	0.2165	6	20	66	36	Cr15	2
74001675	CRDR-G-C1103-05558 Cr15	5.558	7/32	6	20	66	36	Cr15	2
74001680	CRDR-G-C1103-05600 Cr15	5.600	0.2205	6	20	66	36	Cr15	2
74001685	CRDR-G-C1103-05616 Cr15	5.616	0.2211	6	20	66	36	Cr15	2
74001690	CRDR-G-C1103-05700 Cr15	5.700	0.2244	6	20	66	36	Cr15	2
74001695	CRDR-G-C1103-05800 Cr15	5.800	0.2283	6	20	66	36	Cr15	2
74001700	CRDR-G-C1103-05900 Cr15	5.900	0.2323	6	20	66	36	Cr15	2
74001705	CRDR-G-C1103-05954 Cr15	5.954	15/64	6	20	66	36	Cr15	2
74001710	CRDR-G-C1103-06000 Cr15	6.000	0.2362	6	20	66	36	Cr15	2
74001715	CRDR-G-C1103-06100 Cr15	6.100	0.2402	8	24	79	36	Cr15	2
74001720	CRDR-G-C1103-06200 Cr15	6.200	0.2441	8	24	79	36	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001725	CRDR-G-C1103-06300 Cr15	6.300	0.2480	8	24	79	36	Cr15	2
74001730	CRDR-G-C1103-06350 Cr15	6.350	1/4	8	24	79	36	Cr15	2
74001735	CRDR-G-C1103-06400 Cr15	6.400	0.2520	8	24	79	36	Cr15	2
74001740	CRDR-G-C1103-06500 Cr15	6.500	0.2559	8	24	79	36	Cr15	2
74001745	CRDR-G-C1103-06528 Cr15	6.528	0.2570	8	24	79	36	Cr15	2
74001750	CRDR-G-C1103-06600 Cr15	6.600	0.2598	8	24	79	36	Cr15	2
74001755	CRDR-G-C1103-06630 Cr15	6.630	0.2610	8	24	79	36	Cr15	2
74001760	CRDR-G-C1103-06700 Cr15	6.700	0.2638	8	24	79	36	Cr15	2
74001765	CRDR-G-C1103-06746 Cr15	6.746	17/64	8	24	79	36	Cr15	2
74001770	CRDR-G-C1103-06800 Cr15	6.800	0.2677	8	24	79	36	Cr15	2
74001775	CRDR-G-C1103-06900 Cr15	6.900	0.2717	8	24	79	36	Cr15	2
74001780	CRDR-G-C1103-07000 Cr15	7.000	0.2756	8	29	79	36	Cr15	2
74001785	CRDR-G-C1103-07100 Cr15	7.100	0.2795	8	29	79	36	Cr15	2
74001790	CRDR-G-C1103-07145 Cr15	7.145	9/32	8	29	79	36	Cr15	2
74001795	CRDR-G-C1103-07200 Cr15	7.200	0.2835	8	29	79	36	Cr15	2
74001800	CRDR-G-C1103-07300 Cr15	7.300	0.2874	8	29	79	36	Cr15	2
74001805	CRDR-G-C1103-07400 Cr15	7.400	0.2913	8	29	79	36	Cr15	2
74001810	CRDR-G-C1103-07500 Cr15	7.500	0.2953	8	29	79	36	Cr15	2
74001815	CRDR-G-C1103-07541 Cr15	7.541	19/64	8	29	79	36	Cr15	2
74001820	CRDR-G-C1103-07600 Cr15	7.600	0.2992	8	29	79	36	Cr15	2
74001825	CRDR-G-C1103-07700 Cr15	7.700	0.3031	8	29	79	36	Cr15	2
74001830	CRDR-G-C1103-07800 Cr15	7.800	0.3071	8	29	79	36	Cr15	2
74001835	CRDR-G-C1103-07900 Cr15	7.900	0.3110	8	29	79	36	Cr15	2
74001840	CRDR-G-C1103-07938 Cr15	7.938	5/16	8	29	79	36	Cr15	2
74001845	CRDR-G-C1103-08000 Cr15	8.000	0.3150	8	29	79	36	Cr15	2
74001850	CRDR-G-C1103-08100 Cr15	8.100	0.3189	10	35	89	40	Cr15	2
74001855	CRDR-G-C1103-08200 Cr15	8.200	0.3228	10	35	89	40	Cr15	2
74001860	CRDR-G-C1103-08300 Cr15	8.300	0.3268	10	35	89	40	Cr15	2
74001865	CRDR-G-C1103-08334 Cr15	8.334	21/64	10	35	89	40	Cr15	2
74001870	CRDR-G-C1103-08400 Cr15	8.400	0.3307	10	35	89	40	Cr15	2
74001875	CRDR-G-C1103-08433 Cr15	8.433	0.3320	10	35	89	40	Cr15	2
74001880	CRDR-G-C1103-08500 Cr15	8.500	0.3346	10	35	89	40	Cr15	2
74001885	CRDR-G-C1103-08600 Cr15	8.600	0.3386	10	35	89	40	Cr15	2
74001890	CRDR-G-C1103-08700 Cr15	8.700	0.3425	10	35	89	40	Cr15	2
74001895	CRDR-G-C1103-08733 Cr15	8.733	11/32	10	35	89	40	Cr15	2
74001900	CRDR-G-C1103-08800 Cr15	8.800	0.3465	10	35	89	40	Cr15	2
74001905	CRDR-G-C1103-08900 Cr15	8.900	0.3504	10	35	89	40	Cr15	2
74001910	CRDR-G-C1103-09000 Cr15	9.000	0.3543	10	35	89	40	Cr15	2
74001915	CRDR-G-C1103-09100 Cr15	9.100	0.3583	10	35	89	40	Cr15	2
74001920	CRDR-G-C1103-09129 Cr15	9.129	23/64	10	35	89	40	Cr15	2
74001925	CRDR-G-C1103-09200 Cr15	9.200	0.3622	10	35	89	40	Cr15	2
74001930	CRDR-G-C1103-09300 Cr15	9.300	0.3661	10	35	89	40	Cr15	2
74001935	CRDR-G-C1103-09347 Cr15	9.347	0.3680	10	35	89	40	Cr15	2
74001940	CRDR-G-C1103-09400 Cr15	9.400	0.3701	10	35	89	40	Cr15	2
74001945	CRDR-G-C1103-09500 Cr15	9.500	0.3740	10	35	89	40	Cr15	2
74001950	CRDR-G-C1103-09525 Cr15	9.525	3/8	10	35	89	40	Cr15	2
74001955	CRDR-G-C1103-09600 Cr15	9.600	0.3780	10	35	89	40	Cr15	2
74001960	CRDR-G-C1103-09700 Cr15	9.700	0.3819	10	35	89	40	Cr15	2
74001965	CRDR-G-C1103-09800 Cr15	9.800	0.3858	10	35	89	40	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001970	CRDR-G-C1103-09900 Cr15	9.900	0.3898	10	35	89	40	Cr15	2
74001975	CRDR-G-C1103-09921 Cr15	9.921	25/64	10	35	89	40	Cr15	2
74001980	CRDR-G-C1103-10000 Cr15	10.000	0.3937	10	35	89	40	Cr15	2
74001985	CRDR-G-C1103-10100 Cr15	10.100	0.3976	12	40	102	40	Cr15	2
74001990	CRDR-G-C1103-10200 Cr15	10.200	0.4016	12	40	102	45	Cr15	2
74001995	CRDR-G-C1103-10300 Cr15	10.300	0.4055	12	40	102	45	Cr15	2
74002000	CRDR-G-C1103-10320 Cr15	10.320	13/32	12	40	102	45	Cr15	2
74002005	CRDR-G-C1103-10400 Cr15	10.400	0.4094	12	40	102	45	Cr15	2
74002010	CRDR-G-C1103-10500 Cr15	10.500	0.4134	12	40	102	45	Cr15	2
74002015	CRDR-G-C1103-10600 Cr15	10.600	0.4173	12	40	102	45	Cr15	2
74002020	CRDR-G-C1103-10700 Cr15	10.700	0.4213	12	40	102	45	Cr15	2
74002025	CRDR-G-C1103-10716 Cr15	10.716	27/64	12	40	102	45	Cr15	2
74002030	CRDR-G-C1103-10800 Cr15	10.800	0.4252	12	40	102	45	Cr15	2
74002035	CRDR-G-C1103-10900 Cr15	10.900	0.4291	12	40	102	45	Cr15	2
74002040	CRDR-G-C1103-11000 Cr15	11.000	0.4331	12	40	102	45	Cr15	2
74002045	CRDR-G-C1103-11100 Cr15	11.100	0.4370	12	40	102	45	Cr15	2
74002050	CRDR-G-C1103-11113 Cr15	11.113	7/16	12	40	102	45	Cr15	2
74002055	CRDR-G-C1103-11200 Cr15	11.200	0.4409	12	40	102	45	Cr15	2
74002060	CRDR-G-C1103-11300 Cr15	11.300	0.4449	12	40	102	45	Cr15	2
74002065	CRDR-G-C1103-11400 Cr15	11.400	0.4488	12	40	102	45	Cr15	2
74002070	CRDR-G-C1103-11500 Cr15	11.500	0.4528	12	40	102	45	Cr15	2
74002075	CRDR-G-C1103-11509 Cr15	11.509	0.4531	12	40	102	45	Cr15	2
74002080	CRDR-G-C1103-11600 Cr15	11.600	0.4567	12	40	102	45	Cr15	2
74002085	CRDR-G-C1103-11700 Cr15	11.700	0.4606	12	40	102	45	Cr15	2
74002090	CRDR-G-C1103-11800 Cr15	11.800	0.4646	12	40	102	45	Cr15	2
74002095	CRDR-G-C1103-11900 Cr15	11.900	0.4685	12	40	102	45	Cr15	2
74002100	CRDR-G-C1103-11908 Cr15	11.908	0.4688	12	40	102	45	Cr15	2
74002105	CRDR-G-C1103-12000 Cr15	12.000	0.4724	12	40	102	45	Cr15	2
74002110	CRDR-G-C1103-12100 Cr15	12.100	0.4764	14	43	107	45	Cr15	2
74002115	CRDR-G-C1103-12200 Cr15	12.200	0.4803	14	43	107	45	Cr15	2
74002120	CRDR-G-C1103-12300 Cr15	12.300	0.4843	14	43	107	45	Cr15	2
74002125	CRDR-G-C1103-12304 Cr15	12.304	0.4844	14	43	107	45	Cr15	2
74002130	CRDR-G-C1103-12400 Cr15	12.400	0.4882	14	43	107	45	Cr15	2
74002135	CRDR-G-C1103-12500 Cr15	12.500	0.4921	14	43	107	45	Cr15	2
74002140	CRDR-G-C1103-12600 Cr15	12.600	0.4961	14	43	107	45	Cr15	2
74002145	CRDR-G-C1103-12700 Cr15	12.700	0.5000	14	43	107	45	Cr15	2
74002150	CRDR-G-C1103-12800 Cr15	12.800	0.5039	14	43	107	45	Cr15	2
74002155	CRDR-G-C1103-12900 Cr15	12.900	0.5079	14	43	107	45	Cr15	2
74002160	CRDR-G-C1103-13000 Cr15	13.000	0.5118	14	43	107	45	Cr15	2
74002165	CRDR-G-C1103-13096 Cr15	13.096	0.5156	14	43	107	45	Cr15	2
74002170	CRDR-G-C1103-13100 Cr15	13.100	0.5157	14	43	107	45	Cr15	2
74002175	CRDR-G-C1103-13200 Cr15	13.200	0.5197	14	43	107	45	Cr15	2
74002180	CRDR-G-C1103-13300 Cr15	13.300	0.5236	14	43	107	45	Cr15	2
74002185	CRDR-G-C1103-13400 Cr15	13.400	0.5276	14	43	107	45	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002190	CRDR-G-C1103-13500 Cr15	13.500	0.5315	14	43	107	45	Cr15	2
74002195	CRDR-G-C1103-13600 Cr15	13.600	0.5354	14	43	107	45	Cr15	2
74002200	CRDR-G-C1103-13700 Cr15	13.700	0.5394	14	43	107	45	Cr15	2
74002205	CRDR-G-C1103-13800 Cr15	13.800	0.5433	14	43	107	45	Cr15	2
74002210	CRDR-G-C1103-13891 Cr15	13.891	0.5469	14	43	107	45	Cr15	2
74002215	CRDR-G-C1103-13900 Cr15	13.900	0.5472	14	43	107	45	Cr15	2
74002220	CRDR-G-C1103-14000 Cr15	14.000	0.5512	14	45	107	45	Cr15	2
74002225	CRDR-G-C1103-14100 Cr15	14.100	0.5551	16	45	115	48	Cr15	2
74002230	CRDR-G-C1103-14200 Cr15	14.200	0.5591	16	45	115	48	Cr15	2
74002235	CRDR-G-C1103-14288 Cr15	14.288	0.5625	16	45	115	48	Cr15	2
74002240	CRDR-G-C1103-14300 Cr15	14.300	0.5630	16	45	115	48	Cr15	2
74002245	CRDR-G-C1103-14400 Cr15	14.400	0.5669	16	45	115	48	Cr15	2
74002250	CRDR-G-C1103-14500 Cr15	14.500	0.5709	16	45	115	48	Cr15	2
74002255	CRDR-G-C1103-14600 Cr15	14.600	0.5748	16	45	115	48	Cr15	2
74002260	CRDR-G-C1103-14684 Cr15	14.684	37/64	16	45	115	48	Cr15	2
74002265	CRDR-G-C1103-14700 Cr15	14.700	0.5787	16	45	115	48	Cr15	2
74002270	CRDR-G-C1103-14800 Cr15	14.800	0.5827	16	45	115	48	Cr15	2
74002275	CRDR-G-C1103-14900 Cr15	14.900	0.5866	16	45	115	48	Cr15	2
74002280	CRDR-G-C1103-15000 Cr15	15.000	0.5906	16	45	115	48	Cr15	2
74002285	CRDR-G-C1103-15083 Cr15	15.083	19/32	16	45	115	48	Cr15	2
74002290	CRDR-G-C1103-15100 Cr15	15.100	0.5945	16	45	115	48	Cr15	2
74002295	CRDR-G-C1103-15200 Cr15	15.200	0.5984	16	45	115	48	Cr15	2
74002300	CRDR-G-C1103-15300 Cr15	15.300	0.6024	16	45	115	48	Cr15	2
74002305	CRDR-G-C1103-15400 Cr15	15.400	0.6063	16	45	115	48	Cr15	2
74002310	CRDR-G-C1103-15479 Cr15	15.479	0.6094	16	45	115	48	Cr15	2
74002315	CRDR-G-C1103-15500 Cr15	15.500	0.6102	16	45	115	48	Cr15	2
74002320	CRDR-G-C1103-15600 Cr15	15.600	0.6142	16	45	115	48	Cr15	2
74002325	CRDR-G-C1103-15700 Cr15	15.700	0.6181	16	45	115	48	Cr15	2
74002330	CRDR-G-C1103-15800 Cr15	15.800	0.6220	16	45	115	48	Cr15	2
74002335	CRDR-G-C1103-15875 Cr15	15.875	5/8	16	45	115	48	Cr15	2
74002340	CRDR-G-C1103-15900 Cr15	15.900	0.6260	16	45	115	48	Cr15	2
74002345	CRDR-G-C1103-16000 Cr15	16.000	0.6299	16	45	115	48	Cr15	2
74002350	CRDR-G-C1103-16100 Cr15	16.100	0.6339	18	51	123	48	Cr15	2
74002355	CRDR-G-C1103-16200 Cr15	16.200	0.6378	18	51	123	48	Cr15	2
74002360	CRDR-G-C1103-16271 Cr15	16.271	0.6406	18	51	123	48	Cr15	2
74002365	CRDR-G-C1103-16300 Cr15	16.300	0.6417	18	51	123	48	Cr15	2
74002370	CRDR-G-C1103-16400 Cr15	16.400	0.6457	18	51	123	48	Cr15	2
74002375	CRDR-G-C1103-16500 Cr15	16.500	0.6496	18	51	123	48	Cr15	2
74002380	CRDR-G-C1103-16600 Cr15	16.600	0.6535	18	51	123	48	Cr15	2
74002385	CRDR-G-C1103-16670 Cr15	16.670	21/32	18	51	123	48	Cr15	2
74002390	CRDR-G-C1103-16700 Cr15	16.700	0.6575	18	51	123	48	Cr15	2
74002395	CRDR-G-C1103-16800 Cr15	16.800	0.6614	18	51	123	48	Cr15	2
74002400	CRDR-G-C1103-16900 Cr15	16.900	0.6654	18	51	123	48	Cr15	2
74002405	CRDR-G-C1103-17000 Cr15	17.000	0.6693	18	51	123	48	Cr15	2
74002410	CRDR-G-C1103-17100 Cr15	17.100	0.6732	18	51	123	48	Cr15	2
74002415	CRDR-G-C1103-17200 Cr15	17.200	0.6772	18	51	123	48	Cr15	2
74002420	CRDR-G-C1103-17300 Cr15	17.300	0.6811	18	51	123	48	Cr15	2
74002425	CRDR-G-C1103-17400 Cr15	17.400	0.6850	18	51	123	48	Cr15	2
74002430	CRDR-G-C1103-17463 Cr15	17.463	11/16	18	51	123	48	Cr15	2



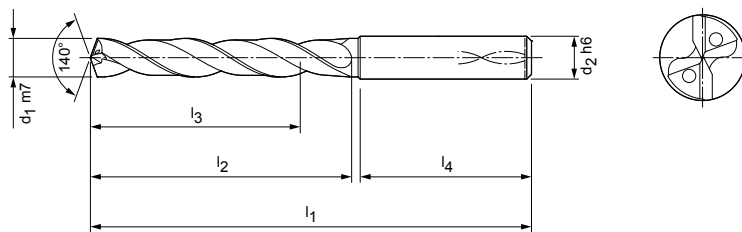
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002435	CRDR-G-C1103-17500 Cr15	17.500	0.6890	18	51	123	48	Cr15	2
74002440	CRDR-G-C1103-17600 Cr15	17.600	0.6929	18	51	123	48	Cr15	2
74002445	CRDR-G-C1103-17700 Cr15	17.700	0.6969	18	51	123	48	Cr15	2
74002450	CRDR-G-C1103-17800 Cr15	17.800	0.7008	18	51	123	48	Cr15	2
74002455	CRDR-G-C1103-17859 Cr15	17.859	45/64	18	51	123	48	Cr15	2
74002460	CRDR-G-C1103-17900 Cr15	17.900	0.7047	18	51	123	48	Cr15	2
74002465	CRDR-G-C1103-18000 Cr15	18.000	0.7087	18	51	123	48	Cr15	2
74002470	CRDR-G-C1103-18100 Cr15	18.100	0.7126	20	55	131	50	Cr15	2
74002475	CRDR-G-C1103-18200 Cr15	18.200	0.7165	20	55	131	50	Cr15	2
74002480	CRDR-G-C1103-18258 Cr15	18.258	23/32	20	55	131	50	Cr15	2
74002485	CRDR-G-C1103-18300 Cr15	18.300	0.7205	20	55	131	50	Cr15	2
74002490	CRDR-G-C1103-18400 Cr15	18.400	0.7244	20	55	131	50	Cr15	2
74002495	CRDR-G-C1103-18500 Cr15	18.500	0.7283	20	55	131	50	Cr15	2
74002500	CRDR-G-C1103-18600 Cr15	18.600	0.7323	20	55	131	50	Cr15	2
74002505	CRDR-G-C1103-18654 Cr15	18.654	0.7344	20	55	131	50	Cr15	2
74002510	CRDR-G-C1103-18700 Cr15	18.700	0.7362	20	55	131	50	Cr15	2
74002515	CRDR-G-C1103-18800 Cr15	18.800	0.7402	20	55	131	50	Cr15	2
74002520	CRDR-G-C1103-18900 Cr15	18.900	0.7441	20	55	131	50	Cr15	2
74002525	CRDR-G-C1103-19000 Cr15	19.000	0.7480	20	55	131	50	Cr15	2
74002530	CRDR-G-C1103-19050 Cr15	19.050	3/4	20	55	131	50	Cr15	2
74002535	CRDR-G-C1103-19100 Cr15	19.100	0.7520	20	55	131	50	Cr15	2
74002540	CRDR-G-C1103-19200 Cr15	19.200	0.7559	20	55	131	50	Cr15	2
74002545	CRDR-G-C1103-19300 Cr15	19.300	0.7598	20	55	131	50	Cr15	2
74002550	CRDR-G-C1103-19400 Cr15	19.400	0.7638	20	55	131	50	Cr15	2
74002555	CRDR-G-C1103-19500 Cr15	19.500	0.7677	20	55	131	50	Cr15	2
74002560	CRDR-G-C1103-19600 Cr15	19.600	0.7717	20	55	131	50	Cr15	2
74002565	CRDR-G-C1103-19700 Cr15	19.700	0.7756	20	55	131	50	Cr15	2
74002570	CRDR-G-C1103-19800 Cr15	19.800	0.7795	20	55	131	50	Cr15	2
74002575	CRDR-G-C1103-19900 Cr15	19.900	0.7835	20	55	131	50	Cr15	2
74002580	CRDR-G-C1103-20000 Cr15	20.000	0.7874	20	55	131	50	Cr15	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.0591-0.7874 in
1.50-20.00 mm

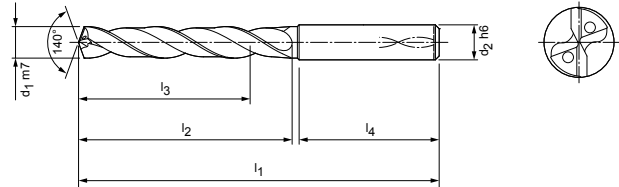
Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Standard point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002585	CRDR-G-C1105-01500 Cr15	1.500	0.0591	4	9	58	28	Cr15	2
74002590	CRDR-G-C1105-01600 Cr15	1.600	1/16	4	9	58	28	Cr15	2
74002595	CRDR-G-C1105-01700 Cr15	1.700	0.0669	4	9	58	28	Cr15	2
74002600	CRDR-G-C1105-01800 Cr15	1.800	0.0709	4	9	58	28	Cr15	2
74002605	CRDR-G-C1105-01900 Cr15	1.900	0.0748	4	9	58	28	Cr15	2
74002610	CRDR-G-C1105-01984 Cr15	1.984	5/64	4	14	58	28	Cr15	2
74002615	CRDR-G-C1105-02000 Cr15	2.000	0.0787	4	14	58	28	Cr15	2
74002620	CRDR-G-C1105-02100 Cr15	2.100	0.0827	4	14	58	28	Cr15	2
74002625	CRDR-G-C1105-02200 Cr15	2.200	0.0866	4	14	58	28	Cr15	2
74002630	CRDR-G-C1105-02300 Cr15	2.300	0.0906	4	14	58	28	Cr15	2
74002635	CRDR-G-C1105-02383 Cr15	2.383	3/32	4	17	58	28	Cr15	2
74002640	CRDR-G-C1105-02400 Cr15	2.400	3/32	4	17	58	28	Cr15	2
74002645	CRDR-G-C1105-02439 Cr15	2.439	0.0960	4	17	58	28	Cr15	2
74002650	CRDR-G-C1105-02489 Cr15	2.489	0.0980	4	17	58	28	Cr15	2
74002655	CRDR-G-C1105-02500 Cr15	2.500	0.0984	4	17	58	28	Cr15	2
74002660	CRDR-G-C1105-02578 Cr15	2.578	0.1015	4	17	58	28	Cr15	2
74002665	CRDR-G-C1105-02600 Cr15	2.600	0.1024	4	17	58	28	Cr15	2
74002670	CRDR-G-C1105-02642 Cr15	2.642	0.1040	4	17	58	28	Cr15	2
74002675	CRDR-G-C1105-02700 Cr15	2.700	0.1063	4	17	58	28	Cr15	2
74002680	CRDR-G-C1105-02705 Cr15	2.705	0.1065	4	17	58	28	Cr15	2
74002685	CRDR-G-C1105-02779 Cr15	2.779	7/64	4	17	58	28	Cr15	2
74002690	CRDR-G-C1105-02800 Cr15	2.800	0.1102	4	17	58	28	Cr15	2
74002695	CRDR-G-C1105-02820 Cr15	2.820	0.1110	4	17	58	28	Cr15	2
74002700	CRDR-G-C1105-02870 Cr15	2.870	0.1130	4	17	58	28	Cr15	2
74002705	CRDR-G-C1105-02900 Cr15	2.900	0.1142	4	17	58	28	Cr15	2
74002710	CRDR-G-C1105-02947 Cr15	2.947	0.1160	4	17	58	28	Cr15	2
74002715	CRDR-G-C1105-03000 Cr15	3.000	0.1181	6	23	66	36	Cr15	2
74002720	CRDR-G-C1105-03048 Cr15	3.048	0.1200	6	23	66	36	Cr15	2
74002725	CRDR-G-C1105-03100 Cr15	3.100	0.1220	6	23	66	36	Cr15	2
74002730	CRDR-G-C1105-03175 Cr15	3.175	1/8	6	23	66	36	Cr15	2
74002735	CRDR-G-C1105-03200 Cr15	3.200	0.1260	6	23	66	36	Cr15	2

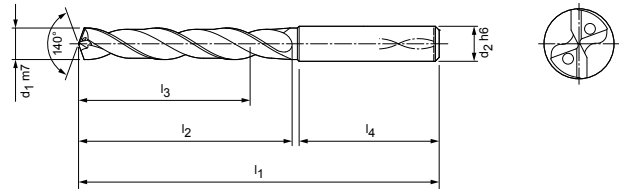
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002740	CRDR-G-C1105-03264 Cr15	3.264	0.1285	6	23	66	36	Cr15	2
74002745	CRDR-G-C1105-03300 Cr15	3.300	0.1299	6	23	66	36	Cr15	2
74002750	CRDR-G-C1105-03400 Cr15	3.400	0.1339	6	23	66	36	Cr15	2
74002755	CRDR-G-C1105-03455 Cr15	3.455	0.1360	6	23	66	36	Cr15	2
74002760	CRDR-G-C1105-03500 Cr15	3.500	0.1378	6	23	66	36	Cr15	2
74002765	CRDR-G-C1105-03571 Cr15	3.571	9/64	6	23	66	36	Cr15	2
74002770	CRDR-G-C1105-03600 Cr15	3.600	0.1417	6	23	66	36	Cr15	2
74002775	CRDR-G-C1105-03658 Cr15	3.658	0.1440	6	23	66	36	Cr15	2
74002780	CRDR-G-C1105-03700 Cr15	3.700	0.1457	6	23	66	36	Cr15	2
74002785	CRDR-G-C1105-03734 Cr15	3.734	0.1470	6	23	66	36	Cr15	2
74002790	CRDR-G-C1105-03800 Cr15	3.800	0.1496	6	29	74	36	Cr15	2
74002795	CRDR-G-C1105-03900 Cr15	3.900	0.1535	6	29	74	36	Cr15	2
74002800	CRDR-G-C1105-03970 Cr15	3.970	5/32	6	29	74	36	Cr15	2
74002805	CRDR-G-C1105-04000 Cr15	4.000	0.1575	6	29	74	36	Cr15	2
74002810	CRDR-G-C1105-04039 Cr15	4.039	0.1590	6	29	74	36	Cr15	2
74002815	CRDR-G-C1105-04090 Cr15	4.090	0.1610	6	29	74	36	Cr15	2
74002820	CRDR-G-C1105-04100 Cr15	4.100	0.1614	6	29	74	36	Cr15	2
74002825	CRDR-G-C1105-04200 Cr15	4.200	0.1654	6	29	74	36	Cr15	2
74002830	CRDR-G-C1105-04217 Cr15	4.217	0.1660	6	29	74	36	Cr15	2
74002835	CRDR-G-C1105-04300 Cr15	4.300	0.1693	6	29	74	36	Cr15	2
74002840	CRDR-G-C1105-04366 Cr15	4.366	11/64	6	29	74	36	Cr15	2
74002845	CRDR-G-C1105-04400 Cr15	4.400	0.1732	6	29	74	36	Cr15	2
74002850	CRDR-G-C1105-04500 Cr15	4.500	0.1772	6	29	74	36	Cr15	2
74002855	CRDR-G-C1105-04600 Cr15	4.600	0.1811	6	29	74	36	Cr15	2
74002860	CRDR-G-C1105-04623 Cr15	4.623	0.1820	6	29	74	36	Cr15	2
74002865	CRDR-G-C1105-04700 Cr15	4.700	0.1850	6	29	74	36	Cr15	2
74002870	CRDR-G-C1105-04763 Cr15	4.763	3/16	6	35	82	36	Cr15	2
74002875	CRDR-G-C1105-04800 Cr15	4.800	0.1890	6	35	82	36	Cr15	2
74002880	CRDR-G-C1105-04852 Cr15	4.852	0.1910	6	35	82	36	Cr15	2
74002885	CRDR-G-C1105-04900 Cr15	4.900	0.1929	6	35	82	36	Cr15	2
74002890	CRDR-G-C1105-05000 Cr15	5.000	0.1969	6	35	82	36	Cr15	2
74002895	CRDR-G-C1105-05100 Cr15	5.100	0.2008	6	35	82	36	Cr15	2
74002900	CRDR-G-C1105-05106 Cr15	5.106	0.2010	6	35	82	36	Cr15	2
74002905	CRDR-G-C1105-05159 Cr15	5.159	13/64	6	35	82	36	Cr15	2
74002910	CRDR-G-C1105-05200 Cr15	5.200	0.2047	6	35	82	36	Cr15	2
74002915	CRDR-G-C1105-05300 Cr15	5.300	0.2087	6	35	82	36	Cr15	2
74002920	CRDR-G-C1105-05400 Cr15	5.400	0.2126	6	35	82	36	Cr15	2
74002925	CRDR-G-C1105-05410 Cr15	5.410	0.2130	6	35	82	36	Cr15	2
74002930	CRDR-G-C1105-05500 Cr15	5.500	0.2165	6	35	82	36	Cr15	2
74002935	CRDR-G-C1105-05558 Cr15	5.558	7/32	6	35	82	36	Cr15	2
74002940	CRDR-G-C1105-05600 Cr15	5.600	0.2205	6	35	82	36	Cr15	2
74002945	CRDR-G-C1105-05616 Cr15	5.616	0.2211	6	35	82	36	Cr15	2
74002950	CRDR-G-C1105-05700 Cr15	5.700	0.2244	6	35	82	36	Cr15	2
74002955	CRDR-G-C1105-05800 Cr15	5.800	0.2283	6	35	82	36	Cr15	2
74002960	CRDR-G-C1105-05900 Cr15	5.900	0.2323	6	35	82	36	Cr15	2
74002965	CRDR-G-C1105-05954 Cr15	5.954	15/64	6	35	82	36	Cr15	2
74002970	CRDR-G-C1105-06000 Cr15	6.000	0.2362	6	35	82	36	Cr15	2
74002975	CRDR-G-C1105-06100 Cr15	6.100	0.2402	8	43	91	36	Cr15	2
74002980	CRDR-G-C1105-06200 Cr15	6.200	0.2441	8	43	91	36	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002985	CRDR-G-C1105-06300 Cr15	6.300	0.2480	8	43	91	36	Cr15	2
74002990	CRDR-G-C1105-06350 Cr15	6.350	1/4	8	43	91	36	Cr15	2
74002995	CRDR-G-C1105-06400 Cr15	6.400	0.2520	8	43	91	36	Cr15	2
74003000	CRDR-G-C1105-06500 Cr15	6.500	0.2559	8	43	91	36	Cr15	2
74003005	CRDR-G-C1105-06528 Cr15	6.528	0.2570	8	43	91	36	Cr15	2
74003010	CRDR-G-C1105-06600 Cr15	6.600	0.2598	8	43	91	36	Cr15	2
74003015	CRDR-G-C1105-06630 Cr15	6.630	0.2610	8	43	91	36	Cr15	2
74003020	CRDR-G-C1105-06700 Cr15	6.700	0.2638	8	43	91	36	Cr15	2
74003025	CRDR-G-C1105-06746 Cr15	6.746	17/64	8	43	91	36	Cr15	2
74003030	CRDR-G-C1105-06800 Cr15	6.800	0.2677	8	43	91	36	Cr15	2
74003035	CRDR-G-C1105-06900 Cr15	6.900	0.2717	8	43	91	36	Cr15	2
74003040	CRDR-G-C1105-07000 Cr15	7.000	0.2756	8	43	91	36	Cr15	2
74003045	CRDR-G-C1105-07100 Cr15	7.100	0.2795	8	43	91	36	Cr15	2
74003050	CRDR-G-C1105-07145 Cr15	7.145	9/32	8	43	91	36	Cr15	2
74003055	CRDR-G-C1105-07200 Cr15	7.200	0.2835	8	43	91	36	Cr15	2
74003060	CRDR-G-C1105-07300 Cr15	7.300	0.2874	8	43	91	36	Cr15	2
74003065	CRDR-G-C1105-07400 Cr15	7.400	0.2913	8	43	91	36	Cr15	2
74003070	CRDR-G-C1105-07500 Cr15	7.500	0.2953	8	43	91	36	Cr15	2
74003075	CRDR-G-C1105-07541 Cr15	7.541	19/64	8	43	91	36	Cr15	2
74003080	CRDR-G-C1105-07600 Cr15	7.600	0.2992	8	43	91	36	Cr15	2
74003085	CRDR-G-C1105-07700 Cr15	7.700	0.3031	8	43	91	36	Cr15	2
74003090	CRDR-G-C1105-07800 Cr15	7.800	0.3071	8	43	91	36	Cr15	2
74003095	CRDR-G-C1105-07900 Cr15	7.900	0.3110	8	43	91	36	Cr15	2
74003100	CRDR-G-C1105-07938 Cr15	7.938	5/16	8	43	91	36	Cr15	2
74003105	CRDR-G-C1105-08000 Cr15	8.000	0.3150	8	43	91	36	Cr15	2
74003110	CRDR-G-C1105-08100 Cr15	8.100	0.3189	10	49	103	40	Cr15	2
74003115	CRDR-G-C1105-08200 Cr15	8.200	0.3228	10	49	103	40	Cr15	2
74003120	CRDR-G-C1105-08300 Cr15	8.300	0.3268	10	49	103	40	Cr15	2
74003125	CRDR-G-C1105-08334 Cr15	8.334	21/64	10	49	103	40	Cr15	2
74003130	CRDR-G-C1105-08400 Cr15	8.400	0.3307	10	49	103	40	Cr15	2
74003135	CRDR-G-C1105-08433 Cr15	8.433	0.3320	10	49	103	40	Cr15	2
74003140	CRDR-G-C1105-08500 Cr15	8.500	0.3346	10	49	103	40	Cr15	2
74003145	CRDR-G-C1105-08600 Cr15	8.600	0.3386	10	49	103	40	Cr15	2
74003150	CRDR-G-C1105-08700 Cr15	8.700	0.3425	10	49	103	40	Cr15	2
74003155	CRDR-G-C1105-08733 Cr15	8.733	11/32	10	49	103	40	Cr15	2
74003160	CRDR-G-C1105-08800 Cr15	8.800	0.3465	10	49	103	40	Cr15	2
74003165	CRDR-G-C1105-08900 Cr15	8.900	0.3504	10	49	103	40	Cr15	2
74003170	CRDR-G-C1105-09000 Cr15	9.000	0.3543	10	49	103	40	Cr15	2
74003175	CRDR-G-C1105-09100 Cr15	9.100	0.3583	10	49	103	40	Cr15	2
74003180	CRDR-G-C1105-09129 Cr15	9.129	23/64	10	49	103	40	Cr15	2
74003185	CRDR-G-C1105-09200 Cr15	9.200	0.3622	10	49	103	40	Cr15	2
74003190	CRDR-G-C1105-09300 Cr15	9.300	0.3661	10	49	103	40	Cr15	2
74003195	CRDR-G-C1105-09347 Cr15	9.347	0.3680	10	49	103	40	Cr15	2
74003200	CRDR-G-C1105-09400 Cr15	9.400	0.3701	10	49	103	40	Cr15	2
74003205	CRDR-G-C1105-09500 Cr15	9.500	0.3740	10	49	103	40	Cr15	2
74003210	CRDR-G-C1105-09525 Cr15	9.525	3/8	10	49	103	40	Cr15	2
74003215	CRDR-G-C1105-09600 Cr15	9.600	0.3780	10	49	103	40	Cr15	2
74003220	CRDR-G-C1105-09700 Cr15	9.700	0.3819	10	49	103	40	Cr15	2
74003225	CRDR-G-C1105-09800 Cr15	9.800	0.3858	10	49	103	40	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74003230	CRDR-G-C1105-09900 Cr15	9.900	0.3898	10	49	103	40	Cr15	2
74003235	CRDR-G-C1105-09921 Cr15	9.921	25/64	10	49	103	40	Cr15	2
74003240	CRDR-G-C1105-10000 Cr15	10.000	0.3937	10	49	103	40	Cr15	2
74003245	CRDR-G-C1105-10100 Cr15	10.100	0.3976	12	56	118	45	Cr15	2
74003250	CRDR-G-C1105-10200 Cr15	10.200	0.4016	12	56	118	45	Cr15	2
74003255	CRDR-G-C1105-10300 Cr15	10.300	0.4055	12	56	118	45	Cr15	2
74003260	CRDR-G-C1105-10320 Cr15	10.320	13/32	12	56	118	45	Cr15	2
74003265	CRDR-G-C1105-10400 Cr15	10.400	0.4094	12	56	118	45	Cr15	2
74003270	CRDR-G-C1105-10500 Cr15	10.500	0.4134	12	56	118	45	Cr15	2
74003275	CRDR-G-C1105-10600 Cr15	10.600	0.4173	12	56	118	45	Cr15	2
74003280	CRDR-G-C1105-10700 Cr15	10.700	0.4213	12	56	118	45	Cr15	2
74003285	CRDR-G-C1105-10716 Cr15	10.716	27/64	12	56	118	45	Cr15	2
74003290	CRDR-G-C1105-10800 Cr15	10.800	0.4252	12	56	118	45	Cr15	2
74003295	CRDR-G-C1105-10900 Cr15	10.900	0.4291	12	56	118	45	Cr15	2
74003300	CRDR-G-C1105-11000 Cr15	11.000	0.4331	12	56	118	45	Cr15	2
74003305	CRDR-G-C1105-11100 Cr15	11.100	0.4370	12	56	118	45	Cr15	2
74003310	CRDR-G-C1105-11113 Cr15	11.113	7/16	12	56	118	45	Cr15	2
74003315	CRDR-G-C1105-11200 Cr15	11.200	0.4409	12	56	118	45	Cr15	2
74003320	CRDR-G-C1105-11300 Cr15	11.300	0.4449	12	56	118	45	Cr15	2
74003325	CRDR-G-C1105-11400 Cr15	11.400	0.4488	12	56	118	45	Cr15	2
74003330	CRDR-G-C1105-11500 Cr15	11.500	0.4528	12	56	118	45	Cr15	2
74003335	CRDR-G-C1105-11509 Cr15	11.509	0.4531	12	56	118	45	Cr15	2
74003340	CRDR-G-C1105-11600 Cr15	11.600	0.4567	12	56	118	45	Cr15	2
74003345	CRDR-G-C1105-11700 Cr15	11.700	0.4606	12	56	118	45	Cr15	2
74003350	CRDR-G-C1105-11800 Cr15	11.800	0.4646	12	56	118	45	Cr15	2
74003355	CRDR-G-C1105-11900 Cr15	11.900	0.4685	12	56	118	45	Cr15	2
74003360	CRDR-G-C1105-11908 Cr15	11.908	0.4688	12	56	118	45	Cr15	2
74003365	CRDR-G-C1105-12000 Cr15	12.000	0.4724	12	56	118	45	Cr15	2
74003370	CRDR-G-C1105-12100 Cr15	12.100	0.4764	14	60	124	45	Cr15	2
74003375	CRDR-G-C1105-12200 Cr15	12.200	0.4803	14	60	124	45	Cr15	2
74003380	CRDR-G-C1105-12300 Cr15	12.300	0.4843	14	60	124	45	Cr15	2
74003385	CRDR-G-C1105-12304 Cr15	12.304	0.4844	14	60	124	45	Cr15	2
74003390	CRDR-G-C1105-12400 Cr15	12.400	0.4882	14	60	124	45	Cr15	2
74003395	CRDR-G-C1105-12500 Cr15	12.500	0.4921	14	60	124	45	Cr15	2
74003400	CRDR-G-C1105-12600 Cr15	12.600	0.4961	14	60	124	45	Cr15	2
74003405	CRDR-G-C1105-12700 Cr15	12.700	0.5000	14	60	124	45	Cr15	2
74003410	CRDR-G-C1105-12800 Cr15	12.800	0.5039	14	60	124	45	Cr15	2
74003415	CRDR-G-C1105-12900 Cr15	12.900	0.5079	14	60	124	45	Cr15	2
74003420	CRDR-G-C1105-13000 Cr15	13.000	0.5118	14	60	124	45	Cr15	2
74003425	CRDR-G-C1105-13096 Cr15	13.096	0.5156	14	60	124	45	Cr15	2
74003430	CRDR-G-C1105-13100 Cr15	13.100	0.5157	14	60	124	45	Cr15	2
74003435	CRDR-G-C1105-13200 Cr15	13.200	0.5197	14	60	124	45	Cr15	2
74003440	CRDR-G-C1105-13300 Cr15	13.300	0.5236	14	60	124	45	Cr15	2
74003445	CRDR-G-C1105-13400 Cr15	13.400	0.5276	14	60	124	45	Cr15	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74003450	CRDR-G-C1105-13500 Cr15	13.500	0.5315	14	60	124	45	Cr15	2
74003455	CRDR-G-C1105-13600 Cr15	13.600	0.5354	14	60	124	45	Cr15	2
74003460	CRDR-G-C1105-13700 Cr15	13.700	0.5394	14	60	124	45	Cr15	2
74003465	CRDR-G-C1105-13800 Cr15	13.800	0.5433	14	60	124	45	Cr15	2
74003470	CRDR-G-C1105-13891 Cr15	13.891	0.5469	14	60	124	45	Cr15	2
74003475	CRDR-G-C1105-13900 Cr15	13.900	0.5472	14	60	124	45	Cr15	2
74003480	CRDR-G-C1105-14000 Cr15	14.000	0.5512	14	60	124	45	Cr15	2
74003485	CRDR-G-C1105-14100 Cr15	14.100	0.5551	16	63	133	48	Cr15	2
74003490	CRDR-G-C1105-14200 Cr15	14.200	0.5591	16	63	133	48	Cr15	2
74003495	CRDR-G-C1105-14288 Cr15	14.288	0.5625	16	63	133	48	Cr15	2
74003500	CRDR-G-C1105-14300 Cr15	14.300	0.5630	16	63	133	48	Cr15	2
74003505	CRDR-G-C1105-14400 Cr15	14.400	0.5669	16	63	133	48	Cr15	2
74003510	CRDR-G-C1105-14500 Cr15	14.500	0.5709	16	63	133	48	Cr15	2
74003515	CRDR-G-C1105-14600 Cr15	14.600	0.5748	16	63	133	48	Cr15	2
74003520	CRDR-G-C1105-14684 Cr15	14.684	37/64	16	63	133	48	Cr15	2
74003525	CRDR-G-C1105-14700 Cr15	14.700	0.5787	16	63	133	48	Cr15	2
74003530	CRDR-G-C1105-14800 Cr15	14.800	0.5827	16	63	133	48	Cr15	2
74003535	CRDR-G-C1105-14900 Cr15	14.900	0.5866	16	63	133	48	Cr15	2
74003540	CRDR-G-C1105-15000 Cr15	15.000	0.5906	16	63	133	48	Cr15	2
74003545	CRDR-G-C1105-15083 Cr15	15.083	19/32	16	63	133	48	Cr15	2
74003550	CRDR-G-C1105-15100 Cr15	15.100	0.5945	16	63	133	48	Cr15	2
74003555	CRDR-G-C1105-15200 Cr15	15.200	0.5984	16	63	133	48	Cr15	2
74003560	CRDR-G-C1105-15300 Cr15	15.300	0.6024	16	63	133	48	Cr15	2
74003565	CRDR-G-C1105-15400 Cr15	15.400	0.6063	16	63	133	48	Cr15	2
74003570	CRDR-G-C1105-15479 Cr15	15.479	0.6094	16	63	133	48	Cr15	2
74003575	CRDR-G-C1105-15500 Cr15	15.500	0.6102	16	63	133	48	Cr15	2
74003580	CRDR-G-C1105-15600 Cr15	15.600	0.6142	16	63	133	48	Cr15	2
74003585	CRDR-G-C1105-15700 Cr15	15.700	0.6181	16	63	133	48	Cr15	2
74003590	CRDR-G-C1105-15800 Cr15	15.800	0.6220	16	63	133	48	Cr15	2
74003595	CRDR-G-C1105-15875 Cr15	15.875	5/8	16	63	133	48	Cr15	2
74003600	CRDR-G-C1105-15900 Cr15	15.900	0.6260	16	63	133	48	Cr15	2
74003605	CRDR-G-C1105-16000 Cr15	16.000	0.6299	16	63	133	48	Cr15	2
74003610	CRDR-G-C1105-16100 Cr15	16.100	0.6339	18	71	143	48	Cr15	2
74003615	CRDR-G-C1105-16200 Cr15	16.200	0.6378	18	71	143	48	Cr15	2
74003620	CRDR-G-C1105-16271 Cr15	16.271	0.6406	18	71	143	48	Cr15	2
74003625	CRDR-G-C1105-16300 Cr15	16.300	0.6417	18	71	143	48	Cr15	2
74003630	CRDR-G-C1105-16400 Cr15	16.400	0.6457	18	71	143	48	Cr15	2
74003635	CRDR-G-C1105-16500 Cr15	16.500	0.6496	18	71	143	48	Cr15	2
74003640	CRDR-G-C1105-16600 Cr15	16.600	0.6535	18	71	143	48	Cr15	2
74003645	CRDR-G-C1105-16670 Cr15	16.670	21/32	18	71	143	48	Cr15	2
74003650	CRDR-G-C1105-16700 Cr15	16.700	0.6575	18	71	143	48	Cr15	2
74003655	CRDR-G-C1105-16800 Cr15	16.800	0.6614	18	71	143	48	Cr15	2
74003660	CRDR-G-C1105-16900 Cr15	16.900	0.6654	18	71	143	48	Cr15	2
74003665	CRDR-G-C1105-17000 Cr15	17.000	0.6693	18	71	143	48	Cr15	2
74003670	CRDR-G-C1105-17100 Cr15	17.100	0.6732	18	71	143	48	Cr15	2
74003675	CRDR-G-C1105-17200 Cr15	17.200	0.6772	18	71	143	48	Cr15	2
74003680	CRDR-G-C1105-17300 Cr15	17.300	0.6811	18	71	143	48	Cr15	2
74003685	CRDR-G-C1105-17400 Cr15	17.400	0.6850	18	71	143	48	Cr15	2
74003690	CRDR-G-C1105-17463 Cr15	17.463	11/16	18	71	143	48	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74003695	CRDR-G-C1105-17500 Cr15	17.500	0.6890	18	71	143	48	Cr15	2
74003700	CRDR-G-C1105-17600 Cr15	17.600	0.6929	18	71	143	48	Cr15	2
74003705	CRDR-G-C1105-17700 Cr15	17.700	0.6969	18	71	143	48	Cr15	2
74003710	CRDR-G-C1105-17800 Cr15	17.800	0.7008	18	71	143	48	Cr15	2
74003715	CRDR-G-C1105-17859 Cr15	17.859	45/64	18	71	143	48	Cr15	2
74003720	CRDR-G-C1105-17900 Cr15	17.900	0.7047	18	71	143	48	Cr15	2
74003725	CRDR-G-C1105-18000 Cr15	18.000	0.7087	18	71	143	48	Cr15	2
74003730	CRDR-G-C1105-18100 Cr15	18.100	0.7126	20	77	153	50	Cr15	2
74003735	CRDR-G-C1105-18200 Cr15	18.200	0.7165	20	77	153	50	Cr15	2
74003740	CRDR-G-C1105-18258 Cr15	18.258	23/32	20	77	153	50	Cr15	2
74003745	CRDR-G-C1105-18300 Cr15	18.300	0.7205	20	77	153	50	Cr15	2
74003750	CRDR-G-C1105-18400 Cr15	18.400	0.7244	20	77	153	50	Cr15	2
74003755	CRDR-G-C1105-18500 Cr15	18.500	0.7283	20	77	153	50	Cr15	2
74003760	CRDR-G-C1105-18600 Cr15	18.600	0.7323	20	77	153	50	Cr15	2
74003765	CRDR-G-C1105-18654 Cr15	18.654	0.7344	20	77	153	50	Cr15	2
74003770	CRDR-G-C1105-18700 Cr15	18.700	0.7362	20	77	153	50	Cr15	2
74003775	CRDR-G-C1105-18800 Cr15	18.800	0.7402	20	77	153	50	Cr15	2
74003780	CRDR-G-C1105-18900 Cr15	18.900	0.7441	20	77	153	50	Cr15	2
74003785	CRDR-G-C1105-19000 Cr15	19.000	0.7480	20	77	153	50	Cr15	2
74003790	CRDR-G-C1105-19050 Cr15	19.050	3/4	20	77	153	50	Cr15	2
74003795	CRDR-G-C1105-19100 Cr15	19.100	0.7520	20	77	153	50	Cr15	2
74003800	CRDR-G-C1105-19200 Cr15	19.200	0.7559	20	77	153	50	Cr15	2
74003805	CRDR-G-C1105-19300 Cr15	19.300	0.7598	20	77	153	50	Cr15	2
74003810	CRDR-G-C1105-19400 Cr15	19.400	0.7638	20	77	153	50	Cr15	2
74003815	CRDR-G-C1105-19500 Cr15	19.500	0.7677	20	77	153	50	Cr15	2
74003820	CRDR-G-C1105-19600 Cr15	19.600	0.7717	20	77	153	50	Cr15	2
74003825	CRDR-G-C1105-19700 Cr15	19.700	0.7756	20	77	153	50	Cr15	2
74003830	CRDR-G-C1105-19800 Cr15	19.800	0.7795	20	77	153	50	Cr15	2
74003835	CRDR-G-C1105-19900 Cr15	19.900	0.7835	20	77	153	50	Cr15	2
74003840	CRDR-G-C1105-20000 Cr15	20.000	0.7874	20	77	153	50	Cr15	2

EFFICIENCY - C1000 / C1100													
Work Material	Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm2)			Product model description						Recommended feed (f) for diameter ranges			
	HRC	BHN	N/mm2	C1003 (3 x d)		C1103 (3 x d)		C1105 (5 x d)		0.039-0.059 in		0.063-0.079 in	
				SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	279-328 246-295 213-262	85-100 75-90 65-80	312-377 279-344 246-295	95-115 85-105 75-90	312-377 279-344 246-295	95-115 85-105 75-90	.0012-.0020 .0012-.0020 .0020 .0012-.0020	0.03-0.05 0.03-0.05 0.03-0.05	.0016-.0028 .0016-.0028 .0016-.0028	0.04-0.07 0.04-0.07 0.04-0.07
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	180-246 147-197 115-164	55-75 45-60 35-50	197-279 164-230 131-197	60-85 50-70 40-60	197-279 164-230 131-197	60-85 50-70 40-60	.0008-.0020 .0012-.0020 .0008-.0016 .0008-.0016	0.02-0.05 0.02-0.04 0.02-0.04	.0012-.0024 .0012-.0024 .0012-.0020	0.03-0.06 0.03-0.06 0.03-0.05
Stainless steel moderate 17-4PH, 15-5PH, 316L				131-197	40-60	164-230	50-70	164-230	50-70	.0004-.0012	.0004-.0012	.0008-.0016	0.02-0.04
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				98-164	30-50	131-197	40-60	131-197	40-60	.0004-.0012	0.01-0.03	.0008-.0016	0.02-0.04
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	230-361 197-312 164-262	70-110 60-95 50-80	262-427 230-377 197-328	80-130 70-115 60-100	262-427 230-377 197-328	80-130 70-115 60-100	.0012-.0024 .0012-.0020 .0020 .0012-.0020	0.03-0.06 0.03-0.05 0.03-0.05	.0016-.0028 .0016-.0028 .0016-.0024	0.04-0.07 0.04-0.07 0.04-0.06
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	213-279 180-230	65-85 55-70	246-295 213-262	75-90 65-80	246-295 213-262	75-90 65-80	.0012-.0020 .0020 .0008-.0016	0.03-0.05 0.03-0.05 0.02-0.04	.0016-.0024 .0012-.00201	0.04-0.06 0.03-0.05
Aluminum (Si content >10%) 6061, 2025, 208, 360				361-1181	110-360	361-1181	110-360	361-1181	110-360	.0012-.0024	0.03-0.06	.0016-.0031	0.04-0.08
Aluminum (Si content <10%) 413, 385, A390				394-1575	120-480	120-480	120-480	394-1575	120-480	.0016-.0028	0.04-0.07	.0020-.0031	0.05-0.08
Copper, brass, bronze beryllium copper, naval brass, AMPCO				394-1575	120-480	394-1575	120-480	394-1575	120-480	.0016-.0028	0.04-0.07	.0020-.0031	0.05-0.08
Titanium alloy TiAl4V						66-164	20-50	66-164	20-50	.0004-.0012	0.01-0.03	.0008-.0016	0.02-0.04
High temperature alloy inconel, haynes, waspaloy, hastelloy						66-164	20-50	66-164	20-50	.0004-.0012	0.01-0.03	.0008-.0016	0.02-0.04
Chilled cast iron	38-48	350-450	1173-1527										
Hardened steel 50-60 HRC	50-55 56-60 61-65		1614-1870										

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

* For diameter < 3.00mm reduce cutting speed by 20-30%

Recommended feed (f) for diameter ranges												
0.083-0.118 in		0.118-0.197 in		0.197-0.316 in		0.316-0.472 in		0.472-0.630 in		0.630-0.787 in		
IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	
.0024-.0035	0.06-0.09	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.007-.012	0.18-0.30	.008-.012	0.20-0.35	.010-.016	0.25-0.40	
.0020-.0035	0.05-0.09	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.007-.012	0.18-0.30	.008-.012	0.20-0.35	.010-.016	0.25-0.40	
.0020-.0035	0.05-0.09	.004-.008	0.10-0.20	.006-.011	0.15-0.28	.007-.014	0.18-0.35	.008-.015	0.20-0.38	.010-.017	0.25-0.42	
.0016-.0031	0.04-0.08	.004-.008	0.10-0.20	.006-.011	0.15-0.28	.007-.014	0.18-0.35	.008-.015	0.20-0.38	.010-.017	0.25-0.42	
.0016-.0031	0.04-0.08	.004-.006	0.10-0.15	.005-.008	0.12-0.20	.005-.010	0.14-0.25	.006-.012	0.16-0.30	.007-.013	0.18-0.32	
.0016-.0031	0.04-0.07	.004-.006	0.10-0.15	.005-.008	0.12-0.20	.005-.010	0.14-0.25	.006-.012	0.16-0.30	.007-.013	0.18-0.32	
.0016-.0028												
.0012-.0024	0.03-0.06	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.005-.008	0.12-0.20	.006-.010	0.15-0.25	
.0012-.0024	0.03-0.06	.001-.003	0.03-0.08	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15	
.0020-.0039	0.05-0.10	.004-.010	0.10-0.25	.006-.012	0.15-0.30	.008-.016	0.20-0.40	.010-.018	0.25-0.45	.012-.020	0.30-0.50	
.0020-.0039	0.05-0.10	.004-.008	0.10-0.20	.005-.010	0.12-0.25	.006-.014	0.15-0.35	.008-.016	0.20-0.40	.010-.018	0.25-0.45	
.0020-.0035	0.06-0.09	.004-.008	0.10-0.20	.005-.012	0.12-0.25	.006-.014	0.15-0.35	.008-.016	0.20-0.40	.010-.018	0.25-0.45	
.0020-.0035	0.05-0.09	.004-.008	0.10-0.20	.005-.010	0.12-0.25	.008-.014	0.20-0.35	.012-.016	0.30-0.40	.014-.020	0.35-0.50	
.0016-.0031	0.04-0.08	.003-.006	0.08-0.15	.004-.008	0.10-0.20	.007-.012	0.18-0.30	.010-.014	0.25-0.35	.012-.016	0.30-0.40	
.0020-.0047	0.05-0.12	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55	
.0024-.0059	0.06-0.15	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55	
.0024-.0059	0.06-0.15	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55	
.0012-.0024	0.03-0.06	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15	
.0012-.0024	0.03-0.06	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.18	

CROMINOX

C2000 SERIES

- ⊙ When machining stainless steel, the best results are obtained with drills that have a very sharp cutting edge with special cutting edge preparation
- ⊙ The CROMINOX offer these specifics features and more. It has a chip flute optimised for these materials with a rounded geometry such that clean chip flow is ensured
- ⊙ The CROMINOX from CROMSON, is available coated with a special Cr85 TiAlN+ (PVD) coating and offer in the drilling depths 3xD, 5xD and 8xD with internal coolant



Work Material	Hardness Rockwell (HRc) Hardness Brinell (BHN) Tensile Strength (N/mm2)			C2000
	HRc	BHN	N/mm2	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				
Cast iron. grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 - over 24	up to 200 up to 250 - over 2050	up to 680 up to 850 - over 850	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	
Titanium alloy TiAl4V				
High temperature alloy inconel, haynes, waspaloy, hastelloy				



Highly recommended

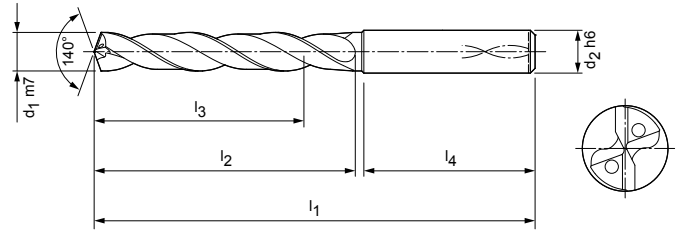


Suitable for some applications.

CARBIDE DRILL

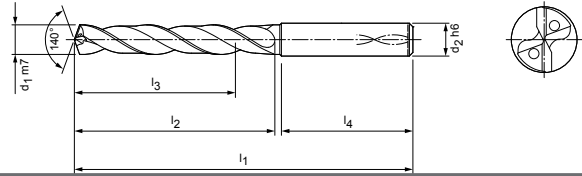
TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm
Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100000	CRDR-HP-C2103-0300 Cr85	3.000	0.1181	6	22	62	36	Cr85	2
75100005	CRDR-HP-C2103-0310 Cr85	3.100	0.1220	6	22	62	36	Cr85	2
75100008	CRDR-HP-C2103-0318 Cr85	3.180	1/8	6	22	62	36	Cr85	2
75100010	CRDR-HP-C2103-0320 Cr85	3.200	0.1260	6	22	62	36	Cr85	2
75100015	CRDR-HP-C2103-0330 Cr85	3.300	0.1299	6	22	62	36	Cr85	2
75100020	CRDR-HP-C2103-0340 Cr85	3.400	0.1339	6	22	62	36	Cr85	2
75100025	CRDR-HP-C2103-0350 Cr85	3.500	0.1378	6	22	62	36	Cr85	2
75100028	CRDR-HP-C2103-0357 Cr85	3.570	9/64	6	22	62	36	Cr85	2
75100030	CRDR-HP-C2103-0360 Cr85	3.600	0.1417	6	22	62	36	Cr85	2
75100035	CRDR-HP-C2103-0370 Cr85	3.700	0.1457	6	22	62	36	Cr85	2
75100040	CRDR-HP-C2103-0380 Cr85	3.800	0.1496	6	26	66	36	Cr85	2
75100045	CRDR-HP-C2103-0390 Cr85	3.900	0.1535	6	26	66	36	Cr85	2
75100048	CRDR-HP-C2103-0397 Cr85	3.970	5/32	6	26	66	36	Cr85	2
75100050	CRDR-HP-C2103-0400 Cr85	4.000	0.1575	6	26	66	36	Cr85	2
75100055	CRDR-HP-C2103-0410 Cr85	4.100	0.1614	6	26	66	36	Cr85	2
75100060	CRDR-HP-C2103-0420 Cr85	4.200	0.1654	6	26	66	36	Cr85	2
75100065	CRDR-HP-C2103-0430 Cr85	4.300	0.1693	6	26	66	36	Cr85	2
75100068	CRDR-HP-C2103-0437 Cr85	4.370	11/64	6	26	66	36	Cr85	2
75100070	CRDR-HP-C2103-0440 Cr85	4.400	0.1732	6	26	66	36	Cr85	2
75100075	CRDR-HP-C2103-0450 Cr85	4.500	0.1772	6	26	66	36	Cr85	2
75100080	CRDR-HP-C2103-0460 Cr85	4.600	0.1811	6	26	66	36	Cr85	2
75100085	CRDR-HP-C2103-0470 Cr85	4.700	0.1850	6	26	66	36	Cr85	2
75100088	CRDR-HP-C2103-0476 Cr85	4.760	3/16	6	26	66	36	Cr85	2
75100090	CRDR-HP-C2103-0480 Cr85	4.800	0.1890	6	30	66	36	Cr85	2
75100095	CRDR-HP-C2103-0490 Cr85	4.900	0.1929	6	30	66	36	Cr85	2
75100100	CRDR-HP-C2103-0500 Cr85	5.000	0.1969	6	30	66	36	Cr85	2
75100105	CRDR-HP-C2103-0510 Cr85	5.100	0.2008	6	30	66	36	Cr85	2
75100108	CRDR-HP-C2103-0516 Cr86	5.160	13/64	6	30	66	36	Cr85	2
75100110	CRDR-HP-C2103-0520 Cr85	5.200	0.2047	6	30	66	36	Cr85	2
75100115	CRDR-HP-C2103-0530 Cr85	5.300	0.2087	6	30	66	36	Cr85	2
75100120	CRDR-HP-C2103-0540 Cr85	5.400	0.2126	6	30	66	36	Cr85	2
75100125	CRDR-HP-C2103-0550 Cr85	5.500	0.2165	6	30	66	36	Cr85	2
75100128	CRDR-HP-C2103-0556 Cr85	5.560	7/32	6	30	66	36	Cr85	2
75100130	CRDR-HP-C2103-0560 Cr85	5.600	0.2205	6	30	66	36	Cr85	2
75100135	CRDR-HP-C2103-0570 Cr85	5.700	0.2244	6	30	66	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100140	CRDR-HP-C2103-0580 Cr85	5.800	0.2283	6	30	66	36	Cr85	2
75100145	CRDR-HP-C2103-0590 Cr85	5.900	0.2323	6	30	66	36	Cr85	2
75100148	CRDR-HP-C2103-0595 Cr85	5.950	15/64	6	30	66	36	Cr85	2
75100150	CRDR-HP-C2103-0600 Cr85	6.000	0.2362	6	30	66	36	Cr85	2
75100155	CRDR-HP-C2103-0610 Cr85	6.100	0.2402	8	38	79	36	Cr85	2
75100160	CRDR-HP-C2103-0620 Cr85	6.200	0.2441	8	38	79	36	Cr85	2
75100165	CRDR-HP-C2103-0630 Cr85	6.300	0.2480	8	38	79	36	Cr85	2
75100168	CRDR-HP-C2103-0635 Cr85	6.350	1/4	8	38	79	36	Cr85	2
75100170	CRDR-HP-C2103-0640 Cr85	6.400	0.2520	8	38	79	36	Cr85	2
75100175	CRDR-HP-C2103-0650 Cr85	6.500	0.2559	8	38	79	36	Cr85	2
75100180	CRDR-HP-C2103-0660 Cr85	6.600	0.2598	8	38	79	36	Cr85	2
75100185	CRDR-HP-C2103-0670 Cr85	6.700	0.2638	8	38	79	36	Cr85	2
75100188	CRDR-HP-C2103-0675 Cr85	6.750	17/64	8	38	79	36	Cr85	2
75100190	CRDR-HP-C2103-0680 Cr85	6.800	0.2677	8	38	79	36	Cr85	2
75100195	CRDR-HP-C2103-0690 Cr85	6.900	0.2717	8	38	79	36	Cr85	2
75100200	CRDR-HP-C2103-0700 Cr85	7.000	0.2756	8	38	79	36	Cr85	2
75100205	CRDR-HP-C2103-0710 Cr85	7.100	0.2795	8	42	79	36	Cr85	2
75100208	CRDR-HP-C2103-0714 Cr85	7.140	9/32	8	42	79	36	Cr85	2
75100210	CRDR-HP-C2103-0720 Cr85	7.200	0.2835	8	42	79	36	Cr85	2
75100215	CRDR-HP-C2103-0730 Cr85	7.300	0.2874	8	42	79	36	Cr85	2
75100220	CRDR-HP-C2103-0740 Cr85	7.400	0.2913	8	42	79	36	Cr85	2
75100225	CRDR-HP-C2103-0750 Cr85	7.500	0.2953	8	42	79	36	Cr85	2
75100228	CRDR-HP-C2103-0754 Cr85	7.540	19/64	8	42	79	36	Cr85	2
75100230	CRDR-HP-C2103-0760 Cr85	7.600	0.2992	8	42	79	36	Cr85	2
75100235	CRDR-HP-C2103-0770 Cr85	7.700	0.3031	8	42	79	36	Cr85	2
75100240	CRDR-HP-C2103-0780 Cr85	7.800	0.3071	8	42	79	36	Cr85	2
75100245	CRDR-HP-C2103-0790 Cr85	7.900	0.3110	8	42	79	36	Cr85	2
75100248	CRDR-HP-C2103-0794 Cr85	7.940	5/16	8	42	79	36	Cr85	2
75100250	CRDR-HP-C2103-0800 Cr85	8.000	0.3150	8	42	79	36	Cr85	2
75100255	CRDR-HP-C2103-0810 Cr85	8.100	0.3189	10	49	89	40	Cr85	2
75100260	CRDR-HP-C2103-0820 Cr85	8.200	0.3228	10	49	89	40	Cr85	2
75100265	CRDR-HP-C2103-0830 Cr85	8.300	0.3268	10	49	89	40	Cr85	2
75100268	CRDR-HP-C2103-0833 Cr85	8.330	21/64	10	49	89	40	Cr85	2
75100270	CRDR-HP-C2103-0840 Cr85	8.400	0.3307	10	49	89	40	Cr85	2
75100275	CRDR-HP-C2103-0850 Cr85	8.500	0.3346	10	49	89	40	Cr85	2
75100280	CRDR-HP-C2103-0860 Cr85	8.600	0.3386	10	49	89	40	Cr85	2
75100285	CRDR-HP-C2103-0870 Cr85	8.700	0.3425	10	49	89	40	Cr85	2
75100288	CRDR-HP-C2103-0873 Cr85	8.730	11/32	10	49	89	40	Cr85	2
75100290	CRDR-HP-C2103-0880 Cr85	8.800	0.3465	10	49	89	40	Cr85	2
75100295	CRDR-HP-C2103-0890 Cr85	8.900	0.3504	10	49	89	40	Cr85	2
75100300	CRDR-HP-C2103-0900 Cr85	9.000	0.3543	10	49	89	40	Cr85	2
75100305	CRDR-HP-C2103-0910 Cr85	9.100	0.3583	10	49	89	40	Cr85	2
75100308	CRDR-HP-C2103-0913 Cr85	9.130	23/64	10	49	89	40	Cr85	2
75100310	CRDR-HP-C2103-0920 Cr85	9.200	0.3622	10	49	89	40	Cr85	2
75100315	CRDR-HP-C2103-0930 Cr85	9.300	0.3661	10	49	89	40	Cr85	2
75100320	CRDR-HP-C2103-0940 Cr85	9.400	0.3701	10	49	89	40	Cr85	2
75100325	CRDR-HP-C2103-0950 Cr85	9.500	0.3740	10	49	89	40	Cr85	2
75100328	CRDR-HP-C2103-0953 Cr85	9.530	3/8	10	49	89	40	Cr85	2
75100330	CRDR-HP-C2103-0960 Cr85	9.600	0.3780	10	49	89	40	Cr85	2
75100335	CRDR-HP-C2103-0970 Cr85	9.700	0.3819	10	49	89	40	Cr85	2
75100340	CRDR-HP-C2103-0980 Cr85	9.800	0.3858	10	49	89	40	Cr85	2



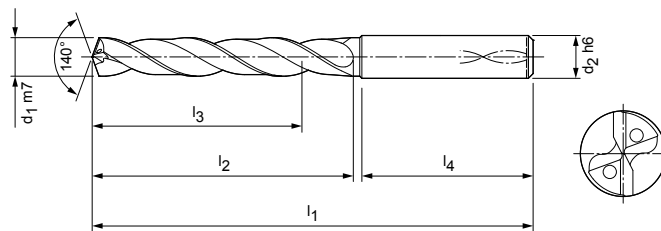
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100345	CRDR-HP-C2103-0990 Cr85	9.900	0.3898	10	49	89	40	Cr85	2
75100348	CRDR-HP-C2103-0992 Cr85	9.920	25/64	10	49	89	40	Cr85	2
75100350	CRDR-HP-C2103-1000 Cr85	10.000	0.3937	10	49	89	40	Cr85	2
75100355	CRDR-HP-C2103-1010 Cr85	10.100	0.3976	12	56	102	45	Cr85	2
75100360	CRDR-HP-C2103-1020 Cr85	10.200	0.4016	12	56	102	45	Cr85	2
75100365	CRDR-HP-C2103-1030 Cr85	10.300	0.4055	12	56	102	45	Cr85	2
75100368	CRDR-HP-C2103-1032 Cr85	10.320	13/32	12	56	102	45	Cr85	2
75100370	CRDR-HP-C2103-1040 Cr85	10.400	0.4094	12	56	102	45	Cr85	2
75100375	CRDR-HP-C2103-1050 Cr85	10.500	0.4134	12	56	102	45	Cr85	2
75100380	CRDR-HP-C2103-1060 Cr85	10.600	0.4173	12	56	102	45	Cr85	2
75100385	CRDR-HP-C2103-1070 Cr85	10.700	0.4213	12	56	102	45	Cr85	2
75100388	CRDR-HP-C2103-1072 Cr85	10.720	27/64	12	56	102	45	Cr85	2
75100390	CRDR-HP-C2103-1080 Cr85	10.800	0.4252	12	56	102	45	Cr85	2
75100395	CRDR-HP-C2103-1090 Cr85	10.900	0.4291	12	56	102	45	Cr85	2
75100400	CRDR-HP-C2103-1100 Cr85	11.000	0.4331	12	56	102	45	Cr85	2
75100405	CRDR-HP-C2103-1110 Cr85	11.100	0.4370	12	56	102	45	Cr85	2
75100408	CRDR-HP-C2103-1111 Cr85	11.110	7/16	12	56	102	45	Cr85	2
75100410	CRDR-HP-C2103-1120 Cr85	11.200	0.4409	12	56	102	45	Cr85	2
75100415	CRDR-HP-C2103-1130 Cr85	11.300	0.4449	12	56	102	45	Cr85	2
75100420	CRDR-HP-C2103-1140 Cr85	11.400	0.4488	12	56	102	45	Cr85	2
75100425	CRDR-HP-C2103-1150 Cr85	11.500	0.4528	12	56	102	45	Cr85	2
75100430	CRDR-HP-C2103-1160 Cr85	11.600	0.4567	12	56	102	45	Cr85	2
75100435	CRDR-HP-C2103-1170 Cr85	11.700	0.4606	12	56	102	45	Cr85	2
75100440	CRDR-HP-C2103-1180 Cr85	11.800	0.4646	12	56	102	45	Cr85	2
75100445	CRDR-HP-C2103-1190 Cr85	11.900	0.4685	12	56	102	45	Cr85	2
75100450	CRDR-HP-C2103-1200 Cr85	12.000	0.4724	12	56	102	45	Cr85	2
75100455	CRDR-HP-C2103-1350 Cr85	13.500	0.5315	14	61	107	45	Cr85	2
75100460	CRDR-HP-C2103-1450 Cr85	14.500	0.5709	16	65	115	48	Cr85	2
75100463	CRDR-HP-C2103-1468 Cr85	14.680	37/64	16	65	115	48	Cr85	2
75100465	CRDR-HP-C2103-1500 Cr85	15.000	0.5906	16	65	115	48	Cr85	2
75100468	CRDR-HP-C2103-1508 Cr85	15.080	19/32	16	65	115	48	Cr85	2
75100469	CRDR-HP-C2103-1588 Cr85	15.880	5/8	16	65	115	48	Cr85	2
75100470	CRDR-HP-C2103-1600 Cr85	16.000	0.6299	16	65	115	48	Cr85	2
75100475	CRDR-HP-C2103-1650 Cr85	16.500	0.6496	18	73	123	48	Cr85	2
75100478	CRDR-HP-C2103-1667 Cr85	16.670	21/32	18	73	123	48	Cr85	2
75100480	CRDR-HP-C2103-1700 Cr85	17.000	0.6693	18	73	123	48	Cr85	2
75100483	CRDR-HP-C2103-1746 Cr85	17.460	11/16	18	73	123	48	Cr85	2
75100485	CRDR-HP-C2103-1750 Cr85	17.500	0.6890	18	73	123	48	Cr85	2
75100488	CRDR-HP-C2103-1786 Cr85	17.860	45/64	18	73	123	48	Cr85	2
75100490	CRDR-HP-C2103-1800 Cr85	18.000	0.7087	18	73	123	48	Cr85	2
75100493	CRDR-HP-C2103-1826 Cr85	18.260	23/32	20	79	131	50	Cr85	2
75100495	CRDR-HP-C2103-1850 Cr85	18.500	0.7283	20	79	131	50	Cr85	2
75100500	CRDR-HP-C2103-1900 Cr85	19.000	0.7480	20	79	131	50	Cr85	2
75100503	CRDR-HP-C2103-1905 Cr85	19.050	3/4	20	79	131	50	Cr85	2
75100505	CRDR-HP-C2103-1950 Cr85	19.500	0.7677	20	79	131	50	Cr85	2
75100510	CRDR-HP-C2103-2000 Cr85	20.000	0.7874	20	79	131	50	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1102 - 0.7874 in
2.80-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100515	CRDR-HP-C2105-0280 Cr85	2.800	0.1102	6	28	66	36	Cr85	2
75100520	CRDR-HP-C2105-0300 Cr85	3.000	0.1181	6	28	66	36	Cr85	2
75100525	CRDR-HP-C2105-0310 Cr85	3.100	0.1220	6	28	66	36	Cr85	2
75100528	CRDR-HP-C2105-0318 Cr85	3.180	1/8	6	28	66	36	Cr85	2
75100530	CRDR-HP-C2105-0320 Cr85	3.200	0.1260	6	28	66	36	Cr85	2
75100535	CRDR-HP-C2105-0330 Cr85	3.300	0.1299	6	28	66	36	Cr85	2
75100540	CRDR-HP-C2105-0340 Cr85	3.400	0.1339	6	28	66	36	Cr85	2
75100545	CRDR-HP-C2105-0350 Cr85	3.500	0.1378	6	28	66	36	Cr85	2
75100548	CRDR-HP-C2105-0357 Cr85	3.570	9/64	6	28	66	36	Cr85	2
75100550	CRDR-HP-C2105-0360 Cr85	3.600	0.1417	6	28	66	36	Cr85	2
75100555	CRDR-HP-C2105-0370 Cr85	3.700	0.1457	6	28	66	36	Cr85	2
75100560	CRDR-HP-C2105-0380 Cr85	3.800	0.1496	6	36	74	36	Cr85	2
75100565	CRDR-HP-C2105-0390 Cr85	3.900	0.1535	6	36	74	36	Cr85	2
75100568	CRDR-HP-C2105-0397 Cr85	3.970	5/32	6	36	74	36	Cr85	2
75100570	CRDR-HP-C2105-0400 Cr85	4.000	0.1575	6	36	74	36	Cr85	2
75100575	CRDR-HP-C2105-0410 Cr85	4.100	0.1614	6	36	74	36	Cr85	2
75100580	CRDR-HP-C2105-0420 Cr85	4.200	0.1654	6	36	74	36	Cr85	2
75100585	CRDR-HP-C2105-0430 Cr85	4.300	0.1693	6	36	74	36	Cr85	2
75100588	CRDR-HP-C2105-0437 Cr85	4.370	11/64	6	36	74	36	Cr85	2
75100590	CRDR-HP-C2105-0440 Cr85	4.400	0.1732	6	36	74	36	Cr85	2
75100595	CRDR-HP-C2105-0450 Cr85	4.500	0.1772	6	36	74	36	Cr85	2
75100600	CRDR-HP-C2105-0460 Cr85	4.600	0.1811	6	36	74	36	Cr85	2
75100605	CRDR-HP-C2105-0465 Cr85	4.650	0.1831	6	36	74	36	Cr85	2
75100610	CRDR-HP-C2105-0470 Cr85	4.700	0.1850	6	36	74	36	Cr85	2
75100613	CRDR-HP-C2105-0476 Cr85	4.760	3/16	6	44	82	36	Cr85	2
75100615	CRDR-HP-C2105-0480 Cr85	4.800	0.1890	6	44	82	36	Cr85	2
75100620	CRDR-HP-C2105-0490 Cr85	4.900	0.1929	6	44	82	36	Cr85	2
75100625	CRDR-HP-C2105-0500 Cr85	5.000	0.1969	6	44	82	36	Cr85	2
75100630	CRDR-HP-C2105-0510 Cr85	5.100	0.2008	6	44	82	36	Cr85	2
75100633	CRDR-HP-C2105-0516 Cr85	5.160	13/64	6	44	82	36	Cr85	2
75100635	CRDR-HP-C2105-0520 Cr85	5.200	0.2047	6	44	82	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100640	CRDR-HP-C2105-0530 Cr85	5.300	0.2087	6	44	82	36	Cr85	2
75100645	CRDR-HP-C2105-0540 Cr85	5.400	0.2126	6	44	82	36	Cr85	2
75100650	CRDR-HP-C2105-0550 Cr85	5.500	0.2165	6	44	82	36	Cr85	2
75100655	CRDR-HP-C2105-0555 Cr85	5.550	0.2185	6	44	82	36	Cr85	2
75100658	CRDR-HP-C2105-0556 Cr85	5.560	7/32	6	44	82	36	Cr85	2
75100660	CRDR-HP-C2105-0560 Cr85	5.600	0.2205	6	44	82	36	Cr85	2
75100665	CRDR-HP-C2105-0570 Cr85	5.700	0.2244	6	44	82	36	Cr85	2
75100670	CRDR-HP-C2105-0580 Cr85	5.800	0.2283	6	44	82	36	Cr85	2
75100675	CRDR-HP-C2105-0590 Cr85	5.900	0.2323	6	44	82	36	Cr85	2
75100678	CRDR-HP-C2105-0595 Cr85	5.950	15/64	6	44	82	36	Cr85	2
75100680	CRDR-HP-C2105-0600 Cr85	6.000	0.2362	6	44	82	36	Cr85	2
75100685	CRDR-HP-C2105-0610 Cr85	6.100	0.2402	8	53	91	36	Cr85	2
75100690	CRDR-HP-C2105-0620 Cr85	6.200	0.2441	8	53	91	36	Cr85	2
75100695	CRDR-HP-C2105-0630 Cr85	6.300	0.2480	8	53	91	36	Cr85	2
75100698	CRDR-HP-C2105-0635 Cr85	6.350	1/4	8	53	91	36	Cr85	2
75100700	CRDR-HP-C2105-0640 Cr85	6.400	0.2520	8	53	91	36	Cr85	2
75100705	CRDR-HP-C2105-0650 Cr85	6.500	0.2559	8	53	91	36	Cr85	2
75100710	CRDR-HP-C2105-0660 Cr85	6.600	0.2598	8	53	91	36	Cr85	2
75100715	CRDR-HP-C2105-0670 Cr85	6.700	0.2638	8	53	91	36	Cr85	2
75100718	CRDR-HP-C2105-0675 Cr85	6.750	17/64	8	53	91	36	Cr85	2
75100720	CRDR-HP-C2105-0680 Cr85	6.800	0.2677	8	53	91	36	Cr85	2
75100725	CRDR-HP-C2105-0690 Cr85	6.900	0.2717	8	53	91	36	Cr85	2
75100730	CRDR-HP-C2105-0700 Cr85	7.000	0.2756	8	53	91	36	Cr85	2
75100735	CRDR-HP-C2105-0710 Cr85	7.100	0.2795	8	53	91	36	Cr85	2
75100738	CRDR-HP-C2105-0714 Cr85	7.140	9/32	8	53	91	36	Cr85	2
75100740	CRDR-HP-C2105-0720 Cr85	7.200	0.2835	8	53	91	36	Cr85	2
75100745	CRDR-HP-C2105-0730 Cr85	7.300	0.2874	8	53	91	36	Cr85	2
75100750	CRDR-HP-C2105-0740 Cr85	7.400	0.2913	8	53	91	36	Cr85	2
75100755	CRDR-HP-C2105-0745 Cr85	7.450	0.2933	8	53	91	36	Cr85	2
75100760	CRDR-HP-C2105-0750 Cr85	7.500	0.2953	8	53	91	36	Cr85	2
75100763	CRDR-HP-C2105-0754 Cr85	7.540	19/64	8	53	91	36	Cr85	2
75100765	CRDR-HP-C2105-0760 Cr85	7.600	0.2992	8	53	91	36	Cr85	2
75100770	CRDR-HP-C2105-0770 Cr85	7.700	0.3031	8	53	91	36	Cr85	2
75100775	CRDR-HP-C2105-0780 Cr85	7.800	0.3071	8	53	91	36	Cr85	2
75100780	CRDR-HP-C2105-0790 Cr85	7.900	0.3110	8	53	91	36	Cr85	2
75100783	CRDR-HP-C2105-0794 Cr85	7.940	5/16	8	53	91	36	Cr85	2
75100785	CRDR-HP-C2105-0800 Cr85	8.000	0.3150	8	53	91	36	Cr85	2
75100790	CRDR-HP-C2105-0810 Cr85	8.100	0.3189	10	61	103	40	Cr85	2
75100795	CRDR-HP-C2105-0820 Cr85	8.200	0.3228	10	61	103	40	Cr85	2
75100800	CRDR-HP-C2105-0830 Cr85	8.300	0.3268	10	61	103	40	Cr85	2
75100803	CRDR-HP-C2105-0833 Cr83	8.330	21/64	10	61	103	40	Cr85	2
75100805	CRDR-HP-C2105-0840 Cr85	8.400	0.3307	10	61	103	40	Cr85	2
75100810	CRDR-HP-C2105-0850 Cr85	8.500	0.3346	10	61	103	40	Cr85	2
75100815	CRDR-HP-C2105-0860 Cr85	8.600	0.3386	10	61	103	40	Cr85	2
75100820	CRDR-HP-C2105-0870 Cr85	8.700	0.3425	10	61	103	40	Cr85	2
75100823	CRDR-HP-C2105-0873 Cr85	8.730	11/32	10	61	103	40	Cr85	2
75100825	CRDR-HP-C2105-0880 Cr85	8.800	0.3465	10	61	103	40	Cr85	2
75100830	CRDR-HP-C2105-0890 Cr85	8.900	0.3504	10	61	103	40	Cr85	2
75100835	CRDR-HP-C2105-0900 Cr85	9.000	0.3543	10	61	103	40	Cr85	2




EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75100840	CRDR-HP-C2105-0910 Cr85	9.100	0.3583	10	61	103	40	Cr85	2
75100843	CRDR-HP-C2105-0913 Cr85	9.130	23/64	10	61	103	40	Cr85	2
75100845	CRDR-HP-C2105-0920 Cr85	9.200	0.3622	10	61	103	40	Cr85	2
75100850	CRDR-HP-C2105-0930 Cr85	9.300	0.3661	10	61	103	40	Cr85	2
75100855	CRDR-HP-C2105-0940 Cr85	9.400	0.3701	10	61	103	40	Cr85	2
75100860	CRDR-HP-C2105-0950 Cr85	9.500	0.3740	10	61	103	40	Cr85	2
75100863	CRDR-HP-C2105-0953 Cr85	9.530	3/8	10	61	103	40	Cr85	2
75100865	CRDR-HP-C2105-0960 Cr85	9.600	0.3780	10	61	103	40	Cr85	2
75100870	CRDR-HP-C2105-0970 Cr85	9.700	0.3819	10	61	103	40	Cr85	2
75100875	CRDR-HP-C2105-0980 Cr85	9.800	0.3858	10	61	103	40	Cr85	2
75100880	CRDR-HP-C2105-0990 Cr85	9.900	0.3898	10	61	103	40	Cr85	2
75100883	CRDR-HP-C2105-0992 Cr85	9.920	25/64	10	61	103	40	Cr85	2
75100885	CRDR-HP-C2105-1000 Cr85	10.000	0.3937	10	61	103	40	Cr85	2
75100890	CRDR-HP-C2105-1010 Cr85	10.100	0.3976	12	71	118	45	Cr85	2
75100895	CRDR-HP-C2105-1020 Cr85	10.200	0.4016	12	71	118	45	Cr85	2
75100900	CRDR-HP-C2105-1030 Cr85	10.300	0.4055	12	71	118	45	Cr85	2
75100903	CRDR-HP-C2105-1032 Cr85	10.320	13/32	12	71	118	45	Cr85	2
75100905	CRDR-HP-C2105-1040 Cr85	10.400	0.4094	12	71	118	45	Cr85	2
75100910	CRDR-HP-C2105-1050 Cr85	10.500	0.4134	12	71	118	45	Cr85	2
75100915	CRDR-HP-C2105-1060 Cr85	10.600	0.4173	12	71	118	45	Cr85	2
75100920	CRDR-HP-C2105-1070 Cr85	10.700	0.4213	12	71	118	45	Cr85	2
75100923	CRDR-HP-C2105-1072 Cr86	10.720	27/64	12	71	118	45	Cr85	2
75100925	CRDR-HP-C2105-1080 Cr85	10.800	0.4252	12	71	118	45	Cr85	2
75100930	CRDR-HP-C2105-1090 Cr85	10.900	0.4291	12	71	118	45	Cr85	2
75100935	CRDR-HP-C2105-1100 Cr85	11.000	0.4331	12	71	118	45	Cr85	2
75100940	CRDR-HP-C2105-1110 Cr85	11.100	0.4370	12	71	118	45	Cr85	2
75100943	CRDR-HP-C2105-1111 Cr85	11.110	7/16	12	71	118	45	Cr85	2
75100945	CRDR-HP-C2105-1120 Cr85	11.200	0.4409	12	71	118	45	Cr85	2
75100950	CRDR-HP-C2105-1130 Cr85	11.300	0.4449	12	71	118	45	Cr85	2
75100955	CRDR-HP-C2105-1140 Cr85	11.400	0.4488	12	71	118	45	Cr85	2
75100960	CRDR-HP-C2105-1150 Cr85	11.500	0.4528	12	71	118	45	Cr85	2
75100965	CRDR-HP-C2105-1160 Cr85	11.600	0.4567	12	71	118	45	Cr85	2
75100970	CRDR-HP-C2105-1170 Cr85	11.700	0.4606	12	71	118	45	Cr85	2
75100975	CRDR-HP-C2105-1180 Cr85	11.800	0.4646	12	71	118	45	Cr85	2
75100980	CRDR-HP-C2105-1190 Cr85	11.900	0.4685	12	71	118	45	Cr85	2
75100985	CRDR-HP-C2105-1200 Cr85	12.000	0.4724	12	71	118	45	Cr85	2
75100990	CRDR-HP-C2105-1250 Cr85	12.500	0.4921	14	77	124	45	Cr85	2
75100995	CRDR-HP-C2105-1280 Cr85	12.800	0.5039	14	77	124	45	Cr85	2
75101000	CRDR-HP-C2105-1300 Cr85	13.000	0.5118	14	77	124	45	Cr85	2
75101005	CRDR-HP-C2105-1350 Cr85	13.500	0.5315	14	77	124	45	Cr85	2
75101010	CRDR-HP-C2105-1380 Cr85	13.800	0.5433	14	77	124	45	Cr85	2
75101015	CRDR-HP-C2105-1400 Cr85	14.000	0.5512	14	77	124	45	Cr85	2
75101020	CRDR-HP-C2105-1450 Cr85	14.500	0.5709	16	83	133	48	Cr85	2
75101023	CRDR-HP-C2105-1468 Cr85	14.680	37/64	16	83	133	48	Cr85	2
75101025	CRDR-HP-C2105-1480 Cr85	14.800	0.5827	16	83	133	48	Cr85	2
75101030	CRDR-HP-C2105-1500 Cr85	15.000	0.5906	16	83	133	48	Cr85	2
75101033	CRDR-HP-C2105-1508 Cr85	15.080	19/32	16	83	133	48	Cr85	2
75101035	CRDR-HP-C2105-1550 Cr85	15.500	0.6102	16	83	133	48	Cr85	2
75101040	CRDR-HP-C2105-1580 Cr85	15.800	0.6220	16	83	133	48	Cr85	2
75101044	CRDR-HP-C2105-1588 Cr85	15.880	5/8	16	83	133	48	Cr85	2

CROMINOX-C2000		Product model description		Recommended feed (f) for diameter ranges																
		C2103 (3 x d)		C2105 (5 x d)		0.118-0.197 in 3 to 5 mm IPR			0.197-0.316 in 5 to 8 mm IPR			0.316-0.472 in 8 to 12 mm IPR			0.472-0.630 in 12 to 16 mm IPR			0.630-0.787 in 16 to 20 mm IPR		
		SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	
Work Material	Hardness Rockwell (HRC)																			
	Hardness Brinell (BHN)																			
	Tensile Strength (N/mm2)																			
	Hrc	up to 8	up to 178	up to 600	95-115	312-377	95-115	312-377	95-115	312-377	.004-.007	.010-0.18	.006-.010	.015-0.25	.007-.012	.018-0.30	.007-.012	.018-0.30	.007-.012	.018-0.30
		up to 15	up to 205	up to 700	85-105	279-344	85-105	279-344	85-105	279-344	.004-.007	.010-0.18	.006-.010	.015-0.25	.007-.012	.018-0.30	.007-.012	.018-0.30	.007-.012	.018-0.30
		over 15	over 205	over 700	75-90	246-295	75-90	246-295	75-90	246-295	.004-.008	.010-0.20	.006-.011	.015-0.28	.007-.014	.018-0.35	.007-.014	.018-0.35	.007-.014	.018-0.35
		up to 27	up to 266	up to 900	60-85	197-279	60-85	197-279	60-85	197-279	.004-.008	.010-0.20	.006-.011	.015-0.28	.007-.014	.018-0.35	.007-.014	.018-0.35	.007-.014	.018-0.35
		up to 31	up to 297	up to 1000	50-70	164-230	50-70	164-230	50-70	164-230	.004-.006	.010-0.15	.005-.008	.012-0.20	.005-.010	.014-0.25	.005-.010	.014-0.25	.005-.010	.014-0.25
		over 31	over 297	over 1000	40-60	131-197	40-60	131-197	40-60	131-197	.004-.006	.010-0.15	.005-.008	.012-0.20	.005-.010	.014-0.25	.005-.010	.014-0.25	.005-.010	.014-0.25
					50-70	164-230	50-70	164-230	50-70	164-230	.001-.004	0.04-0.10	.002.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15	.003-.006	0.08-0.15
					30-50	98-164	30-50	131-197	40-60	98-164	.001-.003	0.03-0.08	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15
		up to 14	up to 200	up to 680	80-130	262-427	80-130	262-427	80-130	262-427	.004-.010	0.10-0.25	.006-.012	0.15-0.30	.008-.016	0.20-0.40	.010-.018	0.25-0.45	.012-.020	0.30-0.50
		up to 24	up to 250	up to 850	70-115	230-377	70-115	230-377	70-115	230-377	.004-.008	0.10-0.20	.005-.010	0.12-0.25	.006-.014	0.15-0.35	.008-.016	0.20-0.40	.010-.018	0.25-0.45
		over 24	over 2050	over 850	60-100	197-328	60-100	197-328	60-100	197-328	.004-.008	0.10-0.20	.005-.012	0.12-0.25	.006-.014	0.15-0.35	.008-.016	0.20-0.40	.010-.018	0.25-0.45
		up to 8	up to 178	up to 600	75-90	246-295	75-90	246-295	75-90	246-295	.004-.008	0.10-0.20	.005-.010	0.12-0.25	.008-.014	0.20-0.35	.012-.016	0.30-0.40	.014-.020	0.35-0.50
		over 8	over 178	over 650	65-80	213-262	65-80	213-262	65-80	213-262	.003-.006	0.08-0.15	.004-.008	0.10-0.20	.007-.012	0.18-0.30	.010-.014	0.25-0.35	.012-.016	0.30-0.40
					110-360	361-1181	110-360	361-1181	110-360	361-1181	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55
					120-480	120-480	120-480	120-480	120-480	120-480	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55
					120-480	394-1575	120-480	394-1575	120-480	394-1575	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55
					20-50	66-164	20-50	66-164	20-50	66-164	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15
					20-50	66-164	20-50	66-164	20-50	66-164	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15
		38-48	350-450	1173-1527																
		50-55	56-60	161-41870																
		50-60 HRC	61-65																	

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.00mm reduce cutting speed by 20-30%

MINIATURE C3000 SERIES

© For bore diameter even in the range, from 1.00 to 2.90 mm and bore depths of up to 12xD, the MINIATURE series from CROMSON is equipped with internal coolant as standard together with the special new grade from Cromson, Cr85 TiAlN+ (PVD). These features result in high performance even with these miniature sizes of drills

Work Material	Hardness Rockwell (HRc) Hardness Brinell (BHN) Tensile Strength (N/mm2)			C3000
	HRc	BHN	N/mm2	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				



Highly recommended



Suitable for some applications.

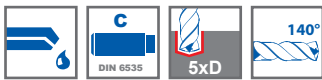
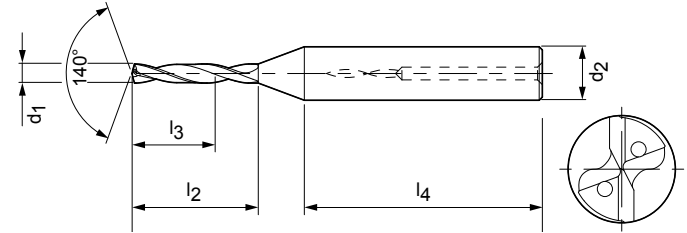


CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.0394-0.1142 in
 1.00-2.90 mm

Bore tolerance IT9 (achievable)
 Shank form Cyl. (DIN 6535)
 Number of flutes 2
 Number of margins 1
 Point geometry Special point
 Point angle 140°
 Helix angle 10 to 20 (depends on diameter)
 Coolant Internal



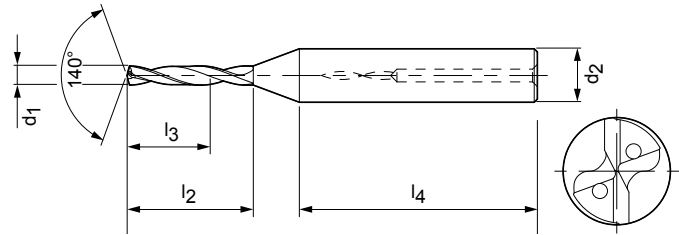
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101110	CRDR-HP-C3105-0100 Cr85	1.000	0.0394	3	8	55	40	Cr85	2
75101115	CRDR-HP-C3105-0110 Cr85	1.100	0.0433	3	12	55	34	Cr85	2
75101120	CRDR-HP-C3105-0120 Cr85	1.200	0.0472	3	12	55	35	Cr85	2
75101125	CRDR-HP-C3105-0130 Cr85	1.300	0.0512	3	12	55	35	Cr85	2
75101130	CRDR-HP-C3105-0140 Cr85	1.400	0.0551	3	12	55	35	Cr85	2
75101135	CRDR-HP-C3105-0150 Cr85	1.500	0.0591	3	12	55	35	Cr85	2
75101140	CRDR-HP-C3105-0160 Cr85	1.600	1/16	3	16	68	43	Cr85	2
75101145	CRDR-HP-C3105-0170 Cr85	1.700	0.0669	3	16	68	44	Cr85	2
75101150	CRDR-HP-C3105-0180 Cr85	1.800	0.0709	3	16	68	44	Cr85	2
75101155	CRDR-HP-C3105-0190 Cr85	1.900	0.0748	3	16	68	44	Cr85	2
75101160	CRDR-HP-C3105-0200 Cr85	2.000	0.0787	3	16	68	44	Cr85	2
75101165	CRDR-HP-C3105-0210 Cr85	2.100	0.0827	3	20	74	44	Cr85	2
75101170	CRDR-HP-C3105-0220 Cr85	2.200	0.0866	3	20	74	45	Cr85	2
75101175	CRDR-HP-C3105-0230 Cr85	2.300	0.0906	3	20	74	45	Cr85	2
75101180	CRDR-HP-C3105-0240 Cr85	2.400	3/32	3	20	74	45	Cr85	2
75101185	CRDR-HP-C3105-0250 Cr85	2.500	0.0984	3	20	74	45	Cr85	2
75101190	CRDR-HP-C3105-0260 Cr85	2.600	0.1024	3	23	81	48	Cr85	2
75101195	CRDR-HP-C3105-0270 Cr85	2.700	0.1063	3	23	81	48	Cr85	2
75101200	CRDR-HP-C3105-0280 Cr85	2.800	0.1102	3	23	81	48	Cr85	2
75101205	CRDR-HP-C3105-0290 Cr85	2.900	0.1142	3	23	81	48	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.0394-0.1142 in
 1.00-2.90 mm

 Bore tolerance IT9 (achievable)
 Shank form Cyl. (DIN 6535)
 Number of flutes 2
 Number of margins 1
 Point geometry Special point
 Point angle 140°
 Helix angle 10 to 20 (depends on diameter)
 Coolant Internal



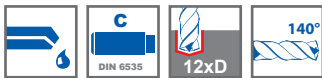
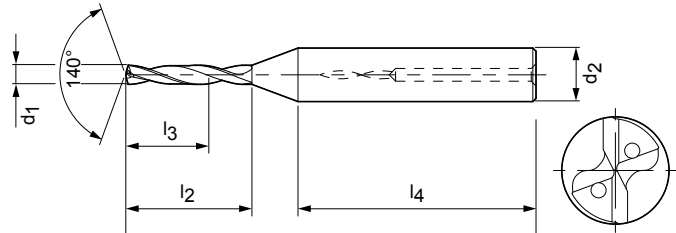
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101210	CRDR-HP-C3108-0100 Cr85	1.000	0.0394	3	11	55	40	Cr85	2
75101215	CRDR-HP-C3108-0110 Cr85	1.100	0.0433	3	17	55	34	Cr85	2
75101220	CRDR-HP-C3108-0120 Cr85	1.200	0.0472	3	17	55	35	Cr85	2
75101225	CRDR-HP-C3108-0130 Cr85	1.300	0.0512	3	17	55	35	Cr85	2
75101230	CRDR-HP-C3108-0140 Cr85	1.400	0.0551	3	17	55	35	Cr85	2
75101235	CRDR-HP-C3108-0150 Cr85	1.500	0.0591	3	22	68	35	Cr85	2
75101240	CRDR-HP-C3108-0160 Cr85	1.600	1/16	3	22	68	43	Cr85	2
75101245	CRDR-HP-C3108-0170 Cr85	1.700	0.0669	3	22	68	44	Cr85	2
75101250	CRDR-HP-C3108-0180 Cr85	1.800	0.0709	3	22	68	44	Cr85	2
75101255	CRDR-HP-C3108-0190 Cr85	1.900	0.0748	3	22	68	44	Cr85	2
75101260	CRDR-HP-C3108-0200 Cr85	2.000	0.0787	3	22	68	44	Cr85	2
75101265	CRDR-HP-C3108-0210 Cr85	2.100	0.0827	3	28	74	44	Cr85	2
75101270	CRDR-HP-C3108-0220 Cr85	2.200	0.0866	3	28	74	45	Cr85	2
75101275	CRDR-HP-C3108-0230 Cr85	2.300	0.0906	3	28	74	45	Cr85	2
75101280	CRDR-HP-C3108-0240 Cr85	2.400	3/32	3	28	74	45	Cr85	2
75101285	CRDR-HP-C3108-0250 Cr85	2.500	0.0984	3	28	74	45	Cr85	2
75101290	CRDR-HP-C3108-0260 Cr85	2.600	0.1024	3	32	81	48	Cr85	2
75101295	CRDR-HP-C3108-0270 Cr85	2.700	0.1063	3	32	81	48	Cr85	2
75101300	CRDR-HP-C3108-0280 Cr85	2.800	0.1102	3	32	81	48	Cr85	2
75101305	CRDR-HP-C3108-0290 Cr85	2.900	0.1142	3	32	81	48	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.0394-0.1142 in
 1.00-2.90 mm

 Bore tolerance IT9 (achievable)
 Shank form Cyl. (DIN 6535)
 Number of flutes 2
 Number of margins 1
 Point geometry Special point
 Point angle 140°
 Helix angle 10 to 20 (depends on diameter)
 Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101310	CRDR-HP-C3112-0100 Cr85	1.000	0.0394	3	15	55	28	Cr85	2
75101315	CRDR-HP-C3112-0110 Cr85	1.100	0.0433	3	23	55	28	Cr85	2
75101320	CRDR-HP-C3112-0120 Cr85	1.200	0.0472	3	23	55	29	Cr85	2
75101325	CRDR-HP-C3112-0130 Cr85	1.300	0.0512	3	23	55	29	Cr85	2
75101330	CRDR-HP-C3112-0140 Cr85	1.400	0.0551	3	23	55	29	Cr85	2
75101335	CRDR-HP-C3112-0150 Cr85	1.500	0.0591	3	23	55	29	Cr85	2
75101340	CRDR-HP-C3112-0160 Cr85	1.600	1/16	3	30	68	35	Cr85	2
75101345	CRDR-HP-C3112-0170 Cr85	1.700	0.0669	3	30	68	36	Cr85	2
75101350	CRDR-HP-C3112-0180 Cr85	1.800	0.0709	3	30	68	36	Cr85	2
75101355	CRDR-HP-C3112-0190 Cr85	1.900	0.0748	3	30	68	36	Cr85	2
75101360	CRDR-HP-C3112-0200 Cr85	2.000	0.0787	3	30	68	36	Cr85	2
75101365	CRDR-HP-C3112-0210 Cr85	2.100	0.0827	3	38	74	34	Cr85	2
75101370	CRDR-HP-C3112-0220 Cr85	2.200	0.0866	3	38	74	35	Cr85	2
75101375	CRDR-HP-C3112-0230 Cr85	2.300	0.0906	3	38	74	35	Cr85	2
75101380	CRDR-HP-C3112-0240 Cr85	2.400	3/32	3	38	74	35	Cr85	2
75101385	CRDR-HP-C3112-0250 Cr85	2.500	0.0984	3	38	74	35	Cr85	2
75101390	CRDR-HP-C3112-0260 Cr85	2.600	0.1024	3	44	81	36	Cr85	2
75101395	CRDR-HP-C3112-0270 Cr85	2.700	0.1063	3	44	81	36	Cr85	2
75101400	CRDR-HP-C3112-0280 Cr85	2.800	0.1102	3	44	81	36	Cr85	2
75101405	CRDR-HP-C3112-0290 Cr85	2.900	0.1142	3	44	81	36	Cr85	2

MINIATURE-C3000		Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm ²)		Product model description						Recommended feed (f) for diameter ranges						
				C3105 (5 x d)			C3108 (8 x d)			C3112 (12 x d)			*0.063-0.079 in 1.6 to 2.0mm mm/rev		*0.083-0.118 in 2.1 to 2.9 mm mm/rev	
				SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR
Work Material	HRC	BHN	N/mm ²	98-295	30-90	98-295	30-90	98-295	30-90	.0016-.0028	.0016-.0028	.0016-.0028	.0016-.0028	.0024-.0035	0.06-0.09	
				98-262	30-80	98-262	30-80	98-262	30-80	.0016-.0028	.0016-.0028	.0016-.0028	.0016-.0028	.0020-.0035	0.05-0.09	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	98-197	30-60	98-197	30-60	98-197	30-60	.0012-.0020	.0012-.0020	.0012-.0020	.0012-.0020	.0016-.0031	0.04-0.08	
				98-180	30-55	98-180	30-55	98-180	30-55	.0012-.0020	.0012-.0020	.0012-.0020	.0012-.0020	.0016-.0031	0.04-0.08	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	66-131	20-40	66-131	20-40	66-131	20-40	.0008-.0016	.0008-.0016	.0008-.0016	.0008-.0016	.0016-.0028	0.04-0.07	
				66-131	20-40	66-131	20-40	66-131	20-40	.0008-.0016	.0008-.0016	.0008-.0016	.0008-.0016	.0016-.0028	0.04-0.07	
Stainless steel moderate 17-4PH, 15-5PH, 316L				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				98-328	30-100	98-328	30-100	98-328	30-100	.0016-.0028	.0016-.0028	.0016-.0028	.0016-.0028	.0020-.0039	0.05-0.10	
				98-295	30-90	98-295	30-90	98-295	30-90	.0016-.0028	.0016-.0028	.0016-.0028	.0016-.0028	.0020-.0039	0.05-0.10	
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	98-262	30-80	98-262	30-80	98-262	30-80	.0012-.0020	.0012-.0020	.0012-.0020	.0012-.0020	.0020-.0035	0.06-0.09	
				98-262	30-80	98-262	30-80	98-262	30-80	.0012-.0020	.0012-.0020	.0012-.0020	.0012-.0020	.0020-.0035	0.06-0.09	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	98-820	30-250	98-820	30-250	98-820	30-250	.0016-.0031	.0016-.0031	.0016-.0031	.0016-.0031	.0020-.0035	0.05-0.09	
				98-820	30-250	98-820	30-250	98-820	30-250	.0016-.0031	.0016-.0031	.0016-.0031	.0016-.0031	.0020-.0035	0.05-0.09	
Aluminum (Si content >10%) 6061, 2025, 208, 360				98-820	30-250	98-820	30-250	98-820	30-250	.0012-.0024	.0012-.0024	.0012-.0024	.0012-.0024	.0020-.0047	0.05-0.12	
				98-820	30-250	98-820	30-250	98-820	30-250	.0012-.0024	.0012-.0024	.0012-.0024	.0012-.0024	.0020-.0047	0.05-0.12	
Aluminum (Si content <10%) 413, 385, A390				98-820	30-250	98-820	30-250	98-820	30-250	.0020-.0031	.0020-.0031	.0020-.0031	.0020-.0031	.0024-.0059	0.06-0.15	
				98-820	30-250	98-820	30-250	98-820	30-250	.0020-.0031	.0020-.0031	.0020-.0031	.0020-.0031	.0024-.0059	0.06-0.15	
Copper, brass, bronze beryllium copper, naval brass, AMPCCO				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
Titanium alloy TiAl4V				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
High temperature alloy Inconel, haynes, waspaloy, hastelloy				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
				66-131	20-40	66-131	20-40	66-131	20-40	.0004-.0012	.0004-.0012	.0004-.0012	.0004-.0012	.0012-.0024	0.03-0.06	
Chilled cast iron	38-48	350-450	1173-1527													
Hardened steel 50-60 HRC	50-55 56-60 61-65															

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.00mm reduce cutting speed by 20-30%

CROMSTEEL

C4000 SERIES

- ⊙ The CROMSTEEL twist drill designed specifically for steel can perform in bore sizes from 3.00 to 25.00 mm
- ⊙ Due to the special design of the cutting edges and the chip flutes, the drills in the CROMSTEEL standard range are adapted and optimised for machining virtually all types of steel
- ⊙ The CROMSTEEL is available with internal coolant supply and has a special Cr85 TiAlN+ (PVD) coating and combined with our specific geometry, these drills offer optimal machining performance



Work Material	Hardness Rockwell (HRc) -Hardness Brinnel (BHN) Tensile Strength (N/mm2)			C4100
	HRc	BHN	N/mm2	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 - over 15	up to 178 up to 205 - over 205	up to 600 up to 700 - over 700	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 - over 31	up to 266 up to 297 - over 297	up to 900 up to 1000 - over 1000	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				
Aluminum (Si content >10%) 6061, 2025, 208, 360				
Aluminum (Si content <10%) 413, 385, A390				
Copper, brass, bronze beryllium copper, naval brass, AMPCO				
Chilled cast iron	38-48	350-450	1173-1527	
Hardened steel 50-60 HRc	50-55 56-60 61-65		1614-1870	



Highly recommended



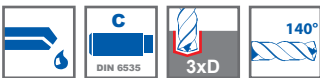
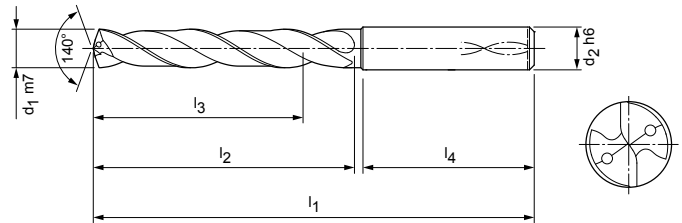
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

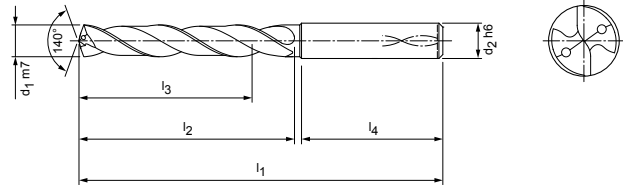
Tool Diameter Range 0.1102-0.9843 in
2.80-25.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101410	CRDR-HP-C4103-0280 Cr85	2.800	0.1102	6	20	62	36	Cr85	2
75101415	CRDR-HP-C4103-0300 Cr85	3.000	0.1181	6	20	62	36	Cr85	2
75101420	CRDR-HP-C4103-0310 Cr85	3.100	0.1220	6	20	62	36	Cr85	2
75101423	CRDR-HP-C4103-0318 Cr85	3.180	1/8	6	20	62	36	Cr85	2
75101425	CRDR-HP-C4103-0320 Cr85	3.200	0.1260	6	20	62	36	Cr85	2
75101430	CRDR-HP-C4103-0330 Cr85	3.300	0.1299	6	20	62	36	Cr85	2
75101435	CRDR-HP-C4103-0340 Cr85	3.400	0.1339	6	20	62	36	Cr85	2
75101440	CRDR-HP-C4103-0350 Cr85	3.500	0.1378	6	20	62	36	Cr85	2
75101443	CRDR-HP-C4103-0357 Cr85	3.570	9/64	6	20	62	36	Cr85	2
75101445	CRDR-HP-C4103-0360 Cr85	3.600	0.1417	6	20	62	36	Cr85	2
75101450	CRDR-HP-C4103-0370 Cr85	3.700	0.1457	6	20	62	36	Cr85	2
75101455	CRDR-HP-C4103-0380 Cr85	3.800	0.1496	6	24	66	36	Cr85	2
75101460	CRDR-HP-C4103-0390 Cr85	3.900	0.1535	6	24	66	36	Cr85	2
75101463	CRDR-HP-C4103-0397 Cr85	3.970	5/32	6	24	66	36	Cr85	2
75101465	CRDR-HP-C4103-0400 Cr85	4.000	0.1575	6	24	66	36	Cr85	2
75101470	CRDR-HP-C4103-0410 Cr85	4.100	0.1614	6	24	66	36	Cr85	2
75101475	CRDR-HP-C4103-0420 Cr85	4.200	0.1654	6	24	66	36	Cr85	2
75101480	CRDR-HP-C4103-0430 Cr85	4.300	0.1693	6	24	66	36	Cr85	2
75101483	CRDR-HP-C4103-0437 Cr85	4.370	11/64	6	24	66	36	Cr85	2
75101485	CRDR-HP-C4103-0440 Cr85	4.400	0.1732	6	24	66	36	Cr85	2
75101490	CRDR-HP-C4103-0450 Cr85	4.500	0.1772	6	24	66	36	Cr85	2
75101495	CRDR-HP-C4103-0460 Cr85	4.600	0.1811	6	24	66	36	Cr85	2
75101500	CRDR-HP-C4103-0465 Cr85	4.650	0.1831	6	24	66	36	Cr85	2
75101505	CRDR-HP-C4103-0470 Cr85	4.700	0.1850	6	24	66	36	Cr85	2
75101508	CRDR-HP-C4103-0476 Cr85	4.760	3/16	6	24	66	36	Cr85	2
75101510	CRDR-HP-C4103-0480 Cr85	4.800	0.1890	6	28	66	36	Cr85	2
75101515	CRDR-HP-C4103-0490 Cr85	4.900	0.1929	6	28	66	36	Cr85	2
75101520	CRDR-HP-C4103-0500 Cr85	5.000	0.1969	6	28	66	36	Cr85	2
75101525	CRDR-HP-C4103-0510 Cr85	5.100	0.2008	6	28	66	36	Cr85	2
75101528	CRDR-HP-C4103-0516 Cr85	5.160	13/64	6	28	66	36	Cr85	2
75101530	CRDR-HP-C4103-0520 Cr85	5.200	0.2047	6	28	66	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101535	CRDR-HP-C4103-0530 Cr85	5.300	0.2087	6	28	66	36	Cr85	2
75101540	CRDR-HP-C4103-0540 Cr85	5.400	0.2126	6	28	66	36	Cr85	2
75101545	CRDR-HP-C4103-0550 Cr85	5.500	0.2165	6	28	66	36	Cr85	2
75101550	CRDR-HP-C4103-0555 Cr85	5.550	0.2185	6	28	66	36	Cr85	2
75101553	CRDR-HP-C4103-0556 Cr85	5.560	7/32	6	28	66	36	Cr85	2
75101555	CRDR-HP-C4103-0560 Cr85	5.600	0.2205	6	28	66	36	Cr85	2
75101560	CRDR-HP-C4103-0570 Cr85	5.700	0.2244	6	28	66	36	Cr85	2
75101565	CRDR-HP-C4103-0580 Cr85	5.800	0.2283	6	28	66	36	Cr85	2
75101570	CRDR-HP-C4103-0590 Cr85	5.900	0.2323	6	28	66	36	Cr85	2
75101573	CRDR-HP-C4103-0595 Cr85	5.950	15/64	6	28	66	36	Cr85	2
75101575	CRDR-HP-C4103-0600 Cr85	6.000	0.2362	6	28	66	36	Cr85	2
75101580	CRDR-HP-C4103-0610 Cr85	6.100	0.2402	8	34	79	36	Cr85	2
75101585	CRDR-HP-C4103-0620 Cr85	6.200	0.2441	8	34	79	36	Cr85	2
75101590	CRDR-HP-C4103-0630 Cr85	6.300	0.2480	8	34	79	36	Cr85	2
75101593	CRDR-HP-C4103-0635 Cr85	6.350	1/4	8	34	79	36	Cr85	2
75101595	CRDR-HP-C4103-0640 Cr85	6.400	0.2520	8	34	79	36	Cr85	2
75101600	CRDR-HP-C4103-0650 Cr85	6.500	0.2559	8	34	79	36	Cr85	2
75101605	CRDR-HP-C4103-0660 Cr85	6.600	0.2598	8	34	79	36	Cr85	2
75101610	CRDR-HP-C4103-0670 Cr85	6.700	0.2638	8	34	79	36	Cr85	2
75101613	CRDR-HP-C4103-0675 Cr85	6.750	17/64	8	34	79	36	Cr85	2
75101615	CRDR-HP-C4103-0680 Cr85	6.800	0.2677	8	34	79	36	Cr85	2
75101620	CRDR-HP-C4103-0690 Cr85	6.900	0.2717	8	34	79	36	Cr85	2
75101625	CRDR-HP-C4103-0700 Cr85	7.000	0.2756	8	34	79	36	Cr85	2
75101630	CRDR-HP-C4103-0710 Cr85	7.100	0.2795	8	41	79	36	Cr85	2
75101633	CRDR-HP-C4103-0714 Cr85	7.140	9/32	8	41	79	36	Cr85	2
75101635	CRDR-HP-C4103-0720 Cr85	7.200	0.2835	8	41	79	36	Cr85	2
75101640	CRDR-HP-C4103-0730 Cr85	7.300	0.2874	8	41	79	36	Cr85	2
75101645	CRDR-HP-C4103-0740 Cr85	7.400	0.2913	8	41	79	36	Cr85	2
75101650	CRDR-HP-C4103-0745 Cr85	7.450	0.2933	8	41	79	36	Cr85	2
75101655	CRDR-HP-C4103-0750 Cr85	7.500	0.2953	8	41	79	36	Cr85	2
75101658	CRDR-HP-C4103-0754 Cr85	7.540	19/64	8	41	79	36	Cr85	2
75101660	CRDR-HP-C4103-0760 Cr85	7.600	0.2992	8	41	79	36	Cr85	2
75101665	CRDR-HP-C4103-0770 Cr85	7.700	0.3031	8	41	79	36	Cr85	2
75101670	CRDR-HP-C4103-0780 Cr85	7.800	0.3071	8	41	79	36	Cr85	2
75101675	CRDR-HP-C4103-0790 Cr85	7.900	0.3110	8	41	79	36	Cr85	2
75101678	CRDR-HP-C4103-0794 Cr85	7.940	5/16	8	41	79	36	Cr85	2
75101680	CRDR-HP-C4103-0800 Cr85	8.000	0.3150	8	41	79	36	Cr85	2
75101685	CRDR-HP-C4103-0810 Cr85	8.100	0.3189	10	47	89	40	Cr85	2
75101690	CRDR-HP-C4103-0820 Cr85	8.200	0.3228	10	47	89	40	Cr85	2
75101695	CRDR-HP-C4103-0830 Cr85	8.300	0.3268	10	47	89	40	Cr85	2
75101698	CRDR-HP-C4103-0833 Cr85	8.330	21/64	10	47	89	40	Cr85	2
75101700	CRDR-HP-C4103-0840 Cr85	8.400	0.3307	10	47	89	40	Cr85	2
75101705	CRDR-HP-C4103-0850 Cr85	8.500	0.3346	10	47	89	40	Cr85	2
75101710	CRDR-HP-C4103-0860 Cr85	8.600	0.3386	10	47	89	40	Cr85	2
75101715	CRDR-HP-C4103-0870 Cr85	8.700	0.3425	10	47	89	40	Cr85	2
75101718	CRDR-HP-C4103-0873 Cr85	8.730	11/32	10	47	89	40	Cr85	2
75101720	CRDR-HP-C4103-0880 Cr85	8.800	0.3465	10	47	89	40	Cr85	2
75101725	CRDR-HP-C4103-0890 Cr85	8.900	0.3504	10	47	89	40	Cr85	2
75101730	CRDR-HP-C4103-0900 Cr85	9.000	0.3543	10	47	89	40	Cr85	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101735	CRDR-HP-C4103-0910 Cr85	9.100	0.3583	10	47	89	40	Cr85	2
75101738	CRDR-HP-C4103-0913 Cr85	9.130	23/64	10	47	89	40	Cr85	2
75101740	CRDR-HP-C4103-0920 Cr85	9.200	0.3622	10	47	89	40	Cr85	2
75101745	CRDR-HP-C4103-0930 Cr85	9.300	0.3661	10	47	89	40	Cr85	2
75101750	CRDR-HP-C4103-0940 Cr85	9.400	0.3701	10	47	89	40	Cr85	2
75101755	CRDR-HP-C4103-0950 Cr85	9.500	0.3740	10	47	89	40	Cr85	2
75101758	CRDR-HP-C4103-0953 Cr85	9.530	3/8	10	47	89	40	Cr85	2
75101760	CRDR-HP-C4103-0960 Cr85	9.600	0.3780	10	47	89	40	Cr85	2
75101765	CRDR-HP-C4103-0970 Cr85	9.700	0.3819	10	47	89	40	Cr85	2
75101770	CRDR-HP-C4103-0980 Cr85	9.800	0.3858	10	47	89	40	Cr85	2
75101775	CRDR-HP-C4103-0990 Cr85	9.900	0.3898	10	47	89	40	Cr85	2
75101778	CRDR-HP-C4103-0992 Cr85	9.920	25/64	10	47	89	40	Cr85	2
75101780	CRDR-HP-C4103-1000 Cr85	10.000	0.3937	10	47	89	40	Cr85	2
75101785	CRDR-HP-C4103-1010 Cr85	10.100	0.3976	12	55	102	45	Cr85	2
75101790	CRDR-HP-C4103-1020 Cr85	10.200	0.4016	12	55	102	45	Cr85	2
75101795	CRDR-HP-C4103-1030 Cr85	10.300	0.4055	12	55	102	45	Cr85	2
75101798	CRDR-HP-C4103-1032 Cr85	10.320	13/32	12	55	102	45	Cr85	2
75101800	CRDR-HP-C4103-1040 Cr85	10.400	0.4094	12	55	102	45	Cr85	2
75101805	CRDR-HP-C4103-1050 Cr85	10.500	0.4134	12	55	102	45	Cr85	2
75101810	CRDR-HP-C4103-1060 Cr85	10.600	0.4173	12	55	102	45	Cr85	2
75101815	CRDR-HP-C4103-1070 Cr85	10.700	0.4213	12	55	102	45	Cr85	2
75101818	CRDR-HP-C4103-1072 Cr85	10.720	27/64	12	55	102	45	Cr85	2
75101820	CRDR-HP-C4103-1080 Cr85	10.800	0.4252	12	55	102	45	Cr85	2
75101825	CRDR-HP-C4103-1090 Cr85	10.900	0.4291	12	55	102	45	Cr85	2
75101830	CRDR-HP-C4103-1100 Cr85	11.000	0.4331	12	55	102	45	Cr85	2
75101835	CRDR-HP-C4103-1110 Cr85	11.100	0.4370	12	55	102	45	Cr85	2
75101838	CRDR-HP-C4103-1111 Cr85	11.110	7/16	12	55	102	45	Cr85	2
75101840	CRDR-HP-C4103-1120 Cr85	11.200	0.4409	12	55	102	45	Cr85	2
75101845	CRDR-HP-C4103-1130 Cr85	11.300	0.4449	12	55	102	45	Cr85	2
75101850	CRDR-HP-C4103-1140 Cr85	11.400	0.4488	12	55	102	45	Cr85	2
75101855	CRDR-HP-C4103-1150 Cr85	11.500	0.4528	12	55	102	45	Cr85	2
75101860	CRDR-HP-C4103-1160 Cr85	11.600	0.4567	12	55	102	45	Cr85	2
75101865	CRDR-HP-C4103-1170 Cr85	11.700	0.4606	12	55	102	45	Cr85	2
75101870	CRDR-HP-C4103-1180 Cr85	11.800	0.4646	12	55	102	45	Cr85	2
75101875	CRDR-HP-C4103-1190 Cr85	11.900	0.4685	12	55	102	45	Cr85	2
75101880	CRDR-HP-C4103-1200 Cr85	12.000	0.4724	12	55	102	45	Cr85	2
75101885	CRDR-HP-C4103-1250 Cr85	12.500	0.4921	14	60	107	45	Cr85	2
75101890	CRDR-HP-C4103-1280 Cr85	12.800	0.5039	14	60	107	45	Cr85	2
75101895	CRDR-HP-C4103-1300 Cr85	13.000	0.5118	14	60	107	45	Cr85	2
75101900	CRDR-HP-C4103-1350 Cr85	13.500	0.5315	14	60	107	45	Cr85	2
75101905	CRDR-HP-C4103-1380 Cr85	13.800	0.5433	14	60	107	45	Cr85	2
75101910	CRDR-HP-C4103-1400 Cr85	14.000	0.5512	14	60	107	45	Cr85	2
75101915	CRDR-HP-C4103-1450 Cr85	14.500	0.5709	16	65	115	48	Cr85	2
75101918	CRDR-HP-C4103-1468 Cr85	14.680	37/64	16	65	115	48	Cr85	2

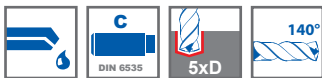
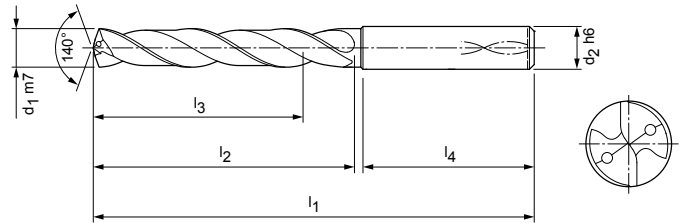
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75101920	CRDR-HP-C4103-1480 Cr85	14.800	0.5827	16	65	115	48	Cr85	2
75101925	CRDR-HP-C4103-1500 Cr85	15.000	0.5906	16	65	115	48	Cr85	2
75101928	CRDR-HP-C4103-1508 Cr85	15.080	19/32	16	65	115	48	Cr85	2
75101930	CRDR-HP-C4103-1550 Cr85	15.500	0.6102	16	65	115	48	Cr85	2
75101935	CRDR-HP-C4103-1580 Cr85	15.800	0.6220	16	65	115	48	Cr85	2
75101938	CRDR-HP-C4103-1588 Cr85	15.880	5/8	16	65	115	48	Cr85	2
75101940	CRDR-HP-C4103-1600 Cr85	16.000	0.6299	16	65	115	48	Cr85	2
75101945	CRDR-HP-C4103-1650 Cr85	16.500	0.6496	18	73	123	48	Cr85	2
75101948	CRDR-HP-C4103-1667 Cr85	16.670	21/32	18	73	123	48	Cr85	2
75101950	CRDR-HP-C4103-1680 Cr85	16.800	0.6614	18	73	123	48	Cr85	2
75101955	CRDR-HP-C4103-1700 Cr85	17.000	0.6693	18	73	123	48	Cr85	2
75101958	CRDR-HP-C4103-1746 Cr85	17.460	11/16	18	73	123	48	Cr85	2
75101960	CRDR-HP-C4103-1750 Cr85	17.500	0.6890	18	73	123	48	Cr85	2
75101965	CRDR-HP-C4103-1780 Cr85	17.800	0.7008	18	73	123	48	Cr85	2
75101968	CRDR-HP-C4103-1786 Cr85	17.860	45/64	18	73	123	48	Cr85	2
75101970	CRDR-HP-C4103-1800 Cr85	18.000	0.7087	18	73	123	48	Cr85	2
75101973	CRDR-HP-C4103-1826 Cr85	18.260	23/32	20	79	131	50	Cr85	2
75101975	CRDR-HP-C4103-1850 Cr85	18.500	0.7283	20	79	131	50	Cr85	2
75101980	CRDR-HP-C4103-1880 Cr85	18.800	0.7402	20	79	131	50	Cr85	2
75101985	CRDR-HP-C4103-1900 Cr85	19.000	0.7480	20	79	131	50	Cr85	2
75101988	CRDR-HP-C4103-1905 Cr85	19.050	3/4	20	79	131	50	Cr85	2
75101990	CRDR-HP-C4103-1950 Cr85	19.500	0.7677	20	79	131	50	Cr85	2
75101995	CRDR-HP-C4103-1980 Cr85	19.800	0.7795	20	79	131	50	Cr85	2
75102000	CRDR-HP-C4103-2000 Cr85	20.000	0.7874	20	79	131	50	Cr85	2
75102005	CRDR-HP-C4103-2050 Cr85	20.500	0.8071	25	93	151	56	Cr85	2
75102010	CRDR-HP-C4103-2100 Cr85	21.000	0.8268	25	93	151	56	Cr85	2
75102015	CRDR-HP-C4103-2150 Cr85	21.500	0.8465	25	93	151	56	Cr85	2
75102020	CRDR-HP-C4103-2200 Cr85	22.000	0.8661	25	93	151	56	Cr85	2
75102025	CRDR-HP-C4103-2300 Cr85	23.000	0.9055	25	96	153	56	Cr85	2
75102030	CRDR-HP-C4103-2350 Cr85	23.500	0.9252	25	96	153	56	Cr85	2
75102035	CRDR-HP-C4103-2400 Cr85	24.000	0.9449	25	96	153	56	Cr85	2
75102040	CRDR-HP-C4103-2500 Cr85	25.000	0.9843	25	96	153	56	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

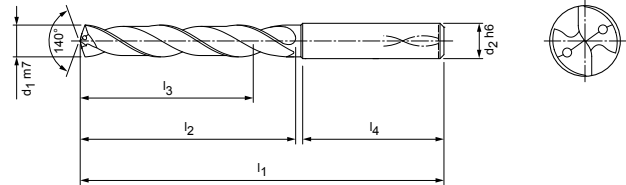
Tool Diameter Range 0.1102-0.9843 in
2.80-25.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102045	CRDR-HP-C4105-0280 Cr85	2.800	0.1102	6	28	66	36	Cr85	2
75102050	CRDR-HP-C4105-0300 Cr85	3.000	0.1181	6	28	66	36	Cr85	2
75102055	CRDR-HP-C4105-0310 Cr85	3.100	0.1220	6	28	66	36	Cr85	2
75102058	CRDR-HP-C4105-0318 Cr85	3.180	1/8	6	28	66	36	Cr85	2
75102060	CRDR-HP-C4105-0320 Cr85	3.200	0.1260	6	28	66	36	Cr85	2
75102065	CRDR-HP-C4105-0330 Cr85	3.300	0.1299	6	28	66	36	Cr85	2
75102070	CRDR-HP-C4105-0340 Cr85	3.400	0.1339	6	28	66	36	Cr85	2
75102075	CRDR-HP-C4105-0350 Cr85	3.500	0.1378	6	28	66	36	Cr85	2
75102078	CRDR-HP-C4105-0357 Cr85	3.570	9/64	6	28	66	36	Cr85	2
75102080	CRDR-HP-C4105-0360 Cr85	3.600	0.1417	6	28	66	36	Cr85	2
75102085	CRDR-HP-C4105-0370 Cr85	3.700	0.1457	6	28	66	36	Cr85	2
75102090	CRDR-HP-C4105-0380 Cr85	3.800	0.1496	6	36	74	36	Cr85	2
75102095	CRDR-HP-C4105-0390 Cr85	3.900	0.1535	6	36	74	36	Cr85	2
75102098	CRDR-HP-C4105-0397 Cr85	3.970	5/32	6	36	74	36	Cr85	2
75102100	CRDR-HP-C4105-0400 Cr85	4.000	0.1575	6	36	74	36	Cr85	2
75102105	CRDR-HP-C4105-0410 Cr85	4.100	0.1614	6	36	74	36	Cr85	2
75102110	CRDR-HP-C4105-0420 Cr85	4.200	0.1654	6	36	74	36	Cr85	2
75102115	CRDR-HP-C4105-0430 Cr85	4.300	0.1693	6	36	74	36	Cr85	2
75102118	CRDR-HP-C4105-0437 Cr85	4.370	11/64	6	36	74	36	Cr85	2
75102120	CRDR-HP-C4105-0440 Cr85	4.400	0.1732	6	36	74	36	Cr85	2
75102125	CRDR-HP-C4105-0450 Cr85	4.500	0.1772	6	36	74	36	Cr85	2
75102130	CRDR-HP-C4105-0460 Cr85	4.600	0.1811	6	36	74	36	Cr85	2
75102135	CRDR-HP-C4105-0465 Cr85	4.650	0.1831	6	36	74	36	Cr85	2
75102140	CRDR-HP-C4105-0470 Cr85	4.700	0.1850	6	36	74	36	Cr85	2
75102143	CRDR-HP-C4105-0476 Cr85	4.760	3/16	6	44	82	36	Cr85	2
75102145	CRDR-HP-C4105-0480 Cr85	4.800	0.1890	6	44	82	36	Cr85	2
75102150	CRDR-HP-C4105-0490 Cr85	4.900	0.1929	6	44	82	36	Cr85	2
75102155	CRDR-HP-C4105-0500 Cr85	5.000	0.1969	6	44	82	36	Cr85	2
75102158	CRDR-HP-C4105-0516 Cr85	5.160	13/64	6	44	82	36	Cr85	2
75102160	CRDR-HP-C4105-0510 Cr85	5.100	0.2031	6	44	82	36	Cr85	2
75102165	CRDR-HP-C4105-0520 Cr85	5.200	0.2047	6	44	82	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102170	CRDR-HP-C4105-0530 Cr85	5.300	0.2087	6	44	82	36	Cr85	2
75102175	CRDR-HP-C4105-0540 Cr85	5.400	0.2126	6	44	82	36	Cr85	2
75102180	CRDR-HP-C4105-0550 Cr85	5.500	0.2165	6	44	82	36	Cr85	2
75102185	CRDR-HP-C4105-0555 Cr85	5.550	0.2185	6	44	82	36	Cr85	2
75102188	CRDR-HP-C4105-0556 Cr85	5.560	7/32	6	44	82	36	Cr85	2
75102190	CRDR-HP-C4105-0560 Cr85	5.600	0.2205	6	44	82	36	Cr85	2
75102195	CRDR-HP-C4105-0570 Cr85	5.700	0.2244	6	44	82	36	Cr85	2
75102200	CRDR-HP-C4105-0580 Cr85	5.800	0.2283	6	44	82	36	Cr85	2
75102205	CRDR-HP-C4105-0590 Cr85	5.900	0.2323	6	44	82	36	Cr85	2
75102208	CRDR-HP-C4105-0595 Cr85	5.950	15/64	6	44	82	36	Cr85	2
75102210	CRDR-HP-C4105-0600 Cr85	6.000	0.2362	6	44	82	36	Cr85	2
75102215	CRDR-HP-C4105-0610 Cr85	6.100	0.2402	8	53	91	36	Cr85	2
75102220	CRDR-HP-C4105-0620 Cr85	6.200	0.2441	8	53	91	36	Cr85	2
75102225	CRDR-HP-C4105-0630 Cr85	6.300	0.2480	8	53	91	36	Cr85	2
75102228	CRDR-HP-C4105-0635 Cr85	6.350	1/4	8	53	91	36	Cr85	2
75102230	CRDR-HP-C4105-0640 Cr85	6.400	0.2520	8	53	91	36	Cr85	2
75102235	CRDR-HP-C4105-0650 Cr85	6.500	0.2559	8	53	91	36	Cr85	2
75102240	CRDR-HP-C4105-0660 Cr85	6.600	0.2598	8	53	91	36	Cr85	2
75102245	CRDR-HP-C4105-0670 Cr85	6.700	0.2638	8	53	91	36	Cr85	2
75102248	CRDR-HP-C4105-0675 Cr85	6.750	17/64	8	53	91	36	Cr85	2
75102250	CRDR-HP-C4105-0680 Cr85	6.800	0.2677	8	53	91	36	Cr85	2
75102255	CRDR-HP-C4105-0690 Cr85	6.900	0.2717	8	53	91	36	Cr85	2
75102260	CRDR-HP-C4105-0700 Cr85	7.000	0.2756	8	53	91	36	Cr85	2
75102265	CRDR-HP-C4105-0710 Cr85	7.100	0.2795	8	53	91	36	Cr85	2
75102268	CRDR-HP-C4105-0714 Cr85	7.140	9/32	8	53	91	36	Cr85	2
75102270	CRDR-HP-C4105-0720 Cr85	7.200	0.2835	8	53	91	36	Cr85	2
75102275	CRDR-HP-C4105-0730 Cr85	7.300	0.2874	8	53	91	36	Cr85	2
75102280	CRDR-HP-C4105-0740 Cr85	7.400	0.2913	8	53	91	36	Cr85	2
75102285	CRDR-HP-C4105-0745 Cr85	7.450	0.2933	8	53	91	36	Cr85	2
75102290	CRDR-HP-C4105-0750 Cr85	7.500	0.2953	8	53	91	36	Cr85	2
75102293	CRDR-HP-C4105-0754 Cr86	7.540	19/64	8	53	91	36	Cr85	2
75102295	CRDR-HP-C4105-0760 Cr85	7.600	0.2992	8	53	91	36	Cr85	2
75102300	CRDR-HP-C4105-0770 Cr85	7.700	0.3031	8	53	91	36	Cr85	2
75102305	CRDR-HP-C4105-0780 Cr85	7.800	0.3071	8	53	91	36	Cr85	2
75102310	CRDR-HP-C4105-0790 Cr85	7.900	0.3110	8	53	91	36	Cr85	2
75102313	CRDR-HP-C4105-0794 Cr86	7.940	5/16	8	53	91	36	Cr85	2
75102315	CRDR-HP-C4105-0800 Cr85	8.000	0.3150	8	53	91	36	Cr85	2
75102320	CRDR-HP-C4105-0810 Cr85	8.100	0.3189	10	61	103	40	Cr85	2
75102325	CRDR-HP-C4105-0820 Cr85	8.200	0.3228	10	61	103	40	Cr85	2
75102330	CRDR-HP-C4105-0830 Cr85	8.300	0.3268	10	61	103	40	Cr85	2
75102333	CRDR-HP-C4105-0833 Cr85	8.330	21/64	10	61	103	40	Cr85	2
75102335	CRDR-HP-C4105-0840 Cr85	8.400	0.3307	10	61	103	40	Cr85	2
75102340	CRDR-HP-C4105-0850 Cr85	8.500	0.3346	10	61	103	40	Cr85	2
75102345	CRDR-HP-C4105-0860 Cr85	8.600	0.3386	10	61	103	40	Cr85	2
75102350	CRDR-HP-C4105-0870 Cr85	8.700	0.3425	10	61	103	40	Cr85	2
75102353	CRDR-HP-C4105-0873 Cr85	8.730	11/32	10	61	103	40	Cr85	2
75102355	CRDR-HP-C4105-0880 Cr85	8.800	0.3465	10	61	103	40	Cr85	2
75102360	CRDR-HP-C4105-0890 Cr85	8.900	0.3504	10	61	103	40	Cr85	2
75102365	CRDR-HP-C4105-0900 Cr85	9.000	0.3543	10	61	103	40	Cr85	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102370	CRDR-HP-C4105-0910 Cr85	9.100	0.3583	10	61	103	40	Cr85	2
75102373	CRDR-HP-C4105-0913 Cr85	9.130	23/64	10	61	103	40	Cr85	2
75102375	CRDR-HP-C4105-0920 Cr85	9.200	0.3622	10	61	103	40	Cr85	2
75102380	CRDR-HP-C4105-0930 Cr85	9.300	0.3661	10	61	103	40	Cr85	2
75102385	CRDR-HP-C4105-0940 Cr85	9.400	0.3701	10	61	103	40	Cr85	2
75102390	CRDR-HP-C4105-0950 Cr85	9.500	0.3740	10	61	103	40	Cr85	2
75102393	CRDR-HP-C4105-0953 Cr85	9.530	3/8	10	61	103	40	Cr85	2
75102395	CRDR-HP-C4105-0960 Cr85	9.600	0.3780	10	61	103	40	Cr85	2
75102400	CRDR-HP-C4105-0970 Cr85	9.700	0.3819	10	61	103	40	Cr85	2
75102405	CRDR-HP-C4105-0980 Cr85	9.800	0.3858	10	61	103	40	Cr85	2
75102410	CRDR-HP-C4105-0990 Cr85	9.900	0.3898	10	61	103	40	Cr85	2
75102413	CRDR-HP-C4105-0992 Cr85	9.920	25/64	10	61	103	40	Cr85	2
75102415	CRDR-HP-C4105-1000 Cr85	10.000	0.3937	10	61	103	40	Cr85	2
75102420	CRDR-HP-C4105-1010 Cr85	10.100	0.3976	12	71	118	45	Cr85	2
75102425	CRDR-HP-C4105-1020 Cr85	10.200	0.4016	12	71	118	45	Cr85	2
75102430	CRDR-HP-C4105-1030 Cr85	10.300	0.4055	12	71	118	45	Cr85	2
75102433	CRDR-HP-C4105-1032 Cr85	10.320	13/32	12	71	118	45	Cr85	2
75102435	CRDR-HP-C4105-1040 Cr85	10.400	0.4094	12	71	118	45	Cr85	2
75102440	CRDR-HP-C4105-1050 Cr85	10.500	0.4134	12	71	118	45	Cr85	2
75102445	CRDR-HP-C4105-1060 Cr85	10.600	0.4173	12	71	118	45	Cr85	2
75102450	CRDR-HP-C4105-1070 Cr85	10.700	0.4213	12	71	118	45	Cr85	2
75102453	CRDR-HP-C4105-1072 Cr85	10.720	27/64	12	71	118	45	Cr85	2
75102455	CRDR-HP-C4105-1080 Cr85	10.800	0.4252	12	71	118	45	Cr85	2
75102460	CRDR-HP-C4105-1090 Cr85	10.900	0.4291	12	71	118	45	Cr85	2
75102465	CRDR-HP-C4105-1100 Cr85	11.000	0.4331	12	71	118	45	Cr85	2
75102470	CRDR-HP-C4105-1110 Cr85	11.100	0.4370	12	71	118	45	Cr85	2
75102473	CRDR-HP-C4105-1111 Cr85	11.110	7/16	12	71	118	45	Cr85	2
75102475	CRDR-HP-C4105-1120 Cr85	11.200	0.4409	12	71	118	45	Cr85	2
75102480	CRDR-HP-C4105-1130 Cr85	11.300	0.4449	12	71	118	45	Cr85	2
75102485	CRDR-HP-C4105-1140 Cr85	11.400	0.4488	12	71	118	45	Cr85	2
75102490	CRDR-HP-C4105-1150 Cr85	11.500	0.4528	12	71	118	45	Cr85	2
75102495	CRDR-HP-C4105-1160 Cr85	11.600	0.4567	12	71	118	45	Cr85	2
75102500	CRDR-HP-C4105-1170 Cr85	11.700	0.4606	12	71	118	45	Cr85	2
75102505	CRDR-HP-C4105-1180 Cr85	11.800	0.4646	12	71	118	45	Cr85	2
75102510	CRDR-HP-C4105-1190 Cr85	11.900	0.4685	12	71	118	45	Cr85	2
75102515	CRDR-HP-C4105-1200 Cr85	12.000	0.4724	12	71	118	45	Cr85	2
75102520	CRDR-HP-C4105-1250 Cr85	12.500	0.4921	14	77	124	45	Cr85	2
75102525	CRDR-HP-C4105-1280 Cr85	12.800	0.5039	14	77	124	45	Cr85	2
75102530	CRDR-HP-C4105-1300 Cr85	13.000	0.5118	14	77	124	45	Cr85	2
75102535	CRDR-HP-C4105-1350 Cr85	13.500	0.5315	14	77	124	45	Cr85	2
75102540	CRDR-HP-C4105-1380 Cr85	13.800	0.5433	14	77	124	45	Cr85	2
75102545	CRDR-HP-C4105-1400 Cr85	14.000	0.5512	14	77	124	45	Cr85	2
75102550	CRDR-HP-C4105-1450 Cr85	14.500	0.5709	16	83	133	48	Cr85	2
75102553	CRDR-HP-C4105-1468 Cr85	14.680	37/64	16	83	133	48	Cr85	2

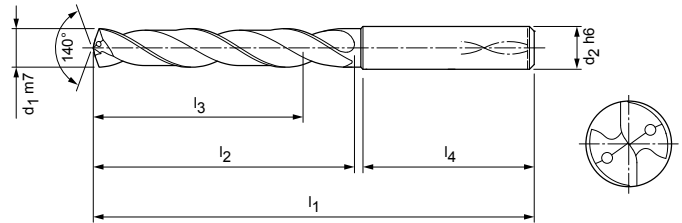
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102555	CRDR-HP-C4105-1480 Cr85	14.800	0.5827	16	83	133	48	Cr85	2
75102560	CRDR-HP-C4105-1500 Cr85	15.000	0.5906	16	83	133	48	Cr85	2
75102563	CRDR-HP-C4105-1508 Cr85	15.080	19/32	16	83	133	48	Cr85	2
75102565	CRDR-HP-C4105-1550 Cr85	15.500	0.6102	16	83	133	48	Cr85	2
75102570	CRDR-HP-C4105-1580 Cr85	15.800	0.6220	16	83	133	48	Cr85	2
75102573	CRDR-HP-C4105-1588 Cr85	15.880	5/8	16	83	133	48	Cr85	2
75102575	CRDR-HP-C4105-1600 Cr85	16.000	0.6299	16	83	133	48	Cr85	2
75102580	CRDR-HP-C4105-1650 Cr85	16.500	0.6496	18	93	143	48	Cr85	2
75102583	CRDR-HP-C4105-1667 Cr85	16.670	21/32	18	93	143	48	Cr85	2
75102585	CRDR-HP-C4105-1680 Cr85	16.800	0.6614	18	93	143	48	Cr85	2
75102590	CRDR-HP-C4105-1700 Cr85	17.000	0.6693	18	93	143	48	Cr85	2
75102593	CRDR-HP-C4105-1746 Cr85	17.460	11/16	18	93	143	48	Cr85	2
75102595	CRDR-HP-C4105-1750 Cr85	17.500	0.6890	18	93	143	48	Cr85	2
75102600	CRDR-HP-C4105-1780 Cr85	17.800	0.7008	18	93	143	48	Cr85	2
75102603	CRDR-HP-C4105-1786 Cr85	17.860	45/64	18	93	143	48	Cr85	2
75102605	CRDR-HP-C4105-1800 Cr85	18.000	0.7087	18	93	143	48	Cr85	2
75102608	CRDR-HP-C4105-1826 Cr85	18.260	23/32	20	101	153	50	Cr85	2
75102610	CRDR-HP-C4105-1850 Cr85	18.500	0.7283	20	101	153	50	Cr85	2
75102615	CRDR-HP-C4105-1880 Cr85	18.800	0.7402	20	101	153	50	Cr85	2
75102620	CRDR-HP-C4105-1900 Cr85	19.000	0.7480	20	101	153	50	Cr85	2
75102623	CRDR-HP-C4105-1905 Cr85	19.050	3/4	20	101	153	50	Cr85	2
75102625	CRDR-HP-C4105-1950 Cr85	19.500	0.7677	20	101	153	50	Cr85	2
75102630	CRDR-HP-C4105-1980 Cr85	19.800	0.7795	20	101	153	50	Cr85	2
75102635	CRDR-HP-C4105-2000 Cr85	20.000	0.7874	20	101	153	50	Cr85	2
75102640	CRDR-HP-C4105-2050 Cr85	20.500	0.8071	25	135	200	56	Cr85	2
75102645	CRDR-HP-C4105-2100 Cr85	21.000	0.8268	25	135	200	56	Cr85	2
75102650	CRDR-HP-C4105-2150 Cr85	21.500	0.8465	25	135	200	56	Cr85	2
75102655	CRDR-HP-C4105-2200 Cr85	22.000	0.8661	25	135	200	56	Cr85	2
75102660	CRDR-HP-C4105-2250 Cr85	22.500	0.8858	25	140	200	56	Cr85	2
75102665	CRDR-HP-C4105-2300 Cr85	23.000	0.9055	25	140	200	56	Cr85	2
75102670	CRDR-HP-C4105-2350 Cr85	23.500	0.9252	25	140	200	56	Cr85	2
75102675	CRDR-HP-C4105-2400 Cr85	24.000	0.9449	25	140	200	56	Cr85	2
75102680	CRDR-HP-C4105-2450 Cr85	24.500	0.9646	25	140	200	56	Cr85	2
75102685	CRDR-HP-C4105-2500 Cr85	25.000	0.9843	25	140	200	56	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

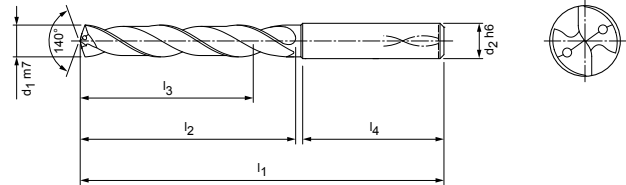
Tool Diameter Range 0.1181-0.9843 in
3.00-25.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102690	CRDR-HP-C4108-0300 Cr85	3.000	0.1181	6	34	72	36	Cr85	2
75102695	CRDR-HP-C4108-0310 Cr85	3.100	0.1220	6	34	72	36	Cr85	2
75102698	CRDR-HP-C4108-0318 Cr85	3.180	1/8	6	34	72	36	Cr85	2
75102700	CRDR-HP-C4108-0320 Cr85	3.200	0.1260	6	34	72	36	Cr85	2
75102705	CRDR-HP-C4108-0330 Cr85	3.300	0.1299	6	34	72	36	Cr85	2
75102710	CRDR-HP-C4108-0340 Cr85	3.400	0.1339	6	34	72	36	Cr85	2
75102715	CRDR-HP-C4108-0350 Cr85	3.500	0.1378	6	34	72	36	Cr85	2
75102718	CRDR-HP-C4108-0357 Cr85	3.570	9/64	6	34	72	36	Cr85	2
75102720	CRDR-HP-C4108-0360 Cr85	3.600	0.1417	6	34	72	36	Cr85	2
75102725	CRDR-HP-C4108-0370 Cr85	3.700	0.1457	6	34	72	36	Cr85	2
75102730	CRDR-HP-C4108-0380 Cr85	3.800	0.1496	6	43	81	36	Cr85	2
75102735	CRDR-HP-C4108-0390 Cr85	3.900	0.1535	6	43	81	36	Cr85	2
75102738	CRDR-HP-C4108-0397 Cr85	3.970	5/32	6	43	81	36	Cr85	2
75102740	CRDR-HP-C4108-0400 Cr85	4.000	0.1575	6	43	81	36	Cr85	2
75102745	CRDR-HP-C4108-0410 Cr85	4.100	0.1614	6	43	81	36	Cr85	2
75102750	CRDR-HP-C4108-0420 Cr85	4.200	0.1654	6	43	81	36	Cr85	2
75102755	CRDR-HP-C4108-0430 Cr85	4.300	0.1693	6	43	81	36	Cr85	2
75102758	CRDR-HP-C4108-0437 Cr85	4.370	11/64	6	43	81	36	Cr85	2
75102760	CRDR-HP-C4108-0440 Cr85	4.400	0.1732	6	43	81	36	Cr85	2
75102765	CRDR-HP-C4108-0450 Cr85	4.500	0.1772	6	43	81	36	Cr85	2
75102770	CRDR-HP-C4108-0460 Cr85	4.600	0.1811	6	43	81	36	Cr85	2
75102775	CRDR-HP-C4108-0470 Cr85	4.700	0.1850	6	43	81	36	Cr85	2
75102778	CRDR-HP-C4108-0476 Cr85	4.760	3/16	6	57	95	36	Cr85	2
75102780	CRDR-HP-C4108-0480 Cr85	4.800	0.1890	6	57	95	36	Cr85	2
75102785	CRDR-HP-C4108-0490 Cr85	4.900	0.1929	6	57	95	36	Cr85	2
75102790	CRDR-HP-C4108-0500 Cr85	5.000	0.1969	6	57	95	36	Cr85	2
75102795	CRDR-HP-C4108-0510 Cr85	5.100	0.2008	6	57	95	36	Cr85	2
75102798	CRDR-HP-C4108-0516 Cr85	5.160	13/64	6	57	95	36	Cr85	2
75102800	CRDR-HP-C4108-0520 Cr85	5.200	0.2047	6	57	95	36	Cr85	2
75102805	CRDR-HP-C4108-0530 Cr85	5.300	0.2087	6	57	95	36	Cr85	2
75102810	CRDR-HP-C4108-0540 Cr85	5.400	0.2126	6	57	95	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75102815	CRDR-HP-C4108-0550 Cr85	5.500	0.2165	6	57	95	36	Cr85	2
75102818	CRDR-HP-C4108-0556 Cr85	5.560	7/32	6	57	95	36	Cr85	2
75102820	CRDR-HP-C4108-0560 Cr85	5.600	0.2205	6	57	95	36	Cr85	2
75102825	CRDR-HP-C4108-0570 Cr85	5.700	0.2244	6	57	95	36	Cr85	2
75102830	CRDR-HP-C4108-0580 Cr85	5.800	0.2283	6	57	95	36	Cr85	2
75102835	CRDR-HP-C4108-0590 Cr85	5.900	0.2323	6	57	95	36	Cr85	2
75102838	CRDR-HP-C4108-0595 Cr85	5.950	15/64	6	57	95	36	Cr85	2
75102840	CRDR-HP-C4108-0600 Cr85	6.000	0.2362	6	57	95	36	Cr85	2
75102845	CRDR-HP-C4108-0610 Cr85	6.100	0.2402	8	76	114	36	Cr85	2
75102850	CRDR-HP-C4108-0620 Cr85	6.200	0.2441	8	76	114	36	Cr85	2
75102855	CRDR-HP-C4108-0630 Cr85	6.300	0.2480	8	76	114	36	Cr85	2
75102858	CRDR-HP-C4108-0635 Cr85	6.350	1/4	8	76	114	36	Cr85	2
75102860	CRDR-HP-C4108-0640 Cr85	6.400	0.2520	8	76	114	36	Cr85	2
75102865	CRDR-HP-C4108-0650 Cr85	6.500	0.2559	8	76	114	36	Cr85	2
75102870	CRDR-HP-C4108-0660 Cr85	6.600	0.2598	8	76	114	36	Cr85	2
75102875	CRDR-HP-C4108-0670 Cr85	6.700	0.2638	8	76	114	36	Cr85	2
75102878	CRDR-HP-C4108-0675 Cr85	6.750	17/64	8	76	114	36	Cr85	2
75102880	CRDR-HP-C4108-0680 Cr85	6.800	0.2677	8	76	114	36	Cr85	2
75102885	CRDR-HP-C4108-0690 Cr85	6.900	0.2717	8	76	114	36	Cr85	2
75102890	CRDR-HP-C4108-0700 Cr85	7.000	0.2756	8	76	114	36	Cr85	2
75102895	CRDR-HP-C4108-0710 Cr85	7.100	0.2795	8	76	114	36	Cr85	2
75102898	CRDR-HP-C4108-0714 Cr85	7.140	9/32	8	76	114	36	Cr85	2
75102900	CRDR-HP-C4108-0720 Cr85	7.200	0.2835	8	76	114	36	Cr85	2
75102905	CRDR-HP-C4108-0730 Cr85	7.300	0.2874	8	76	114	36	Cr85	2
75102910	CRDR-HP-C4108-0740 Cr85	7.400	0.2913	8	76	114	36	Cr85	2
75102915	CRDR-HP-C4108-0750 Cr85	7.500	0.2953	8	76	114	36	Cr85	2
75102918	CRDR-HP-C4108-0754 Cr85	7.540	19/64	8	76	114	36	Cr85	2
75102920	CRDR-HP-C4108-0760 Cr85	7.600	0.2992	8	76	114	36	Cr85	2
75102925	CRDR-HP-C4108-0770 Cr85	7.700	0.3031	8	76	114	36	Cr85	2
75102930	CRDR-HP-C4108-0780 Cr85	7.800	0.3071	8	76	114	36	Cr85	2
75102935	CRDR-HP-C4108-0790 Cr85	7.900	0.3110	8	76	114	36	Cr85	2
75102938	CRDR-HP-C4108-0794 Cr85	7.940	5/16	8	76	114	36	Cr85	2
75102940	CRDR-HP-C4108-0800 Cr85	8.000	0.3150	8	76	114	36	Cr85	2
75102945	CRDR-HP-C4108-0810 Cr85	8.100	0.3189	10	95	142	40	Cr85	2
75102950	CRDR-HP-C4108-0820 Cr85	8.200	0.3228	10	95	142	40	Cr85	2
75102955	CRDR-HP-C4108-0830 Cr85	8.300	0.3268	10	95	142	40	Cr85	2
75102958	CRDR-HP-C4108-0833 Cr85	8.330	21/64	10	95	142	40	Cr85	2
75102960	CRDR-HP-C4108-0840 Cr85	8.400	0.3307	10	95	142	40	Cr85	2
75102965	CRDR-HP-C4108-0850 Cr85	8.500	0.3346	10	95	142	40	Cr85	2
75102970	CRDR-HP-C4108-0860 Cr85	8.600	0.3386	10	95	142	40	Cr85	2
75102975	CRDR-HP-C4108-0870 Cr85	8.700	0.3425	10	95	142	40	Cr85	2
75102978	CRDR-HP-C4108-0873 Cr86	8.730	11/32	10	95	142	40	Cr85	2
75102980	CRDR-HP-C4108-0880 Cr85	8.800	0.3465	10	95	142	40	Cr85	2
75102985	CRDR-HP-C4108-0890 Cr85	8.900	0.3504	10	95	142	40	Cr85	2
75102990	CRDR-HP-C4108-0900 Cr85	9.000	0.3543	10	95	142	40	Cr85	2
75102995	CRDR-HP-C4108-0910 Cr85	9.100	0.3583	10	95	142	40	Cr85	2
75102998	CRDR-HP-C4108-0913 Cr85	9.130	23/64	10	95	142	40	Cr85	2
75103000	CRDR-HP-C4108-0920 Cr85	9.200	0.3622	10	95	142	40	Cr85	2
75103005	CRDR-HP-C4108-0930 Cr85	9.300	0.3661	10	95	142	40	Cr85	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103010	CRDR-HP-C4108-0940 Cr85	9.400	0.3701	10	95	142	40	Cr85	2
75103015	CRDR-HP-C4108-0950 Cr85	9.500	0.3740	10	95	142	40	Cr85	2
75103018	CRDR-HP-C4108-0953 Cr85	9.530	3/8	10	95	142	40	Cr85	2
75103020	CRDR-HP-C4108-0960 Cr85	9.600	0.3780	10	95	142	40	Cr85	2
75103025	CRDR-HP-C4108-0970 Cr85	9.700	0.3819	10	95	142	40	Cr85	2
75103030	CRDR-HP-C4108-0980 Cr85	9.800	0.3858	10	95	142	40	Cr85	2
75103035	CRDR-HP-C4108-0990 Cr85	9.900	0.3898	10	95	142	40	Cr85	2
75103038	CRDR-HP-C4108-0992 Cr85	9.920	25/64	10	95	142	40	Cr85	2
75103040	CRDR-HP-C4108-1000 Cr85	10.000	0.3937	10	95	142	40	Cr85	2
75103045	CRDR-HP-C4108-1010 Cr85	10.100	0.3976	12	114	162	45	Cr85	2
75103050	CRDR-HP-C4108-1020 Cr85	10.200	0.4016	12	114	162	45	Cr85	2
75103055	CRDR-HP-C4108-1030 Cr85	10.300	0.4055	12	114	162	45	Cr85	2
75103058	CRDR-HP-C4108-1032 Cr85	10.320	13/32	12	114	162	45	Cr85	2
75103060	CRDR-HP-C4108-1040 Cr85	10.400	0.4094	12	114	162	45	Cr85	2
75103065	CRDR-HP-C4108-1050 Cr85	10.500	0.4134	12	114	162	45	Cr85	2
75103070	CRDR-HP-C4108-1060 Cr85	10.600	0.4173	12	114	162	45	Cr85	2
75103075	CRDR-HP-C4108-1070 Cr85	10.700	0.4213	12	114	162	45	Cr85	2
75103078	CRDR-HP-C4108-1072 Cr85	10.720	27/64	12	114	162	45	Cr85	2
75103080	CRDR-HP-C4108-1080 Cr85	10.800	0.4252	12	114	162	45	Cr85	2
75103085	CRDR-HP-C4108-1090 Cr85	10.900	0.4291	12	114	162	45	Cr85	2
75103090	CRDR-HP-C4108-1100 Cr85	11.000	0.4331	12	114	162	45	Cr85	2
75103095	CRDR-HP-C4108-1110 Cr85	11.100	0.4370	12	114	162	45	Cr85	2
75103098	CRDR-HP-C4108-1111 Cr85	11.110	7/16	12	114	162	45	Cr85	2
75103100	CRDR-HP-C4108-1120 Cr85	11.200	0.4409	12	114	162	45	Cr85	2
75103105	CRDR-HP-C4108-1130 Cr85	11.300	0.4449	12	114	162	45	Cr85	2
75103110	CRDR-HP-C4108-1140 Cr85	11.400	0.4488	12	114	162	45	Cr85	2
75103115	CRDR-HP-C4108-1150 Cr85	11.500	0.4528	12	114	162	45	Cr85	2
75103120	CRDR-HP-C4108-1160 Cr85	11.600	0.4567	12	114	162	45	Cr85	2
75103125	CRDR-HP-C4108-1170 Cr85	11.700	0.4606	12	114	162	45	Cr85	2
75103130	CRDR-HP-C4108-1180 Cr85	11.800	0.4646	12	114	162	45	Cr85	2
75103135	CRDR-HP-C4108-1190 Cr85	11.900	0.4685	12	114	162	45	Cr85	2
75103140	CRDR-HP-C4108-1200 Cr85	12.000	0.4724	12	114	162	45	Cr85	2
75103145	CRDR-HP-C4108-1250 Cr85	12.500	0.4921	14	133	178	45	Cr85	2
75103150	CRDR-HP-C4108-1280 Cr85	12.800	0.5039	14	133	178	45	Cr85	2
75103155	CRDR-HP-C4108-1300 Cr85	13.000	0.5118	14	133	178	45	Cr85	2
75103160	CRDR-HP-C4108-1350 Cr85	13.500	0.5315	14	133	178	45	Cr85	2
75103165	CRDR-HP-C4108-1380 Cr85	13.800	0.5433	14	133	178	45	Cr85	2
75103170	CRDR-HP-C4108-1400 Cr85	14.000	0.5512	14	133	178	45	Cr85	2
75103175	CRDR-HP-C4108-1450 Cr85	14.500	0.5709	16	152	203	48	Cr85	2
75103178	CRDR-HP-C4108-1468 Cr86	14.680	37/64	16	152	203	48	Cr85	2
75103180	CRDR-HP-C4108-1480 Cr85	14.800	0.5827	16	152	203	48	Cr85	2
75103185	CRDR-HP-C4108-1500 Cr85	15.000	0.5906	16	152	203	48	Cr85	2
75103188	CRDR-HP-C4108-1508 Cr85	15.080	19/32	16	152	203	48	Cr85	2
75103190	CRDR-HP-C4108-1550 Cr85	15.500	0.6102	16	152	203	48	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (I2)	OAL (I1)	Shank length (I4)	Cromson Grade	# Flutes
75103195	CRDR-HP-C4108-1580 Cr85	15.800	0.6220	16	152	203	48	Cr85	2
75103198	CRDR-HP-C4108-1588 Cr85	15.880	5/8	16	152	203	48	Cr85	2
75103200	CRDR-HP-C4108-1600 Cr85	16.000	0.6299	16	152	203	48	Cr85	2
75103205	CRDR-HP-C4108-1650 Cr85	16.500	0.6496	18	171	222	48	Cr85	2
75103208	CRDR-HP-C4108-1667 Cr85	16.670	21/32	18	171	222	48	Cr85	2
75103210	CRDR-HP-C4108-1680 Cr85	16.800	0.6614	18	171	222	48	Cr85	2
75103215	CRDR-HP-C4108-1700 Cr85	17.000	0.6693	18	171	222	48	Cr85	2
75103218	CRDR-HP-C4108-1746 Cr85	17.460	11/16	18	171	222	48	Cr85	2
75103220	CRDR-HP-C4108-1750 Cr85	17.500	0.6890	18	171	222	48	Cr85	2
75103225	CRDR-HP-C4108-1780 Cr85	17.800	0.7008	18	171	222	48	Cr85	2
75103228	CRDR-HP-C4108-1786 Cr85	17.860	45/64	18	171	222	48	Cr85	2
75103230	CRDR-HP-C4108-1800 Cr85	18.000	0.7087	18	171	222	48	Cr85	2
75103233	CRDR-HP-C4108-1826 Cr85	18.260	23/32	20	190	243	50	Cr85	2
75103235	CRDR-HP-C4108-1850 Cr85	18.500	0.7283	20	190	243	50	Cr85	2
75103240	CRDR-HP-C4108-1880 Cr85	18.800	0.7402	20	190	243	50	Cr85	2
75103245	CRDR-HP-C4108-1900 Cr85	19.000	0.7480	20	190	243	50	Cr85	2
75103248	CRDR-HP-C4108-1905 Cr85	19.050	3/4	20	190	243	50	Cr85	2
75103250	CRDR-HP-C4108-1950 Cr85	19.500	0.7677	20	190	243	50	Cr85	2
75103255	CRDR-HP-C4108-1980 Cr85	19.800	0.7795	20	190	243	50	Cr85	2
75103260	CRDR-HP-C4108-2000 Cr85	20.000	0.7874	20	190	243	50	Cr85	2

CROMSTEEL-C4000		Product model description										Recommended feed (f) for diameter ranges																										
		C4103 (3 x d)			C4105 (5 x d)			C4108 (8 x d)				0.118-0.197 in 3 to 5 mm		0.197-0.316 in 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm																		
		SFM	m/min	N/mm2	SFM	m/min	N/mm2	SFM	m/min	HRC	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev																		
Work Material	Hrc	up to 8 up to 15 over 15	up to 178 up to 205 over 205	BHN	up to 600 up to 700 over 700	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	
	Hrc	up to 8 up to 15 over 15	up to 178 up to 205 over 205	BHN	up to 600 up to 700 over 700	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	SFM	95-115 85-105 75-90	m/min	312-377 279-344 246-295	N/mm2	312-377 279-344 246-295	
Alloyed steel	5132, 4130, 8620, 4340, 5140, 6150	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	197-279 164-230 131-197	60-85 50-70 40-60	197-279 164-230 131-197	SFM	60-85 50-70 40-60	m/min	197-279 164-230 131-197	N/mm2	197-279 164-230 131-197	SFM	60-85 50-70 40-60	m/min	197-279 164-230 131-197	N/mm2	197-279 164-230 131-197	SFM	60-85 50-70 40-60	m/min	197-279 164-230 131-197	N/mm2	197-279 164-230 131-197	SFM	60-85 50-70 40-60	m/min	197-279 164-230 131-197	N/mm2	197-279 164-230 131-197	SFM	60-85 50-70 40-60	m/min	197-279 164-230 131-197	N/mm2	197-279 164-230 131-197	
Stainless steel moderate	17-4PH, 15-5PH, 316L				164-230	50-70	164-230	SFM	50-70	m/min	164-230	N/mm2	164-230	SFM	50-70	m/min	164-230	N/mm2	164-230	SFM	50-70	m/min	164-230	N/mm2	164-230	SFM	50-70	m/min	164-230	N/mm2	164-230	SFM	50-70	m/min	164-230	N/mm2	164-230	
Stainless and acid resistant steel	(Cr-Ni-Alloys) 304, 316, 17CrNi16-2				98-164	30-50	131-197	SFM	40-60	m/min	131-197	N/mm2	131-197	SFM	40-60	m/min	131-197	N/mm2	131-197	SFM	40-60	m/min	131-197	N/mm2	131-197	SFM	40-60	m/min	131-197	N/mm2	131-197	SFM	40-60	m/min	131-197	N/mm2	131-197	
Cast iron, grey cast iron alloy	GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	262-427 230-377 197-328	80-130 70-115 60-100	262-427 230-377 197-328	SFM	80-130 70-115 60-100	m/min	262-427 230-377 197-328	N/mm2	262-427 230-377 197-328	SFM	80-130 70-115 60-100	m/min	262-427 230-377 197-328	N/mm2	262-427 230-377 197-328	SFM	80-130 70-115 60-100	m/min	262-427 230-377 197-328	N/mm2	262-427 230-377 197-328	SFM	80-130 70-115 60-100	m/min	262-427 230-377 197-328	N/mm2	262-427 230-377 197-328	SFM	80-130 70-115 60-100	m/min	262-427 230-377 197-328	N/mm2	262-427 230-377 197-328	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80		up to 8 over 8	up to 178 over 178	up to 600 over 650	246-295 213-262	75-90 65-80	246-295 213-262	SFM	75-90 65-80	m/min	246-295 213-262	N/mm2	246-295 213-262	SFM	75-90 65-80	m/min	246-295 213-262	N/mm2	246-295 213-262	SFM	75-90 65-80	m/min	246-295 213-262	N/mm2	246-295 213-262	SFM	75-90 65-80	m/min	246-295 213-262	N/mm2	246-295 213-262	SFM	75-90 65-80	m/min	246-295 213-262	N/mm2	246-295 213-262	
Aluminum (Si content >10%)	6061, 2025, 209, 360																																					
Aluminum (Si content <10%)	413, 385, A390																																					
Copper, brass, bronze	beryllium copper, naval brass, AMIPCO																																					
Titanium alloy	Ti6Al4V																																					
High temperature alloy	inconel, haynes, waspaloy, hastelloy																																					
Chilled cast iron		38-48	350-450	1173-1527																																		
Hardened steel	50-60 HRC	50-55 56-60 61-65	1614-1870																																			






** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.00mm reduce cutting speed by 20-30%

CONCENTRICITY

C5000 SERIES

- ⊙ If a higher bore quality is required, then the CONCENTRICITY is the geometry you have to consider
- ⊙ The drills in the CONCENTRICITY series are equipped with two (2) cutting edges and two (2) additional guiding chamfers
- ⊙ This total of four (4) guiding chamfers ensures maximum bore quality in relation to accuracy of alignment, concentricity and positioning accuracy
- ⊙ Drills in the CONCENTRICITY series perform equally well in relation to circularity and dimensional tolerances



Work Material	Hardness Rockwell (HRc) Hardness Brinell (BHN) Tensile Strength (N/mm2)			C5000
	HRc	BHN	N/mm2	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	
Hardened steel 50-60 HRc	50-55 56-60 61-65		1614-1870	



Highly recommended



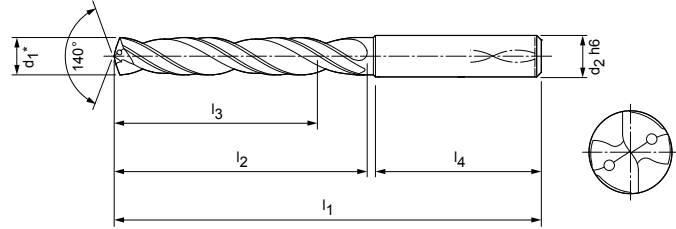
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

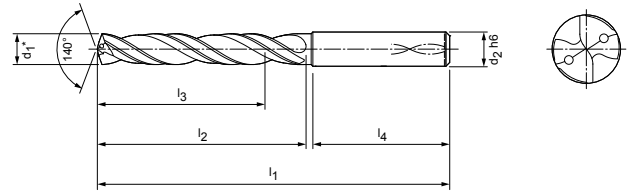
Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 2
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103265	CRDR-AC-C5105-0300 Cr85	3.000	0.1181	6	28	66	36	Cr85	2
75103270	CRDR-AC-C5105-0310 Cr85	3.100	0.1220	6	28	66	36	Cr85	2
75103273	CRDR-AC-C5105-0318 Cr85	3.180	1/8	6	28	66	36	Cr85	2
75103275	CRDR-AC-C5105-0320 Cr85	3.200	0.1260	6	28	66	36	Cr85	2
75103280	CRDR-AC-C5105-0330 Cr85	3.300	0.1299	6	28	66	36	Cr85	2
75103285	CRDR-AC-C5105-0340 Cr85	3.400	0.1339	6	28	66	36	Cr85	2
75103290	CRDR-AC-C5105-0350 Cr85	3.500	0.1378	6	28	66	36	Cr85	2
75103293	CRDR-AC-C5105-0357 Cr85	3.570	9/64	6	28	66	36	Cr85	2
75103295	CRDR-AC-C5105-0360 Cr85	3.600	0.1417	6	28	66	36	Cr85	2
75103300	CRDR-AC-C5105-0370 Cr85	3.700	0.1457	6	28	66	36	Cr85	2
75103305	CRDR-AC-C5105-0380 Cr85	3.800	0.1496	6	36	74	36	Cr85	2
75103310	CRDR-AC-C5105-0390 Cr85	3.900	0.1535	6	36	74	36	Cr85	2
75103313	CRDR-AC-C5105-0397 Cr85	3.970	5/32	6	36	74	36	Cr85	2
75103315	CRDR-AC-C5105-0400 Cr85	4.000	0.1575	6	36	74	36	Cr85	2
75103320	CRDR-AC-C5105-0410 Cr85	4.100	0.1614	6	36	74	36	Cr85	2
75103325	CRDR-AC-C5105-0420 Cr85	4.200	0.1654	6	36	74	36	Cr85	2
75103330	CRDR-AC-C5105-0430 Cr85	4.300	0.1693	6	36	74	36	Cr85	2
75103333	CRDR-AC-C5105-0437 Cr85	4.370	11/64	6	36	74	36	Cr85	2
75103335	CRDR-AC-C5105-0440 Cr85	4.400	0.1732	6	36	74	36	Cr85	2
75103340	CRDR-AC-C5105-0450 Cr85	4.500	0.1772	6	36	74	36	Cr85	2
75103345	CRDR-AC-C5105-0460 Cr85	4.600	0.1811	6	36	74	36	Cr85	2
75103350	CRDR-AC-C5105-0470 Cr85	4.700	0.1850	6	36	74	36	Cr85	2
75103353	CRDR-AC-C5105-0476 Cr85	4.760	3/16	6	44	82	36	Cr85	2
75103355	CRDR-AC-C5105-0480 Cr85	4.800	0.1890	6	44	82	36	Cr85	2
75103360	CRDR-AC-C5105-0490 Cr85	4.900	0.1929	6	44	82	36	Cr85	2
75103365	CRDR-AC-C5105-0500 Cr85	5.000	0.1969	6	44	82	36	Cr85	2
75103370	CRDR-AC-C5105-0510 Cr85	5.100	0.2031	6	44	82	36	Cr85	2
75103373	CRDR-AC-C5105-0516 Cr85	5.160	13/64	6	44	82	36	Cr85	2
75103375	CRDR-AC-C5105-0520 Cr85	5.200	0.2047	6	44	82	36	Cr85	2
75103380	CRDR-AC-C5105-0530 Cr85	5.300	0.2087	6	44	82	36	Cr85	2
75103385	CRDR-AC-C5105-0540 Cr85	5.400	0.2126	6	44	82	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103390	CRDR-AC-C5105-0550 Cr85	5.500	0.2165	6	44	82	36	Cr85	2
75103393	CRDR-AC-C5105-056 Cr85	5.560	7/32	6	44	82	36	Cr85	2
75103395	CRDR-AC-C5105-0560 Cr85	5.600	0.2205	6	44	82	36	Cr85	2
75103400	CRDR-AC-C5105-0570 Cr85	5.700	0.2244	6	44	82	36	Cr85	2
75103405	CRDR-AC-C5105-0580 Cr85	5.800	0.2283	6	44	82	36	Cr85	2
75103410	CRDR-AC-C5105-0590 Cr85	5.900	0.2323	6	44	82	36	Cr85	2
75103413	CRDR-AC-C5105-0595 Cr86	5.950	15/64	6	44	82	36	Cr85	2
75103415	CRDR-AC-C5105-0600 Cr85	6.000	0.2362	6	44	82	36	Cr85	2
75103420	CRDR-AC-C5105-0610 Cr85	6.100	0.2402	8	53	91	36	Cr85	2
75103425	CRDR-AC-C5105-0620 Cr85	6.200	0.2441	8	53	91	36	Cr85	2
75103430	CRDR-AC-C5105-0630 Cr85	6.300	0.2480	8	53	91	36	Cr85	2
75103433	CRDR-AC-C5105-0635 Cr85	6.350	1/4	8	53	91	36	Cr85	2
75103435	CRDR-AC-C5105-0640 Cr85	6.400	0.2520	8	53	91	36	Cr85	2
75103440	CRDR-AC-C5105-0650 Cr85	6.500	0.2559	8	53	91	36	Cr85	2
75103445	CRDR-AC-C5105-0660 Cr85	6.600	0.2598	8	53	91	36	Cr85	2
75103450	CRDR-AC-C5105-0670 Cr85	6.700	0.2638	8	53	91	36	Cr85	2
75103453	CRDR-AC-C5105-0675 Cr85	6.750	17/64	8	53	91	36	Cr85	2
75103455	CRDR-AC-C5105-0680 Cr85	6.800	0.2677	8	53	91	36	Cr85	2
75103460	CRDR-AC-C5105-0690 Cr85	6.900	0.2717	8	53	91	36	Cr85	2
75103465	CRDR-AC-C5105-0700 Cr85	7.000	0.2756	8	53	91	36	Cr85	2
75103470	CRDR-AC-C5105-0710 Cr85	7.100	0.2795	8	53	91	36	Cr85	2
75103473	CRDR-AC-C5105-0714 Cr85	7.140	9/32	8	53	91	36	Cr85	2
75103475	CRDR-AC-C5105-0720 Cr85	7.200	0.2835	8	53	91	36	Cr85	2
75103480	CRDR-AC-C5105-0730 Cr85	7.300	0.2874	8	53	91	36	Cr85	2
75103485	CRDR-AC-C5105-0740 Cr85	7.400	0.2913	8	53	91	36	Cr85	2
75103490	CRDR-AC-C5105-0750 Cr85	7.500	0.2953	8	53	91	36	Cr85	2
75103493	CRDR-AC-C5105-0754 Cr85	7.540	19/64	8	53	91	36	Cr85	2
75103495	CRDR-AC-C5105-0760 Cr85	7.600	0.2992	8	53	91	36	Cr85	2
75103500	CRDR-AC-C5105-0770 Cr85	7.700	0.3031	8	53	91	36	Cr85	2
75103505	CRDR-AC-C5105-0780 Cr85	7.800	0.3071	8	53	91	36	Cr85	2
75103510	CRDR-AC-C5105-0790 Cr85	7.900	0.3110	8	53	91	36	Cr85	2
75103513	CRDR-AC-C5105-0794 Cr85	7.940	5/16	8	53	91	36	Cr85	2
75103515	CRDR-AC-C5105-0800 Cr85	8.000	0.3150	8	53	91	36	Cr85	2
75103520	CRDR-AC-C5105-0810 Cr85	8.100	0.3189	10	61	103	40	Cr85	2
75103525	CRDR-AC-C5105-0820 Cr85	8.200	0.3228	10	61	103	40	Cr85	2
75103530	CRDR-AC-C5105-0830 Cr85	8.300	0.3268	10	61	103	40	Cr85	2
75103533	CRDR-AC-C5105-0833 Cr85	8.330	21/64	10	61	103	40	Cr85	2
75103535	CRDR-AC-C5105-0840 Cr85	8.400	0.3307	10	61	103	40	Cr85	2
75103540	CRDR-AC-C5105-0850 Cr85	8.500	0.3346	10	61	103	40	Cr85	2
75103545	CRDR-AC-C5105-0860 Cr85	8.600	0.3386	10	61	103	40	Cr85	2
75103550	CRDR-AC-C5105-0870 Cr85	8.700	0.3425	10	61	103	40	Cr85	2
75103553	RDR-AC-C5105-0873 Cr85	8.730	11/32	10	61	103	40	Cr85	2
75103555	CRDR-AC-C5105-0880 Cr85	8.800	0.3465	10	61	103	40	Cr85	2
75103560	CRDR-AC-C5105-0890 Cr85	8.900	0.3504	10	61	103	40	Cr85	2
75103565	CRDR-AC-C5105-0900 Cr85	9.000	0.3543	10	61	103	40	Cr85	2
75103570	CRDR-AC-C5105-0910 Cr85	9.100	0.3583	10	61	103	40	Cr85	2
75103573	CRDR-AC-C5105-0913 Cr85	9.130	23/64	10	61	103	40	Cr85	2
75103575	CRDR-AC-C5105-0920 Cr85	9.200	0.3622	10	61	103	40	Cr85	2
75103580	CRDR-AC-C5105-0930 Cr85	9.300	0.3661	10	61	103	40	Cr85	2



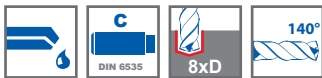
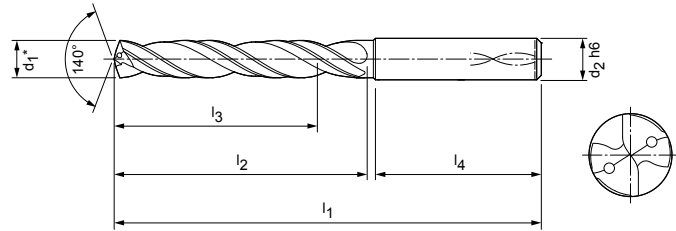
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103585	CRDR-AC-C5105-0940 Cr85	9.400	0.3701	10	61	103	40	Cr85	2
75103590	CRDR-AC-C5105-0950 Cr85	9.500	0.3740	10	61	103	40	Cr85	2
75103593	CRDR-AC-C5105-0953 Cr85	9.530	3/8	10	61	103	40	Cr85	2
75103595	CRDR-AC-C5105-0960 Cr85	9.600	0.3780	10	61	103	40	Cr85	2
75103600	CRDR-AC-C5105-0970 Cr85	9.700	0.3819	10	61	103	40	Cr85	2
75103605	CRDR-AC-C5105-0980 Cr85	9.800	0.3858	10	61	103	40	Cr85	2
75103610	CRDR-AC-C5105-0990 Cr85	9.900	0.3898	10	61	103	40	Cr85	2
75103613	CRDR-AC-C5105-0992 Cr85	9.920	25/64	10	61	103	40	Cr85	2
75103615	CRDR-AC-C5105-1000 Cr85	10.000	0.3937	10	61	103	40	Cr85	2
75103620	CRDR-AC-C5105-1010 Cr85	10.100	0.3976	12	71	118	45	Cr85	2
75103625	CRDR-AC-C5105-1020 Cr85	10.200	0.4016	12	71	118	45	Cr85	2
75103630	CRDR-AC-C5105-1030 Cr85	10.300	0.4055	12	71	118	45	Cr85	2
75103633	CRDR-AC-C5105-1032 Cr85	10.320	13/32	12	71	118	45	Cr85	2
75103635	CRDR-AC-C5105-1040 Cr85	10.400	0.4094	12	71	118	45	Cr85	2
75103640	CRDR-AC-C5105-1050 Cr85	10.500	0.4134	12	71	118	45	Cr85	2
75103645	CRDR-AC-C5105-1060 Cr85	10.600	0.4173	12	71	118	45	Cr85	2
75103650	CRDR-AC-C5105-1070 Cr85	10.700	0.4213	12	71	118	45	Cr85	2
75103653	CRDR-AC-C5105-1072 Cr85	10.720	27/64	12	71	118	45	Cr85	2
75103655	CRDR-AC-C5105-1080 Cr85	10.800	0.4252	12	71	118	45	Cr85	2
75103660	CRDR-AC-C5105-1090 Cr85	10.900	0.4291	12	71	118	45	Cr85	2
75103665	CRDR-AC-C5105-1100 Cr85	11.000	0.4331	12	71	118	45	Cr85	2
75103670	CRDR-AC-C5105-1110 Cr85	11.100	0.4370	12	71	118	45	Cr85	2
75103673	CRDR-AC-C5105-1111 Cr85	11.110	7/16	12	71	118	45	Cr85	2
75103675	CRDR-AC-C5105-1120 Cr85	11.200	0.4409	12	71	118	45	Cr85	2
75103680	CRDR-AC-C5105-1130 Cr85	11.300	0.4449	12	71	118	45	Cr85	2
75103685	CRDR-AC-C5105-1140 Cr85	11.400	0.4488	12	71	118	45	Cr85	2
75103690	CRDR-AC-C5105-1150 Cr85	11.500	0.4528	12	71	118	45	Cr85	2
75103695	CRDR-AC-C5105-1160 Cr85	11.600	0.4567	12	71	118	45	Cr85	2
75103700	CRDR-AC-C5105-1170 Cr85	11.700	0.4606	12	71	118	45	Cr85	2
75103705	CRDR-AC-C5105-1180 Cr85	11.800	0.4646	12	71	118	45	Cr85	2
75103710	CRDR-AC-C5105-1190 Cr85	11.900	0.4685	12	71	118	45	Cr85	2
75103715	CRDR-AC-C5105-1200 Cr85	12.000	0.4724	12	71	118	45	Cr85	2
75103720	CRDR-AC-C5105-1250 Cr85	12.500	0.4921	14	77	124	45	Cr85	2
75103725	CRDR-AC-C5105-1280 Cr85	12.800	0.5039	14	77	124	45	Cr85	2
75103730	CRDR-AC-C5105-1300 Cr85	13.000	0.5118	14	77	124	45	Cr85	2
75103735	CRDR-AC-C5105-1350 Cr85	13.500	0.5315	14	77	124	45	Cr85	2
75103740	CRDR-AC-C5105-1400 Cr85	14.000	0.5512	14	77	124	45	Cr85	2
75103743	CRDR-AC-C5105-1429 Cr85	14.290	9/16	16	83	133	48	Cr85	2
75103745	CRDR-AC-C5105-1450 Cr85	14.500	0.5709	16	83	133	48	Cr85	2
75103748	CRDR-AC-C5105-1468 Cr86	14.680	37/64	16	83	133	48	Cr85	2
75103750	CRDR-AC-C5105-1480 Cr85	14.800	0.5827	16	83	133	48	Cr85	2
75103755	CRDR-AC-C5105-1500 Cr85	15.000	0.5906	16	83	133	48	Cr85	2
75103758	CRDR-AC-C5105-1508 Cr85	15.080	19/32	16	83	133	48	Cr85	2
75103760	CRDR-AC-C5105-1550 Cr85	15.500	0.6102	16	83	133	48	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

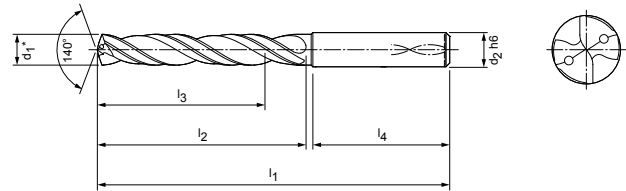
Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 2
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103830	CRDR-AC-C5108-0300 Cr85	3.000	0.1181	6	34	72	36	Cr85	2
75103835	CRDR-AC-C5108-0310 Cr85	3.100	0.1220	6	34	72	36	Cr85	2
75103838	CRDR-AC-C5108-0318 Cr85	3.180	1/8	6	34	72	36	Cr85	2
75103840	CRDR-AC-C5108-0320 Cr85	3.200	0.1260	6	34	72	36	Cr85	2
75103845	CRDR-AC-C5108-0330 Cr85	3.300	0.1299	6	34	72	36	Cr85	2
75103850	CRDR-AC-C5108-0340 Cr85	3.400	0.1339	6	34	72	36	Cr85	2
75103855	CRDR-AC-C5108-0350 Cr85	3.500	0.1378	6	34	72	36	Cr85	2
75103858	CRDR-AC-C5108-0357 Cr85	3.570	9/64	6	34	72	36	Cr85	2
75103860	CRDR-AC-C5108-0360 Cr85	3.600	0.1417	6	34	72	36	Cr85	2
75103865	CRDR-AC-C5108-0370 Cr85	3.700	0.1457	6	34	72	36	Cr85	2
75103870	CRDR-AC-C5108-0380 Cr85	3.800	0.1496	6	43	81	36	Cr85	2
75103875	CRDR-AC-C5108-0390 Cr85	3.900	0.1535	6	43	81	36	Cr85	2
75103878	CRDR-AC-C5108-0397 Cr85	3.970	5/32	6	43	81	36	Cr85	2
75103880	CRDR-AC-C5108-0400 Cr85	4.000	0.1575	6	43	81	36	Cr85	2
75103885	CRDR-AC-C5108-0410 Cr85	4.100	0.1614	6	43	81	36	Cr85	2
75103890	CRDR-AC-C5108-0420 Cr85	4.200	0.1654	6	43	81	36	Cr85	2
75103895	CRDR-AC-C5108-0430 Cr85	4.300	0.1693	6	43	81	36	Cr85	2
75103898	CRDR-AC-C5108-0437 Cr85	4.370	11/64	6	43	81	36	Cr85	2
75103900	CRDR-AC-C5108-0440 Cr85	4.400	0.1732	6	43	81	36	Cr85	2
75103905	CRDR-AC-C5108-0450 Cr85	4.500	0.1772	6	43	81	36	Cr85	2
75103910	CRDR-AC-C5108-0460 Cr85	4.600	0.1811	6	43	81	36	Cr85	2
75103915	CRDR-AC-C5108-0470 Cr85	4.700	0.1850	6	43	81	36	Cr85	2
75103918	CRDR-AC-C5108-0476 Cr85	4.760	3/16	6	57	95	36	Cr85	2
75103920	CRDR-AC-C5108-0480 Cr85	4.800	0.1890	6	57	95	36	Cr85	2
75103925	CRDR-AC-C5108-0490 Cr85	4.900	0.1929	6	57	95	36	Cr85	2
75103930	CRDR-AC-C5108-0500 Cr85	5.000	0.1969	6	57	95	36	Cr85	2
75103935	CRDR-AC-C5108-0510 Cr85	5.100	0.2008	6	57	95	36	Cr85	2
75103938	CRDR-AC-C5108-0516 Cr85	5.160	13/64	6	57	95	36	Cr85	2
75103940	CRDR-AC-C5108-0520 Cr85	5.200	0.2047	6	57	95	36	Cr85	2
75103945	CRDR-AC-C5108-0530 Cr85	5.300	0.2087	6	57	95	36	Cr85	2
75103950	CRDR-AC-C5108-0540 Cr85	5.400	0.2126	6	57	95	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75103955	CRDR-AC-C5108-0550 Cr85	5.500	0.2165	6	57	95	36	Cr85	2
75103958	CRDR-AC-C5108-0556 Cr85	5.560	7/32	6	57	95	36	Cr85	2
75103960	CRDR-AC-C5108-0560 Cr85	5.600	0.2205	6	57	95	36	Cr85	2
75103965	CRDR-AC-C5108-0570 Cr85	5.700	0.2244	6	57	95	36	Cr85	2
75103970	CRDR-AC-C5108-0580 Cr85	5.800	0.2283	6	57	95	36	Cr85	2
75103975	CRDR-AC-C5108-0590 Cr85	5.900	0.2323	6	57	95	36	Cr85	2
75103978	CRDR-AC-C5108-0595 Cr85	5.950	15/64	6	57	95	36	Cr85	2
75103980	CRDR-AC-C5108-0600 Cr85	6.000	0.2362	6	57	95	36	Cr85	2
75103985	CRDR-AC-C5108-0610 Cr85	6.100	0.2402	8	76	114	36	Cr85	2
75103990	CRDR-AC-C5108-0620 Cr85	6.200	0.2441	8	76	114	36	Cr85	2
75103995	CRDR-AC-C5108-0630 Cr85	6.300	0.2480	8	76	114	36	Cr85	2
75103998	CRDR-AC-C5108-0635 Cr85	6.350	1/4	8	76	114	36	Cr85	2
75104000	CRDR-AC-C5108-0640 Cr85	6.400	0.2520	8	76	114	36	Cr85	2
75104005	CRDR-AC-C5108-0650 Cr85	6.500	0.2559	8	76	114	36	Cr85	2
75104010	CRDR-AC-C5108-0660 Cr85	6.600	0.2598	8	76	114	36	Cr85	2
75104015	CRDR-AC-C5108-0670 Cr85	6.700	0.2638	8	76	114	36	Cr85	2
75104018	CRDR-AC-C5108-0675 Cr85	6.750	17/64	8	76	114	36	Cr85	2
75104020	CRDR-AC-C5108-0680 Cr85	6.800	0.2677	8	76	114	36	Cr85	2
75104025	CRDR-AC-C5108-0690 Cr85	6.900	0.2717	8	76	114	36	Cr85	2
75104030	CRDR-AC-C5108-0700 Cr85	7.000	0.2756	8	76	114	36	Cr85	2
75104035	CRDR-AC-C5108-0710 Cr85	7.100	0.2795	8	76	114	36	Cr85	2
75104038	CRDR-AC-C5108-0714 Cr85	7.140	9/32	8	76	114	36	Cr85	2
75104040	CRDR-AC-C5108-0720 Cr85	7.200	0.2835	8	76	114	36	Cr85	2
75104045	CRDR-AC-C5108-0730 Cr85	7.300	0.2874	8	76	114	36	Cr85	2
75104050	CRDR-AC-C5108-0740 Cr85	7.400	0.2913	8	76	114	36	Cr85	2
75104055	CRDR-AC-C5108-0750 Cr85	7.500	0.2953	8	76	114	36	Cr85	2
75104058	CRDR-AC-C5108-0754 Cr85	7.540	19/64	8	76	114	36	Cr85	2
75104060	CRDR-AC-C5108-0760 Cr85	7.600	0.2992	8	76	114	36	Cr85	2
75104065	CRDR-AC-C5108-0770 Cr85	7.700	0.3031	8	76	114	36	Cr85	2
75104070	CRDR-AC-C5108-0780 Cr85	7.800	0.3071	8	76	114	36	Cr85	2
75104075	CRDR-AC-C5108-0790 Cr85	7.900	0.3110	8	76	114	36	Cr85	2
75104078	CRDR-AC-C5108-0794 Cr85	7.940	5/16	8	76	114	36	Cr85	2
75104080	CRDR-AC-C5108-0800 Cr85	8.000	0.3150	8	76	114	36	Cr85	2
75104085	CRDR-AC-C5108-0810 Cr85	8.100	0.3189	10	95	142	40	Cr85	2
75104090	CRDR-AC-C5108-0820 Cr85	8.200	0.3228	10	95	142	40	Cr85	2
75104095	CRDR-AC-C5108-0830 Cr85	8.300	0.3268	10	95	142	40	Cr85	2
75104098	CRDR-AC-C5108-0833 Cr85	8.330	21/64	10	95	142	40	Cr85	2
75104100	CRDR-AC-C5108-0840 Cr85	8.400	0.3307	10	95	142	40	Cr85	2
75104105	CRDR-AC-C5108-0850 Cr85	8.500	0.3346	10	95	142	40	Cr85	2
75104110	CRDR-AC-C5108-0860 Cr85	8.600	0.3386	10	95	142	40	Cr85	2
75104115	CRDR-AC-C5108-0870 Cr85	8.700	0.3425	10	95	142	40	Cr85	2
75104118	CRDR-AC-C5108-0873 Cr85	8.730	11/32	10	95	142	40	Cr85	2
75104120	CRDR-AC-C5108-0880 Cr85	8.800	0.3465	10	95	142	40	Cr85	2
75104125	CRDR-AC-C5108-0890 Cr85	8.900	0.3504	10	95	142	40	Cr85	2
75104130	CRDR-AC-C5108-0900 Cr85	9.000	0.3543	10	95	142	40	Cr85	2
75104135	CRDR-AC-C5108-0910 Cr85	9.100	0.3583	10	95	142	40	Cr85	2
75104138	CRDR-AC-C5108-0913 Cr85	9.130	23/64	10	95	142	40	Cr85	2
75104140	CRDR-AC-C5108-0920 Cr85	9.200	0.3622	10	95	142	40	Cr85	2
75104145	CRDR-AC-C5108-0930 Cr85	9.300	0.3661	10	95	142	40	Cr85	2



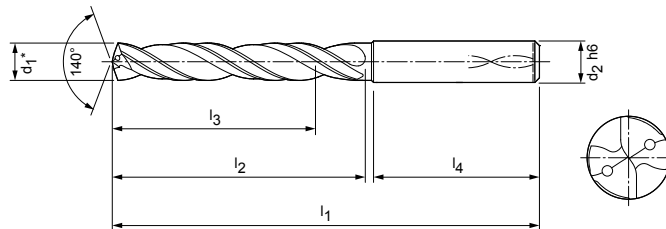
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75104150	CRDR-AC-C5108-0940 Cr85	9.400	0.3701	10	95	142	40	Cr85	2
75104155	CRDR-AC-C5108-0950 Cr85	9.500	0.3740	10	95	142	40	Cr85	2
75104158	CRDR-AC-C5108-0953 Cr85	9.530	3/8	10	95	142	40	Cr85	2
75104160	CRDR-AC-C5108-0960 Cr85	9.600	0.3780	10	95	142	40	Cr85	2
75104165	CRDR-AC-C5108-0970 Cr85	9.700	0.3819	10	95	142	40	Cr85	2
75104170	CRDR-AC-C5108-0980 Cr85	9.800	0.3858	10	95	142	40	Cr85	2
75104175	CRDR-AC-C5108-0990 Cr85	9.900	0.3898	10	95	142	40	Cr85	2
75104178	CRDR-AC-C5108-0992 Cr85	9.920	25/64	10	95	142	40	Cr85	2
75104180	CRDR-AC-C5108-1000 Cr85	10.000	0.3937	10	95	142	40	Cr85	2
75104185	CRDR-AC-C5108-1010 Cr85	10.100	0.3976	12	114	162	45	Cr85	2
75104190	CRDR-AC-C5108-1020 Cr85	10.200	0.4016	12	114	162	45	Cr85	2
75104195	CRDR-AC-C5108-1030 Cr85	10.300	0.4055	12	114	162	45	Cr85	2
75104198	CRDR-AC-C5108-1032 Cr85	10.320	13/32	12	114	162	45	Cr85	2
75104200	CRDR-AC-C5108-1040 Cr85	10.400	0.4094	12	114	162	45	Cr85	2
75104205	CRDR-AC-C5108-1050 Cr85	10.500	0.4134	12	114	162	45	Cr85	2
75104210	CRDR-AC-C5108-1060 Cr85	10.600	0.4173	12	114	162	45	Cr85	2
75104215	CRDR-AC-C5108-1070 Cr85	10.700	0.4213	12	114	162	45	Cr85	2
75104218	CRDR-AC-C5108-1072 Cr85	10.720	27/64	12	114	162	45	Cr85	2
75104220	CRDR-AC-C5108-1080 Cr85	10.800	0.4252	12	114	162	45	Cr85	2
75104225	CRDR-AC-C5108-1090 Cr85	10.900	0.4291	12	114	162	45	Cr85	2
75104230	CRDR-AC-C5108-1100 Cr85	11.000	0.4331	12	114	162	45	Cr85	2
75104235	CRDR-AC-C5108-1110 Cr85	11.100	0.4370	12	114	162	45	Cr85	2
75104238	CRDR-AC-C5108-1111 Cr85	11.110	7/16	12	114	162	45	Cr85	2
75104240	CRDR-AC-C5108-1120 Cr85	11.200	0.4409	12	114	162	45	Cr85	2
75104245	CRDR-AC-C5108-1130 Cr85	11.300	0.4449	12	114	162	45	Cr85	2
75104250	CRDR-AC-C5108-1140 Cr85	11.400	0.4488	12	114	162	45	Cr85	2
75104255	CRDR-AC-C5108-1150 Cr85	11.500	0.4528	12	114	162	45	Cr85	2
75104260	CRDR-AC-C5108-1160 Cr85	11.600	0.4567	12	114	162	45	Cr85	2
75104265	CRDR-AC-C5108-1170 Cr85	11.700	0.4606	12	114	162	45	Cr85	2
75104270	CRDR-AC-C5108-1180 Cr85	11.800	0.4646	12	114	162	45	Cr85	2
75104275	CRDR-AC-C5108-1190 Cr85	11.900	0.4685	12	114	162	45	Cr85	2
75104280	CRDR-AC-C5108-1200 Cr85	12.000	0.4724	12	114	162	45	Cr85	2
75104285	CRDR-AC-C5108-1250 Cr85	12.500	0.4921	14	133	178	45	Cr85	2
75104290	CRDR-AC-C5108-1280 Cr85	12.800	0.5039	14	133	178	45	Cr85	2
75104295	CRDR-AC-C5108-1300 Cr85	13.000	0.5118	14	133	178	45	Cr85	2
75104300	CRDR-AC-C5108-1350 Cr85	13.500	0.5315	14	133	178	45	Cr85	2
75104305	CRDR-AC-C5108-1380 Cr85	13.800	0.5433	14	133	178	45	Cr85	2
75104310	CRDR-AC-C5108-1400 Cr85	14.000	0.5512	14	133	178	45	Cr85	2
75104313	CRDR-AC-C5108-1429 Cr85	14.290	9/16	16	152	203	48	Cr85	2
75104315	CRDR-AC-C5108-1450 Cr85	14.500	0.5709	16	152	203	48	Cr85	2
75104318	CRDR-AC-C5108-1468 Cr85	14.680	37/64	16	152	203	48	Cr85	2
75104320	CRDR-AC-C5108-1480 Cr85	14.800	0.5827	16	152	203	48	Cr85	2
75104325	CRDR-AC-C5108-1500 Cr85	15.000	0.5906	16	152	203	48	Cr85	2
75104328	CRDR-AC-C5108-1508 Cr85	15.080	19/32	16	152	203	48	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

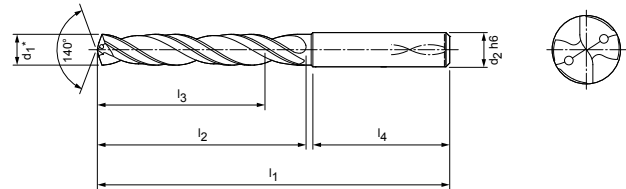
Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 2
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75104405	CRDR-AC-C5112-0300 Cr85	3.000	0.1181	6	54	92	36	Cr85	2
75104410	CRDR-AC-C5112-0310 Cr85	3.100	0.1220	6	54	92	36	Cr85	2
75104413	CRDR-AC-C5112-0318 Cr85	3.180	1/8	6	54	92	36	Cr85	2
75104415	CRDR-AC-C5112-0320 Cr85	3.200	0.1260	6	54	92	36	Cr85	2
75104420	CRDR-AC-C5112-0330 Cr85	3.300	0.1299	6	54	92	36	Cr85	2
75104425	CRDR-AC-C5112-0340 Cr85	3.400	0.1339	6	54	92	36	Cr85	2
75104430	CRDR-AC-C5112-0350 Cr85	3.500	0.1378	6	54	92	36	Cr85	2
75104433	CRDR-AC-C5112-0357 Cr85	3.570	9/64	6	54	92	36	Cr85	2
75104435	CRDR-AC-C5112-0360 Cr85	3.600	0.1417	6	54	92	36	Cr85	2
75104440	CRDR-AC-C5112-0370 Cr85	3.700	0.1457	6	54	92	36	Cr85	2
75104445	CRDR-AC-C5112-0380 Cr85	3.800	0.1496	6	64	102	36	Cr85	2
75104450	CRDR-AC-C5112-0390 Cr85	3.900	0.1535	6	64	102	36	Cr85	2
75104453	CRDR-AC-C5112-0397 Cr85	3.970	5/32	6	64	102	36	Cr85	2
75104455	CRDR-AC-C5112-0400 Cr85	4.000	0.1575	6	64	102	36	Cr85	2
75104460	CRDR-AC-C5112-0410 Cr85	4.100	0.1614	6	64	102	36	Cr85	2
75104465	CRDR-AC-C5112-0420 Cr85	4.200	0.1654	6	64	102	36	Cr85	2
75104470	CRDR-AC-C5112-0430 Cr85	4.300	0.1693	6	64	102	36	Cr85	2
75104473	CRDR-AC-C5112-0437 Cr86	4.370	11/64	6	64	102	36	Cr85	2
75104475	CRDR-AC-C5112-0440 Cr85	4.400	0.1732	6	64	102	36	Cr85	2
75104480	CRDR-AC-C5112-0450 Cr85	4.500	0.1772	6	64	102	36	Cr85	2
75104485	CRDR-AC-C5112-0460 Cr85	4.600	0.1811	6	64	102	36	Cr85	2
75104490	CRDR-AC-C5112-0470 Cr85	4.700	0.1850	6	64	102	36	Cr85	2
75104493	CRDR-AC-C5112-0476 Cr85	4.760	3/16	6	78	116	36	Cr85	2
75104495	CRDR-AC-C5112-0480 Cr85	4.800	0.1890	6	78	116	36	Cr85	2
75104500	CRDR-AC-C5112-0490 Cr85	4.900	0.1929	6	78	116	36	Cr85	2
75104505	CRDR-AC-C5112-0500 Cr85	5.000	0.1969	6	78	116	36	Cr85	2
75104510	CRDR-AC-C5112-0510 Cr85	5.100	0.2031	6	78	116	36	Cr85	2
75104513	CRDR-AC-C5112-0516 Cr85	5.160	13/64	6	78	116	36	Cr85	2
75104515	CRDR-AC-C5112-0520 Cr85	5.200	0.2047	6	78	116	36	Cr85	2
75104520	CRDR-AC-C5112-0530 Cr85	5.300	0.2087	6	78	116	36	Cr85	2
75104525	CRDR-AC-C5112-0540 Cr85	5.400	0.2126	6	78	116	36	Cr85	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75104530	CRDR-AC-C5112-0550 Cr85	5.500	0.2165	6	78	116	36	Cr85	2
75104533	CRDR-AC-C5112-0556 Cr85	5.560	7/32	6	78	116	36	Cr85	2
75104535	CRDR-AC-C5112-0560 Cr85	5.600	0.2205	6	78	116	36	Cr85	2
75104540	CRDR-AC-C5112-0570 Cr85	5.700	0.2244	6	78	116	36	Cr85	2
75104545	CRDR-AC-C5112-0580 Cr85	5.800	0.2283	6	78	116	36	Cr85	2
75104550	CRDR-AC-C5112-0590 Cr85	5.900	0.2323	6	78	116	36	Cr85	2
75104553	CRDR-AC-C5112-0595 Cr85	5.950	15/64	6	78	116	36	Cr85	2
75104555	CRDR-AC-C5112-0600 Cr85	6.000	0.2362	6	78	116	36	Cr85	2
75104560	CRDR-AC-C5112-0610 Cr85	6.100	0.2402	8	108	146	36	Cr85	2
75104565	CRDR-AC-C5112-0620 Cr85	6.200	0.2441	8	108	146	36	Cr85	2
75104570	CRDR-AC-C5112-0630 Cr85	6.300	0.2480	8	108	146	36	Cr85	2
75104573	CRDR-AC-C5112-0635 Cr85	6.350	1/4	8	108	146	36	Cr85	2
75104575	CRDR-AC-C5112-0640 Cr85	6.400	0.2520	8	108	146	36	Cr85	2
75104580	CRDR-AC-C5112-0650 Cr85	6.500	0.2559	8	108	146	36	Cr85	2
75104585	CRDR-AC-C5112-0660 Cr85	6.600	0.2598	8	108	146	36	Cr85	2
75104590	CRDR-AC-C5112-0670 Cr85	6.700	0.2638	8	108	146	36	Cr85	2
75104593	CRDR-AC-C5112-0675 Cr85	6.750	17/64	8	108	146	36	Cr85	2
75104595	CRDR-AC-C5112-0680 Cr85	6.800	0.2677	8	108	146	36	Cr85	2
75104600	CRDR-AC-C5112-0690 Cr85	6.900	0.2717	8	108	146	36	Cr85	2
75104605	CRDR-AC-C5112-0700 Cr85	7.000	0.2756	8	108	146	36	Cr85	2
75104610	CRDR-AC-C5112-0710 Cr85	7.100	0.2795	8	108	146	36	Cr85	2
75104613	CRDR-AC-C5112-0714 Cr85	7.140	9/32	8	108	146	36	Cr85	2
75104615	CRDR-AC-C5112-0720 Cr85	7.200	0.2835	8	108	146	36	Cr85	2
75104620	CRDR-AC-C5112-0730 Cr85	7.300	0.2874	8	108	146	36	Cr85	2
75104625	CRDR-AC-C5112-0740 Cr85	7.400	0.2913	8	108	146	36	Cr85	2
75104630	CRDR-AC-C5112-0750 Cr85	7.500	0.2953	8	108	146	36	Cr85	2
75104633	CRDR-AC-C5112-0754 Cr85	7.540	19/64	8	108	146	36	Cr85	2
75104635	CRDR-AC-C5112-0760 Cr85	7.600	0.2992	8	108	146	36	Cr85	2
75104640	CRDR-AC-C5112-0770 Cr85	7.700	0.3031	8	108	146	36	Cr85	2
75104645	CRDR-AC-C5112-0780 Cr85	7.800	0.3071	8	108	146	36	Cr85	2
75104650	CRDR-AC-C5112-0790 Cr85	7.900	0.3110	8	108	146	36	Cr85	2
75104653	CRDR-AC-C5112-0794 Cr85	7.940	5/16	8	108	146	36	Cr85	2
75104655	CRDR-AC-C5112-0800 Cr85	8.000	0.3150	8	108	146	36	Cr85	2
75104660	CRDR-AC-C5112-0810 Cr85	8.100	0.3189	10	120	162	40	Cr85	2
75104665	CRDR-AC-C5112-0820 Cr85	8.200	0.3228	10	120	162	40	Cr85	2
75104670	CRDR-AC-C5112-0830 Cr85	8.300	0.3268	10	120	162	40	Cr85	2
75104673	CRDR-AC-C5112-0833 Cr85	8.330	21/64	10	120	162	40	Cr85	2
75104675	CRDR-AC-C5112-0840 Cr85	8.400	0.3307	10	120	162	40	Cr85	2
75104680	CRDR-AC-C5112-0850 Cr85	8.500	0.3346	10	120	162	40	Cr85	2
75104685	CRDR-AC-C5112-0860 Cr85	8.600	0.3386	10	120	162	40	Cr85	2
75104690	CRDR-AC-C5112-0870 Cr85	8.700	0.3425	10	120	162	40	Cr85	2
75104693	CRDR-AC-C5112-0873 Cr85	8.730	11/32	10	120	162	40	Cr85	2
75104695	CRDR-AC-C5112-0880 Cr85	8.800	0.3465	10	120	162	40	Cr85	2
75104700	CRDR-AC-C5112-0890 Cr85	8.900	0.3504	10	120	162	40	Cr85	2
75104705	CRDR-AC-C5112-0900 Cr85	9.000	0.3543	10	120	162	40	Cr85	2
75104710	CRDR-AC-C5112-0910 Cr85	9.100	0.3583	10	120	162	40	Cr85	2
75104713	CRDR-AC-C5112-0913 Cr85	9.130	23/64	10	120	162	40	Cr85	2
75104715	CRDR-AC-C5112-0920 Cr85	9.200	0.3622	10	120	162	40	Cr85	2
75104720	CRDR-AC-C5112-0930 Cr85	9.300	0.3661	10	120	162	40	Cr85	2












EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75104725	CRDR-AC-C5112-0940 Cr85	9.400	0.3701	10	120	162	40	Cr85	2
75104730	CRDR-AC-C5112-0950 Cr85	9.500	0.3740	10	120	162	40	Cr85	2
75104733	CRDR-AC-C5112-0953 Cr85	9.530	3/8	10	120	162	40	Cr85	2
75104735	CRDR-AC-C5112-0960 Cr85	9.600	0.3780	10	120	162	40	Cr85	2
75104740	CRDR-AC-C5112-0970 Cr85	9.700	0.3819	10	120	162	40	Cr85	2
75104745	CRDR-AC-C5112-0980 Cr85	9.800	0.3858	10	120	162	40	Cr85	2
75104750	CRDR-AC-C5112-0990 Cr85	9.900	0.3898	10	120	162	40	Cr85	2
75104753	CRDR-AC-C5112-0992 Cr85	9.920	25/64	10	120	162	40	Cr85	2
75104755	CRDR-AC-C5112-1000 Cr85	10.000	0.3937	10	120	162	40	Cr85	2
75104760	CRDR-AC-C5112-1010 Cr85	10.100	0.3976	12	156	204	45	Cr85	2
75104765	CRDR-AC-C5112-1020 Cr85	10.200	0.4016	12	156	204	45	Cr85	2
75104770	CRDR-AC-C5112-1030 Cr85	10.300	0.4055	12	156	204	45	Cr85	2
75104773	CRDR-AC-C5112-1032 Cr85	10.320	13/32	12	156	204	45	Cr85	2
75104775	CRDR-AC-C5112-1040 Cr85	10.400	0.4094	12	156	204	45	Cr85	2
75104780	CRDR-AC-C5112-1050 Cr85	10.500	0.4134	12	156	204	45	Cr85	2
75104785	CRDR-AC-C5112-1060 Cr85	10.600	0.4173	12	156	204	45	Cr85	2
75104790	CRDR-AC-C5112-1070 Cr85	10.700	0.4213	12	156	204	45	Cr85	2
75104793	CRDR-AC-C5112-1072 Cr85	10.720	27/64	12	156	204	45	Cr85	2
75104795	CRDR-AC-C5112-1080 Cr85	10.800	0.4252	12	156	204	45	Cr85	2
75104800	CRDR-AC-C5112-1090 Cr85	10.900	0.4291	12	156	204	45	Cr85	2
75104805	CRDR-AC-C5112-1100 Cr85	11.000	0.4331	12	156	204	45	Cr85	2
75104810	CRDR-AC-C5112-1110 Cr85	11.100	0.4370	12	156	204	45	Cr85	2
75104813	CRDR-AC-C5112-1111 Cr85	11.110	7/16	12	156	204	45	Cr85	2
75104815	CRDR-AC-C5112-1120 Cr85	11.200	0.4409	12	156	204	45	Cr85	2
75104820	CRDR-AC-C5112-1130 Cr85	11.300	0.4449	12	156	204	45	Cr85	2
75104825	CRDR-AC-C5112-1140 Cr85	11.400	0.4488	12	156	204	45	Cr85	2
75104830	CRDR-AC-C5112-1150 Cr85	11.500	0.4528	12	156	204	45	Cr85	2
75104835	CRDR-AC-C5112-1160 Cr85	11.600	0.4567	12	156	204	45	Cr85	2
75104840	CRDR-AC-C5112-1170 Cr85	11.700	0.4606	12	156	204	45	Cr85	2
75104845	CRDR-AC-C5112-1180 Cr85	11.800	0.4646	12	156	204	45	Cr85	2
75104850	CRDR-AC-C5112-1190 Cr85	11.900	0.4685	12	156	204	45	Cr85	2
75104855	CRDR-AC-C5112-1200 Cr85	12.000	0.4724	12	156	204	45	Cr85	2
75104860	CRDR-AC-C5112-1250 Cr85	12.500	0.4921	14	182	230	45	Cr85	2
75104865	CRDR-AC-C5112-1280 Cr85	12.800	0.5039	14	182	230	45	Cr85	2
75104870	CRDR-AC-C5112-1300 Cr85	13.000	0.5118	14	182	230	45	Cr85	2
75104875	CRDR-AC-C5112-1350 Cr85	13.500	0.5315	14	182	230	45	Cr85	2
75104880	CRDR-AC-C5112-1380 Cr85	13.800	0.5433	14	182	230	45	Cr85	2
75104885	CRDR-AC-C5112-1400 Cr85	14.000	0.5512	14	182	230	45	Cr85	2
75104888	CRDR-AC-C5112-1429 Cr85	14.290	9/16	16	208	260	48	Cr85	2
75104890	CRDR-AC-C5112-1450 Cr85	14.500	0.5709	16	208	260	48	Cr85	2
75104893	CRDR-AC-C5112-1468 Cr85	14.680	37/64	16	208	260	48	Cr85	2
75104895	CRDR-AC-C5112-1480 Cr85	14.800	0.5827	16	208	260	48	Cr85	2
75104900	CRDR-AC-C5112-1500 Cr85	15.000	0.5906	16	208	260	48	Cr85	2
75104903	8CRDR-AC-C5112-1508 Cr85	15.080	19/32	16	208	260	48	Cr85	2

CONCENTRICITY-C5000		Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm2)		Product model description						Recommended feed (f) for diameter ranges											
				C5105 (5 x d)		C5108 (8 x d)		C5112 (12 x d)		0.118-0.197 in 3 to 5 mm		0.197-0.316 in 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm			
				SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev		
Work Material	HRC	BHN	N/mm2	262-328	80-100	262-328	80-100	262-328	80-100	262-328	80-100	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.007-.012	0.18-0.30	.008-.012	0.20-0.35	.010-.016	0.25-0.40
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	230-295	70-90	230-295	70-90	230-295	70-90	230-295	70-90	.004-.007 .004-.008	0.10-0.18 0.10-0.18 0.10-0.20	.006-.010 .006-.011	0.15-0.25 0.15-0.28	.007-.012 .007-.014	0.18-0.30 0.18-0.35	.008-.012 .008-.015	0.20-0.35 0.20-0.38	.010-.016 .010-.016 .010-.017	0.25-0.40 0.25-0.40 0.25-0.42
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	197-230	60-70	197-230	60-70	197-230	60-70	197-230	60-70	.004-.008 .004-.006 .004-.006	0.10-0.20 0.10-0.15 0.10-0.15	.006-.011 .005-.008 .005-.008	0.15-0.28 0.12-0.20 0.12-0.20	.007-.014 .005-.010 .005-.010	0.18-0.35 0.14-0.25 0.14-0.25	.008-.015 .006-.012 .006-.012	0.20-0.38 0.16-0.30 0.16-0.30	0.10-.017 .007-.013 .007-.013	0.25-0.42 0.18-0.32 0.18-0.32
Stainless steel moderate 17-4PH, 15-5PH, 316L																					
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2																					
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	230-295	70-90	230-295	70-90	230-295	70-90	230-295	70-90	.006-.010 .006-.010 .006-.010	0.15-0.25 0.15-0.25 0.12-0.20	.008-.014 .008-.014 .006-.010	0.20-0.35 0.20-0.35 0.15-0.25	.010-.018 .010-.018 .008-.014	0.25-0.45 0.25-0.45 0.20-0.35	.012-.020 .012-.020 .010-.016	0.30-0.50 0.30-0.50 0.25-0.40	.014-.022 .014-.022 .012-.018	0.35-0.55 0.35-0.55 0.30-0.45
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	246-295	75-90	246-295	75-90	246-295	75-90	246-295	75-90	.004-.008 .003-.006	0.10-0.20 0.08-0.15	.005-.010 .004-.008	0.12-0.25 0.10-0.20	.008-.014 .007-.012	0.20-0.35 0.18-0.30	.012-.016 .010-.014	0.30-0.40 0.25-0.35	.014-.020 .012-.016	0.35-0.50 0.30-0.40
Aluminum (Si content > 10%) 6061, 2025, 208, 360																					
Aluminum (Si content < 10%) 413, 385, A390																					
Copper, brass, bronze beryllium copper, naval brass, AMPCO																					
Titanium alloy TiAAV																					
High temperature alloy Inconel, haynes, waspaloy, hastelloy																					
Chilled cast iron	38-48	350-450	1173-1527																		
Hardened steel 50-60 HRC	50-55 56-60 61-65		1614-1870																		

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.0mm reduce cutting speed by 20-30%

HIGH PRECISION C6000 SERIES

- ⊙ Reliable machining and optimal guiding are key features of tools for drilling. With the HIGH PRECISION series, CROMSON offers a drill technology that optimally combines these tasks in one tool in a special manner
- ⊙ With a total of four (4) cutting edges and two (2) guiding chamfers, considerably higher performance and very good bore quality are achieved with the HIGH PRECISION concept
- ⊙ The HIGH PRECISION can be used both for drilling solid material and also for gun boring
- ⊙ During this process two solid cutting edges and two gun boring cutting edges machine the material. The surface finish qualities achieved as well as the concentricity and a high level of dimensional consistency guarantee the best results

Work Material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			C6100
	HRc	BHN	N/mm2	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 - over 24	up to 200 up to 250 - over 2050	up to 680 up to 850 - over 850	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	
Aluminum (Si content >10%) 6061, 2025, 208.360				
Aluminum (Si content <10%) 413, 385, A390				
Titanium alloy TiAl4V				
High temperature alloy, inconel, haynes, waspaloy, hastelloy				



Highly recommended



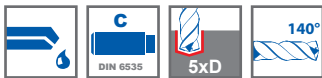
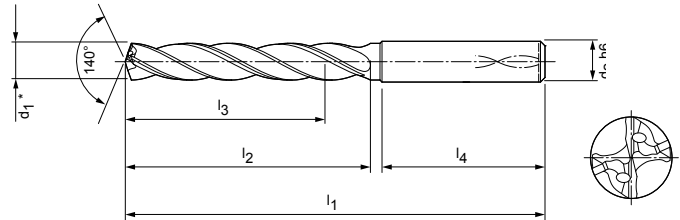
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

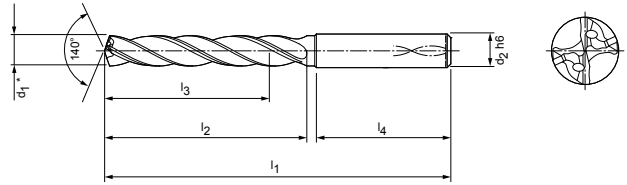
Tool Diameter Range 0.2362-0.7874 in
6.00-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 4
Number of margins 2
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75104980	CRDR-AC-C6105-0600 Cr85	6.000	0.2362	6	44	82	36	Cr85	4
75104985	CRDR-AC-C6105-0610 Cr85	6.100	0.2402	8	53	91	36	Cr85	4
75104990	CRDR-AC-C6105-0620 Cr85	6.200	0.2441	8	53	91	36	Cr85	4
75104995	CRDR-AC-C6105-0630 Cr85	6.300	0.2480	8	53	91	36	Cr85	4
75104998	CRDR-AC-C6105-0635 Cr85	6.350	1/4	8	53	91	36	Cr85	4
75105000	CRDR-AC-C6105-0640 Cr85	6.400	0.2520	8	53	91	36	Cr85	4
75105005	CRDR-AC-C6105-0650 Cr85	6.500	0.2559	8	53	91	36	Cr85	4
75105010	CRDR-AC-C6105-0660 Cr85	6.600	0.2598	8	53	91	36	Cr85	4
75105015	CRDR-AC-C6105-0670 Cr85	6.700	0.2638	8	53	91	36	Cr85	4
75105018	CRDR-AC-C6105-0675 Cr85	6.750	17/64	8	53	91	36	Cr85	4
75105020	CRDR-AC-C6105-0680 Cr85	6.800	0.2677	8	53	91	36	Cr85	4
75105025	CRDR-AC-C6105-0690 Cr85	6.900	0.2717	8	53	91	36	Cr85	4
75105030	CRDR-AC-C6105-0700 Cr85	7.000	0.2756	8	53	91	36	Cr85	4
75105035	CRDR-AC-C6105-0710 Cr85	7.100	0.2795	8	53	91	36	Cr85	4
75105038	CRDR-AC-C6105-0714 Cr85	7.140	9/32	8	53	91	36	Cr85	4
75105040	CRDR-AC-C6105-0720 Cr85	7.200	0.2835	8	53	91	36	Cr85	4
75105045	CRDR-AC-C6105-0730 Cr85	7.300	0.2874	8	53	91	36	Cr85	4
75105050	CRDR-AC-C6105-0740 Cr85	7.400	0.2913	8	53	91	36	Cr85	4
75105055	CRDR-AC-C6105-0750 Cr85	7.500	0.2953	8	53	91	36	Cr85	4
75105058	CRDR-AC-C6105-0754 Cr85	7.540	19/64	8	53	91	36	Cr85	4
75105060	CRDR-AC-C6105-0760 Cr85	7.600	0.2992	8	53	91	36	Cr85	4
75105065	CRDR-AC-C6105-0770 Cr85	7.700	0.3031	8	53	91	36	Cr85	4
75105070	CRDR-AC-C6105-0780 Cr85	7.800	0.3071	8	53	91	36	Cr85	4
75105075	CRDR-AC-C6105-0790 Cr85	7.900	0.3110	8	53	91	36	Cr85	4
75105078	CRDR-AC-C6105-0794 Cr85	7.940	5/16	8	53	91	36	Cr85	4
75105080	CRDR-AC-C6105-0800 Cr85	8.000	0.3150	8	53	91	36	Cr85	4
75105085	CRDR-AC-C6105-0810 Cr85	8.100	0.3189	10	61	103	40	Cr85	4
75105090	CRDR-AC-C6105-0820 Cr85	8.200	0.3228	10	61	103	40	Cr85	4
75105095	CRDR-AC-C6105-0830 Cr85	8.300	0.3268	10	61	103	40	Cr85	4
75105098	CRDR-AC-C6105-0833 Cr85	8.330	21/64	10	61	103	40	Cr85	4
75105100	CRDR-AC-C6105-0840 Cr85	8.400	0.3307	10	61	103	40	Cr85	4

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (2)	OAL (1)	Shank length (4)	Cromson Grade	# Flutes
75105105	CRDR-AC-C6105-0850 Cr85	8.500	0.3346	10	61	103	40	Cr85	4
75105110	CRDR-AC-C6105-0860 Cr85	8.600	0.3386	10	61	103	40	Cr85	4
75105115	CRDR-AC-C6105-0870 Cr85	8.700	0.3425	10	61	103	40	Cr85	4
75105118	CRDR-AC-C6105-0873 Cr85	8.730	11/32	10	61	103	40	Cr85	4
75105120	CRDR-AC-C6105-0880 Cr85	8.800	0.3465	10	61	103	40	Cr85	4
75105125	CRDR-AC-C6105-0890 Cr85	8.900	0.3504	10	61	103	40	Cr85	4
75105130	CRDR-AC-C6105-0900 Cr85	9.000	0.3543	10	61	103	40	Cr85	4
75105135	CRDR-AC-C6105-0910 Cr85	9.100	0.3583	10	61	103	40	Cr85	4
75105138	CRDR-AC-C6105-0913 Cr85	9.130	23/64	10	61	103	40	Cr85	4
75105140	CRDR-AC-C6105-0920 Cr85	9.200	0.3622	10	61	103	40	Cr85	4
75105145	CRDR-AC-C6105-0930 Cr85	9.300	0.3661	10	61	103	40	Cr85	4
75105150	CRDR-AC-C6105-0940 Cr85	9.400	0.3701	10	61	103	40	Cr85	4
75105155	CRDR-AC-C6105-0950 Cr85	9.500	0.3740	10	61	103	40	Cr85	4
75105158	CRDR-AC-C6105-0953 Cr85	9.530	3/8	10	61	103	40	Cr85	4
75105160	CRDR-AC-C6105-0960 Cr85	9.600	0.3780	10	61	103	40	Cr85	4
75105165	CRDR-AC-C6105-0970 Cr85	9.700	0.3819	10	61	103	40	Cr85	4
75105170	CRDR-AC-C6105-0980 Cr85	9.800	0.3858	10	61	103	40	Cr85	4
75105175	CRDR-AC-C6105-0990 Cr85	9.900	0.3898	10	61	103	40	Cr85	4
75105178	CRDR-AC-C6105-0992 Cr85	9.920	25/64	10	61	103	40	Cr85	4
75105180	CRDR-AC-C6105-1000 Cr85	10.000	0.3937	10	61	103	40	Cr85	4
75105185	CRDR-AC-C6105-1010 Cr85	10.100	0.3976	12	71	118	45	Cr85	4
75105190	CRDR-AC-C6105-1020 Cr85	10.200	0.4016	12	71	118	45	Cr85	4
75105195	CRDR-AC-C6105-1030 Cr85	10.300	0.4055	12	71	118	45	Cr85	4
75105198	CRDR-AC-C6105-1032 Cr85	10.320	13/32	12	71	118	45	Cr85	4
75105200	CRDR-AC-C6105-1040 Cr85	10.400	0.4094	12	71	118	45	Cr85	4
75105205	CRDR-AC-C6105-1050 Cr85	10.500	0.4134	12	71	118	45	Cr85	4
75105210	CRDR-AC-C6105-1060 Cr85	10.600	0.4173	12	71	118	45	Cr85	4
75105215	CRDR-AC-C6105-1070 Cr85	10.700	0.4213	12	71	118	45	Cr85	4
75105218	CRDR-AC-C6105-1072 Cr85	10.720	27/64	12	71	118	45	Cr85	4
75105220	CRDR-AC-C6105-1080 Cr85	10.800	0.4252	12	71	118	45	Cr85	4
75105225	CRDR-AC-C6105-1090 Cr85	10.900	0.4291	12	71	118	45	Cr85	4
75105230	CRDR-AC-C6105-1100 Cr85	11.000	0.4331	12	71	118	45	Cr85	4
75105235	CRDR-AC-C6105-1110 Cr85	11.100	0.4370	12	71	118	45	Cr85	4
75105238	CRDR-AC-C6105-1111 Cr85	11.110	7/16	12	71	118	45	Cr85	4
75105240	CRDR-AC-C6105-1120 Cr85	11.200	0.4409	12	71	118	45	Cr85	4
75105245	CRDR-AC-C6105-1130 Cr85	11.300	0.4449	12	71	118	45	Cr85	4
75105250	CRDR-AC-C6105-1140 Cr85	11.400	0.4488	12	71	118	45	Cr85	4
75105255	CRDR-AC-C6105-1150 Cr85	11.500	0.4528	12	71	118	45	Cr85	4
75105260	CRDR-AC-C6105-1160 Cr85	11.600	0.4567	12	71	118	45	Cr85	4
75105265	CRDR-AC-C6105-1170 Cr85	11.700	0.4606	12	71	118	45	Cr85	4
75105270	CRDR-AC-C6105-1180 Cr85	11.800	0.4646	12	71	118	45	Cr85	4
75105275	CRDR-AC-C6105-1190 Cr85	11.900	0.4685	12	71	118	45	Cr85	4
75105280	CRDR-AC-C6105-1200 Cr85	12.000	0.4724	12	71	118	45	Cr85	4
75105285	CRDR-AC-C6105-1250 Cr85	12.500	0.4921	14	77	124	45	Cr85	4
75105290	CRDR-AC-C6105-1300 Cr85	13.000	0.5118	14	77	124	45	Cr85	4
75105295	CRDR-AC-C6105-1350 Cr85	13.500	0.5315	14	77	124	45	Cr85	4
75105300	CRDR-AC-C6105-1380 Cr85	13.800	0.5433	14	77	124	45	Cr85	4
75105305	CRDR-AC-C6105-1400 Cr85	14.000	0.5512	14	77	124	45	Cr85	4
75105308	CRDR-AC-C6105-1429 Cr85	14.290	9/16	16	83	133	48	Cr85	4



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75105310	CRDR-AC-C6105-1450 Cr85	14.500	0.5709	16	83	133	48	Cr85	4
75105313	CRDR-AC-C6105-1468 Cr85	14.680	37/64	16	83	133	48	Cr85	4
75105315	CRDR-AC-C6105-1500 Cr85	15.000	0.5906	16	83	133	48	Cr85	4
75105318	CRDR-AC-C6105-1508 Cr85	15.080	19/32	16	83	133	48	Cr85	4
75105320	CRDR-AC-C6105-1550 Cr85	15.500	0.6102	16	83	133	48	Cr85	4
75105325	CRDR-AC-C6105-1580 Cr85	15.800	0.6220	16	83	133	48	Cr85	4
75105328	CRDR-AC-C6105-1588 Cr85	15.880	5/8	16	83	133	48	Cr85	4
75105330	CRDR-AC-C6105-1600 Cr85	16.000	0.6299	16	83	133	48	Cr85	4
75105335	CRDR-AC-C6105-1650 Cr85	16.500	0.6496	18	93	143	48	Cr85	4
75105338	CRDR-AC-C6105-1667 Cr85	16.670	21/32	18	93	143	48	Cr85	4
75105340	CRDR-AC-C6105-1700 Cr85	17.000	0.6693	18	93	143	48	Cr85	4
75105343	CRDR-AC-C6105-1746 Cr85	17.460	11/16	18	93	143	48	Cr85	4
75105344	CRDR-AC-C6105-1786 Cr85	17.860	45/64	18	93	143	48	Cr85	4
75105345	CRDR-AC-C6105-1800 Cr85	18.000	0.7087	18	93	143	48	Cr85	4
75105348	CRDR-AC-C6105-1826 Cr85	18.260	23/32	20	101	153	50	Cr85	4
75105350	CRDR-AC-C6105-1850 Cr85	18.500	0.7283	20	101	153	50	Cr85	4
75105355	CRDR-AC-C6105-1880 Cr85	18.800	0.7402	20	101	153	50	Cr85	4
75105360	CRDR-AC-C6105-1900 Cr85	19.000	0.7480	20	101	153	50	Cr85	4
75105363	CRDR-AC-C6105-1905 Cr85	19.050	3/4	20	101	153	50	Cr85	4
75105365	CRDR-AC-C6105-1950 Cr85	19.500	0.7677	20	101	153	50	Cr85	4
75105370	CRDR-AC-C6105-2000 Cr85	20.000	0.7874	20	101	153	50	Cr85	4






HIGH PRECISION-C6000		Recommended feed (f) for diameter ranges														
		Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm ²)		Product model description C6105 (5 x d)		0.118-0.197 in 3 to 5 mm		0.197-0.316 in 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm		
		HRC	BHN	N/mm ²	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Work Material																
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700													
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000													
Stainless steel moderate 17-4PH, 15-5PH, 316L																
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2																
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	230-295 197-262 197-230	70-90 60-80 60-70											
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	246-295 213-262	75-90 65-80											
Aluminum (Si content >10%) 6061, 2025, 208, 360				295-984	90-300											
Aluminum (Si content <10%) 413, 385, A390				328-1312	100-400											
Copper, brass, bronze beryllium copper, naval brass, AMPCO				230-984	230-984											
Titanium alloy TiAl4V																
High temperature alloy inconel, haynes, waspaloy, hastelloy																
Chilled cast iron	38-48	350-450	1173-1527													
Hardened steel 50-60 HRC	50-55 56-60 61-65	1614-1870														

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.00mm reduce cutting speed by 20-30%

CARBIDE DRILL

DRILLREAM C7000 SERIES

- ⊙ The NEW DRILLREAM from CROMSON combines two operations into one tool: drilling and reaming
- ⊙ Bores can be machined with this series quicker and more efficiently without having to lose reaming quality
- ⊙ Optimization and rationalisation are always prime at CROMSON and by using DRILLREAM on machining centers, productivity is increased and down-time is reduced.
- ⊙ The DRILLREAM features our Cr85 Coating, a new PVD AlTiN+ as standard, a unique technology
- ⊙ Two (2) drilling flutes first machine into the solid material while the four (4) reaming flutes carry out the finish machining and guarantee a quality surface finish, dimensional stability and roundness
- ⊙ Despite the larger number of flutes and guide chamfers, the DRILLREAM can be reground easily while maintaining its high precision qualities
- ⊙ These tools can be used for numerous applications, for example location bores in cylinder heads, crank cases or trasmission housing...
- ⊙ The applications possible with this tool are endless, only limited by user experience and adaptability

Work Material	Hardness Rockwell (HRc) Hardness Brinell (BHN) Tensile Strength (N/mm2)			C7100
	HRc	BHN	N/mm2	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 - over 15	up to 178 up to 205 - over 205	up to 600 up to 700 - over 700	
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 - over 24	up to 200 up to 250 - over 2050	up to 680 up to 850 - over 850	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	
Aluminum (Si content <10%) 413, 385, A390				
Copper, brass, bronze beryllium copper, naval brass, AMPCO				



Highly recommended

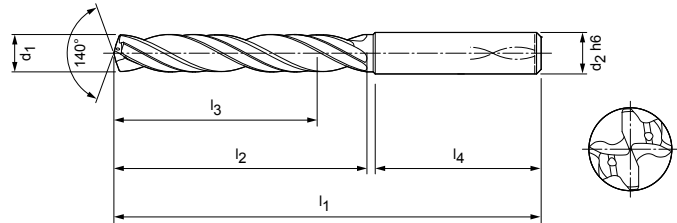


Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range	0.2350-0.6299 in 5.97-16.00 mm
Bore tolerance	+/- 0.003 mm (0.00012 in) std.
Shank form	Cyl. (DIN 6535)
Number of flutes	2
Number of margins	4
Point geometry	Special point
Point angle	140°
Helix angle	30°
Coolant	Internal

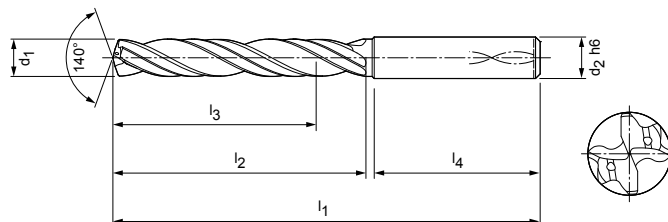


EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75105375	CRDR-SF-C7103-0597 ±0.003 Cr85	5.970	0.2350	6	34	79	36	Cr85	2
75105380	CRDR-SF-C7103-0598 ±0.003 Cr85	5.980	0.2354	6	34	79	36	Cr85	2
75105385	CRDR-SF-C7103-0599 ±0.003 Cr85	5.990	0.2358	6	34	79	36	Cr85	2
75105390	CRDR-SF-C7103-0600 ±0.003 Cr85	6.000	0.2362	6	34	79	36	Cr85	2
75105395	CRDR-SF-C7103-0601 ±0.003 Cr85	6.010	0.2366	6	34	79	36	Cr85	2
75105400	CRDR-SF-C7103-0602 ±0.003 Cr85	6.020	0.2370	6	34	79	36	Cr85	2
75105405	CRDR-SF-C7103-0632 ±0.003 Cr85	6.320	0.2488	8	34	79	36	Cr85	2
75105410	CRDR-SF-C7103-0633 ±0.003 Cr85	6.330	0.2492	8	34	79	36	Cr85	2
75105415	CRDR-SF-C7103-0634 ±0.003 Cr85	6.340	0.2496	8	34	79	36	Cr85	2
75105420	CRDR-SF-C7103-0635 ±0.003 Cr85	6.350	0.2500	8	34	79	36	Cr85	2
75105425	CRDR-SF-C7103-0636 ±0.003 Cr85	6.360	0.2504	8	34	79	36	Cr85	2
75105430	CRDR-SF-C7103-0637 ±0.003 Cr85	6.370	0.2508	8	34	79	36	Cr85	2
75105435	CRDR-SF-C7103-0797 ±0.003 Cr85	7.970	0.3138	8	34	79	36	Cr85	2
75105440	CRDR-SF-C7103-0798 ±0.003 Cr85	7.980	0.3142	8	34	79	36	Cr85	2
75105445	CRDR-SF-C7103-0799 ±0.003 Cr85	7.990	0.3146	8	34	79	36	Cr85	2
75105450	CRDR-SF-C7103-0800 ±0.003 Cr85	8.000	0.3150	8	34	79	36	Cr85	2
75105455	CRDR-SF-C7103-0801 ±0.003 Cr85	8.010	0.3154	8	34	79	36	Cr85	2
75105460	CRDR-SF-C7103-0802 ±0.003 Cr85	8.020	0.3157	8	34	79	36	Cr85	2
75105465	CRDR-SF-C7103-0948 ±0.003 Cr85	9.480	0.3732	10	47	89	40	Cr85	2
75105470	CRDR-SF-C7103-0949 ±0.003 Cr85	9.490	0.3736	10	47	89	40	Cr85	2
75105475	CRDR-SF-C7103-0950 ±0.003 Cr85	9.500	0.3740	10	47	89	40	Cr85	2
75105480	CRDR-SF-C7103-0952 ±0.003 Cr85	9.520	0.3748	10	47	89	40	Cr85	2
75105485	CRDR-SF-C7103-0953 ±0.003 Cr85	9.530	0.3750	10	47	89	40	Cr85	2
75105490	CRDR-SF-C7103-0954 ±0.003 Cr85	9.540	0.3756	10	47	89	40	Cr85	2
75105495	CRDR-SF-C7103-0997 ±0.003 Cr85	9.970	0.3925	10	47	89	40	Cr85	2
75105500	CRDR-SF-C7103-0998 ±0.003 Cr85	9.980	0.3929	10	47	89	40	Cr85	2
75105505	CRDR-SF-C7103-0999 ±0.003 Cr85	9.990	0.3933	10	47	89	40	Cr85	2
75105510	CRDR-SF-C7103-1000 ±0.003 Cr85	10.000	0.3937	10	47	89	40	Cr85	2
75105515	CRDR-SF-C7103-1001 ±0.003 Cr85	10.010	0.3941	10	47	89	40	Cr85	2
75105520	CRDR-SF-C7103-1002 ±0.003 Cr85	10.020	0.3945	10	47	89	40	Cr85	2
75105525	CRDR-SF-C7103-1197 ±0.003 Cr85	11.970	0.4713	12	55	102	45	Cr85	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range	0.2350 - 0.6299 in 5.97 - 16.00 mm
Bore tolerance	+/- 0.003 mm (0.00012 in) std.
Shank form	Cyl. (DIN 6535)
Number of flutes	2
Number of margins	4
Point geometry	Special point
Point angle	140°
Helix angle	30°
Coolant	Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75105635	CRDR-SF-C7105-0597 ±0.003 Cr85	5.970	0.2350	6	53	91	36	Cr85	2
75105640	CRDR-SF-C7105-0598 ±0.003 Cr85	5.980	0.2354	6	53	91	36	Cr85	2
75105645	CRDR-SF-C7105-0599 ±0.003 Cr85	5.990	0.2358	6	53	91	36	Cr85	2
75105650	CRDR-SF-C7105-0600 ±0.003 Cr85	6.000	0.2362	6	53	91	36	Cr85	2
75105655	CRDR-SF-C7105-0601 ±0.003 Cr85	6.010	0.2366	6	53	91	36	Cr85	2
75105660	CRDR-SF-C7105-0602 ±0.003 Cr85	6.020	0.2370	6	53	91	36	Cr85	2
75105665	CRDR-SF-C7105-0632 ±0.003 Cr85	6.320	0.2488	8	53	91	36	Cr85	2
75105670	CRDR-SF-C7105-0633 ±0.003 Cr85	6.330	0.2492	8	53	91	36	Cr85	2
75105675	CRDR-SF-C7105-0634 ±0.003 Cr85	6.340	0.2496	8	53	91	36	Cr85	2
75105680	CRDR-SF-C7105-0635 ±0.003 Cr85	6.350	0.2500	8	53	91	36	Cr85	2
75105685	CRDR-SF-C7105-0636 ±0.003 Cr85	6.360	0.2504	8	53	91	36	Cr85	2
75105690	CRDR-SF-C7105-0637 ±0.003 Cr85	6.370	0.2508	8	53	91	36	Cr85	2
75105695	CRDR-SF-C7105-0797 ±0.003 Cr85	7.970	0.3138	8	53	91	36	Cr85	2
75105700	CRDR-SF-C7105-0798 ±0.003 Cr85	7.980	0.3142	8	53	91	36	Cr85	2
75105705	CRDR-SF-C7105-0799 ±0.003 Cr85	7.990	0.3146	8	53	91	36	Cr85	2
75105710	CRDR-SF-C7105-0800 ±0.003 Cr85	8.000	0.3150	8	53	91	36	Cr85	2
75105715	CRDR-SF-C7105-0801 ±0.003 Cr85	8.010	0.3154	8	53	91	36	Cr85	2
75105720	CRDR-SF-C7105-0802 ±0.003 Cr85	8.020	0.3157	8	53	91	36	Cr85	2
75105725	CRDR-SF-C7105-0948 ±0.003 Cr85	9.480	0.3732	10	61	103	40	Cr85	2
75105730	CRDR-SF-C7105-0949 ±0.003 Cr85	9.490	0.3736	10	61	103	40	Cr85	2
75105735	CRDR-SF-C7105-0950 ±0.003 Cr85	9.500	0.3740	10	61	103	40	Cr85	2
75105740	CRDR-SF-C7105-0952 ±0.003 Cr85	9.520	0.3748	10	61	103	40	Cr85	2
75105745	CRDR-SF-C7105-0953 ±0.003 Cr85	9.530	0.3750	10	61	103	40	Cr85	2
75105750	CRDR-SF-C7105-0954 ±0.003 Cr85	9.540	0.3756	10	61	103	40	Cr85	2
75105755	CRDR-SF-C7105-0997 ±0.003 Cr85	9.970	0.3925	10	61	103	40	Cr85	2
75105760	CRDR-SF-C7105-0998 ±0.003 Cr85	9.980	0.3929	10	61	103	40	Cr85	2
75105765	CRDR-SF-C7105-0999 ±0.003 Cr85	9.990	0.3933	10	61	103	40	Cr85	2
75105770	CRDR-SF-C7105-1000 ±0.003 Cr85	10.000	0.3937	10	61	103	40	Cr85	2
75105775	CRDR-SF-C7105-1001 ±0.003 Cr85	10.010	0.3941	10	61	103	40	Cr85	2
75105780	CRDR-SF-C7105-1002 ±0.003 Cr85	10.020	0.3945	10	61	103	40	Cr85	2
75105785	CRDR-SF-C7105-1197 ±0.003 Cr85	11.970	0.4713	12	71	118	45	Cr85	2



DRILLREAM-C7000		Product model description		Recommended feed (f) for diameter ranges													
				C7103 (3 x d)		C7105 (5 x d)		0.118-0.197 in 3 to 5 mm		0.197-0.316 in. 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm	
				SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Work Material	HRC	BHN	N/mm2	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm2)																	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700	262-328 230-295 197-262	80-100 70-90 60-80	262-328 230-295 197-262	80-100 70-90 60-80	.004-.007 .004-.007 .004-.008	0.10-0.18 0.10-0.18 0.10-0.20	.006-.010 .006-.010 .006-.011	0.15-0.25 0.15-0.25 0.15-0.28	.007-.012 .007-.012 .007-.014	0.18-0.30 0.18-0.30 0.18-0.35	.008-.012 .008-.012 .008-.015	0.20-0.35 0.20-0.35 0.20-0.38		
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000	197-230 131-197 131-164	60-70 40-60 40-50	197-230 131-197 131-164	60-70 40-60 40-50	.004-.008 .004-.006 .004-.006	0.10-0.20 0.10-0.15 0.10-0.15	.006-.011 .005-.008 .005-.008	0.15-0.28 0.12-0.20 0.12-0.20	.007-.014 .005-.010 .005-.010	0.18-0.35 0.14-0.25 0.14-0.25	.008-.015 .006-.012 .006-.012	0.20-0.38 0.16-0.30 0.16-0.30		
Stainless steel moderate 17-4PH, 15-5PH, 316L																	
Stainless and acid resistant steel (C-Ni-Alloys) 304, 316, 17CrNi16-2																	
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850	230-295 197-262 197-230	70-90 60-80 60-70	230-295 197-262 197-230	70-90 60-80 60-70	.006-.010 .006-.010 .005-.008	0.15-0.25 0.15-0.25 0.12-0.20	.008-.014 .008-.014 .006-.010	0.20-0.35 0.20-0.35 0.15-0.25	.010-.018 .010-.018 .008-.014	0.25-0.45 0.25-0.45 0.20-0.35	.012-.020 .012-.020 .010-.016	0.30-0.50 .030-0.50 0.25-0.40		
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	180-230 147-197	55-70 45-60	180-230 147-197	55-70 45-60	.004-.007 .003-.008	0.10-0.18 .010-.020	.006-.010 .006-.011	0.15-0.25 0.15-0.28	.007-.012 .007-.014	0.18-0.30 0.18-0.35	.008-.014 .008-.015	0.20-0.35 0.20-0.38		
Aluminum (Si content >10%) 6061, 2025, 208, 360				262-394	80-120	N/A	N/A	.004-.010	0.10-0.20	.006-.010	0.15-0.25	.008-.012	0.20-0.30	.010-.014	0.25-0.35		
Aluminum (Si content <10%) 413, 385, A390																	
Copper, brass, bronze beryllium copper, naval brass, AMIPCO																	
Titanium alloy TiAl4V				66-164	20-50	66-164	20-50	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15
High temperature alloy Inconel, haynes, waspalloy, hastelloy				66-164	20-50	66-164	20-50	.001-.003	0.02-0.07	.001-.004	0.04-0.10	.002-.005	0.06-0.12	.003-.006	0.08-0.15	.003-.006	0.08-0.15
Chilled cast iron	38-48	350-450	1173-1527														
Hardened steel 50-60 HRC	50-55 56-60 61-65		1614-1870														

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.0mm reduce cutting speed by 20-30%

CROMALU

C8000 SERIES

- ⊙ CROMSON offers a twin cutting technology for machining Aluminum
- ⊙ For drilling depths from 3xD to 12xD, the CROMALU offers optimum cost-effectiveness with high performance
- ⊙ The specialised drill features helical grooves and its large chip flutes and special radial geometry delivers very high drilling quality

Work Material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			C8100
	HRc	BHN	N/mm2	
Aluminum (Si content >10%) 6061, 2025, 208, 360				
Aluminum (Si content <10%) 413, 385, A390				
Copper, brass, bronze beryllium copper, naval brass, AMPCO				



Highly recommended



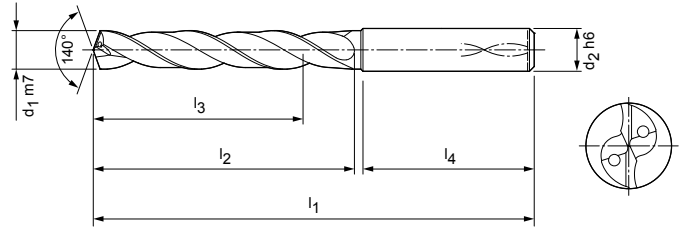
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.6299 in
3.00-16.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



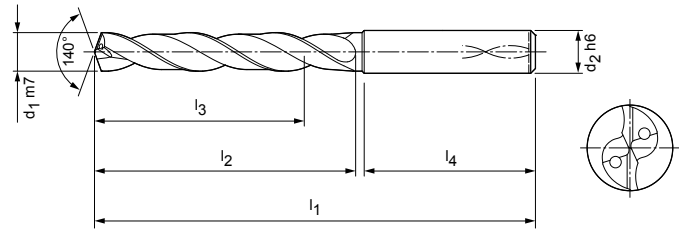
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75105895	CRDR G-C8103-0300 Cr10	3.000	0.1181	6	20	62	36	Cr10	2
75105900	CRDR G-C8103-0350 Cr10	3.500	0.1378	6	20	62	36	Cr10	2
75105905	CRDR G-C8103-0400 Cr10	4.000	0.1575	6	24	66	36	Cr10	2
75105910	CRDR G-C8103-0450 Cr10	4.500	0.1772	6	24	66	36	Cr10	2
75105915	CRDR G-C8103-0500 Cr10	5.000	0.1969	6	28	66	36	Cr10	2
75105920	CRDR G-C8103-0550 Cr10	5.500	0.2165	6	28	66	36	Cr10	2
75105925	CRDR G-C8103-0600 Cr10	6.000	0.2362	6	28	66	36	Cr10	2
75105930	CRDR G-C8103-0650 Cr10	6.500	0.2559	8	34	79	36	Cr10	2
75105935	CRDR G-C8103-0700 Cr10	7.000	0.2756	8	34	79	36	Cr10	2
75105940	CRDR G-C8103-0750 Cr10	7.500	0.2953	8	41	79	36	Cr10	2
75105945	CRDR G-C8103-0800 Cr10	8.000	0.3150	8	41	79	36	Cr10	2
75105950	CRDR G-C8103-0850 Cr10	8.500	0.3346	10	47	89	40	Cr10	2
75105955	CRDR G-C8103-0900 Cr10	9.000	0.3543	10	47	89	40	Cr10	2
75105960	CRDR G-C8103-1000 Cr10	10.000	0.3937	10	47	89	40	Cr10	2
75105965	CRDR G-C8103-1100 Cr10	11.000	0.4331	12	55	102	45	Cr10	2
75105970	CRDR G-C8103-1200 Cr10	12.000	0.4724	12	55	102	45	Cr10	2
75105975	CRDR G-C8103-1300 Cr10	13.000	0.5118	14	60	107	45	Cr10	2
75105980	CRDR G-C8103-1400 Cr10	14.000	0.5512	14	60	107	45	Cr10	2
75105985	CRDR G-C8103-1500 Cr10	15.000	0.5906	16	65	115	48	Cr10	2
75105990	CRDR G-C8103-1600 Cr10	16.000	0.6299	16	65	115	48	Cr10	2

CARBIDE DRILL

TECHNICAL DETAILS

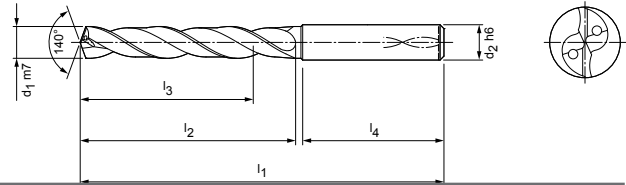
Tool Diameter Range 0.1102-0.7500 in
2.80-19.05 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75105995	CRDR G-C8105-0280 Cr10	2.800	0.1102	6	28	66	36	Cr10	2
75106000	CRDR G-C8105-0300 Cr10	3.000	0.1181	6	28	66	36	Cr10	2
75106005	CRDR G-C8105-0310 Cr10	3.100	0.1220	6	28	66	36	Cr10	2
75106008	CRDR G-C8105-031 Cr10	3.180	1/8	6	28	66	36	Cr10	2
75106010	CRDR G-C8105-0320 Cr10	3.200	0.1260	6	28	66	36	Cr10	2
75106015	CRDR G-C8105-0330 Cr10	3.300	0.1299	6	28	66	36	Cr10	2
75106020	CRDR G-C8105-0340 Cr10	3.400	0.1339	6	28	66	36	Cr10	2
75106025	CRDR G-C8105-0350 Cr10	3.500	0.1378	6	28	66	36	Cr10	2
75106028	CRDR G-C8105-0357 Cr10	3.570	9/64	6	28	66	36	Cr10	2
75106030	CRDR G-C8105-0360 Cr10	3.600	0.1417	6	28	66	36	Cr10	2
75106035	CRDR G-C8105-0370 Cr10	3.700	0.1457	6	28	66	36	Cr10	2
75106040	CRDR G-C8105-0380 Cr10	3.800	0.1496	6	36	74	36	Cr10	2
75106045	CRDR G-C8105-0390 Cr10	3.900	0.1535	6	36	74	36	Cr10	2
75106048	CRDR G-C8105-0397 Cr10	3.970	5/32	6	36	74	36	Cr10	2
75106050	CRDR G-C8105-0400 Cr10	4.000	0.1575	6	36	74	36	Cr10	2
75106055	CRDR G-C8105-0410 Cr10	4.100	0.1614	6	36	74	36	Cr10	2
75106060	CRDR G-C8105-0420 Cr10	4.200	0.1654	6	36	74	36	Cr10	2
75106065	CRDR G-C8105-0430 Cr10	4.300	0.1693	6	36	74	36	Cr10	2
75106068	CRDR G-C8105-0437 Cr10	4.370	11/64	6	36	74	36	Cr10	2
75106070	CRDR G-C8105-0440 Cr10	4.400	0.1732	6	36	74	36	Cr10	2
75106075	CRDR G-C8105-0450 Cr10	4.500	0.1772	6	36	74	36	Cr10	2
75106080	CRDR G-C8105-0460 Cr10	4.600	0.1811	6	36	74	36	Cr10	2
75106085	CRDR G-C8105-0465 Cr10	4.650	0.1831	6	36	74	36	Cr10	2
75106090	CRDR G-C8105-0470 Cr10	4.700	0.1850	6	36	74	36	Cr10	2
75106093	CRDR G-C8105-0476 Cr10	4.760	3/16	6	44	82	36	Cr10	2
75106095	CRDR G-C8105-0480 Cr10	4.800	0.1890	6	44	82	36	Cr10	2
75106100	CRDR G-C8105-0490 Cr10	4.900	0.1929	6	44	82	36	Cr10	2
75106105	CRDR G-C8105-0500 Cr10	5.000	0.1969	6	44	82	36	Cr10	2
75106110	CRDR G-C8105-0510 Cr10	5.100	0.2008	6	44	82	36	Cr10	2
75106113	CRDR G-C8105-0516 Cr10	5.160	13/64	6	44	82	36	Cr10	2
75106115	CRDR G-C8105-0520 Cr10	5.200	0.2047	6	44	82	36	Cr10	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106120	CRDR G-C8105-0530 Cr10	5.300	0.2087	6	44	82	36	Cr10	2
75106125	CRDR G-C8105-0540 Cr10	5.400	0.2126	6	44	82	36	Cr10	2
75106130	CRDR G-C8105-0550 Cr10	5.500	0.2165	6	44	82	36	Cr10	2
75106135	CRDR G-C8105-0555 Cr10	5.550	0.2185	6	44	82	36	Cr10	2
75106138	CRDR G-C8105-0556 Cr10	5.560	7/32	6	44	82	36	Cr10	2
75106140	CRDR G-C8105-0560 Cr10	5.600	0.2205	6	44	82	36	Cr10	2
75106145	CRDR G-C8105-0570 Cr10	5.700	0.2244	6	44	82	36	Cr10	2
75106150	CRDR G-C8105-0580 Cr10	5.800	0.2283	6	44	82	36	Cr10	2
75106155	CRDR G-C8105-0590 Cr10	5.900	0.2323	6	44	82	36	Cr10	2
75106158	CRDR G-C8105-0595 Cr10	5.950	15/64	6	44	82	36	Cr10	2
75106160	CRDR G-C8105-0600 Cr10	6.000	0.2362	6	44	82	36	Cr10	2
75106165	CRDR G-C8105-0610 Cr10	6.100	0.2402	8	53	91	36	Cr10	2
75106170	CRDR G-C8105-0620 Cr10	6.200	0.2441	8	53	91	36	Cr10	2
75106175	CRDR G-C8105-0630 Cr10	6.300	0.2480	8	53	91	36	Cr10	2
75106178	CRDR G-C8105-0635 Cr10	6.350	1/4	8	53	91	36	Cr10	2
75106180	CRDR G-C8105-0640 Cr10	6.400	0.2520	8	53	91	36	Cr10	2
75106185	CRDR G-C8105-0650 Cr10	6.500	0.2559	8	53	91	36	Cr10	2
75106190	CRDR G-C8105-0660 Cr10	6.600	0.2598	8	53	91	36	Cr10	2
75106195	CRDR G-C8105-0670 Cr10	6.700	0.2638	8	53	91	36	Cr10	2
75106198	CRDR G-C8105-0675 Cr10	6.750	17/64	8	53	91	36	Cr10	2
75106200	CRDR G-C8105-0680 Cr10	6.800	0.2677	8	53	91	36	Cr10	2
75106205	CRDR G-C8105-0690 Cr10	6.900	0.2717	8	53	91	36	Cr10	2
75106210	CRDR G-C8105-0700 Cr10	7.000	0.2756	8	53	91	36	Cr10	2
75106215	CRDR G-C8105-0710 Cr10	7.100	0.2795	8	53	91	36	Cr10	2
75106218	CRDR G-C8105-0714 Cr10	7.140	9/32	8	53	91	36	Cr10	2
75106220	CRDR G-C8105-0720 Cr10	7.200	0.2835	8	53	91	36	Cr10	2
75106225	CRDR G-C8105-0730 Cr10	7.300	0.2874	8	53	91	36	Cr10	2
75106230	CRDR G-C8105-0740 Cr10	7.400	0.2913	8	53	91	36	Cr10	2
75106235	CRDR G-C8105-0745 Cr10	7.450	0.2933	8	53	91	36	Cr10	2
75106240	CRDR G-C8105-0750 Cr10	7.500	0.2953	8	53	91	36	Cr10	2
75106243	CRDR G-C8105-0754 Cr10	7.540	19/64	8	53	91	36	Cr10	2
75106245	CRDR G-C8105-0760 Cr10	7.600	0.2992	8	53	91	36	Cr10	2
75106250	CRDR G-C8105-0770 Cr10	7.700	0.3031	8	53	91	36	Cr10	2
75106255	CRDR G-C8105-0780 Cr10	7.800	0.3071	8	53	91	36	Cr10	2
75106260	CRDR G-C8105-0790 Cr10	7.900	0.3110	8	53	91	36	Cr10	2
75106263	CRDR G-C8105-0794 Cr10	7.940	5/16	8	53	91	36	Cr10	2
75106265	CRDR G-C8105-0800 Cr10	8.000	0.3150	8	53	91	36	Cr10	2
75106270	CRDR G-C8105-0810 Cr10	8.100	0.3189	10	61	103	40	Cr10	2
75106275	CRDR G-C8105-0820 Cr10	8.200	0.3228	10	61	103	40	Cr10	2
75106280	CRDR G-C8105-0830 Cr10	8.300	0.3268	10	61	103	40	Cr10	2
75106283	CRDR G-C8105-0833 Cr10	8.330	21/64	10	61	103	40	Cr10	2
75106285	CRDR G-C8105-0840 Cr10	8.400	0.3307	10	61	103	40	Cr10	2
75106290	CRDR G-C8105-0850 Cr10	8.500	0.3346	10	61	103	40	Cr10	2
75106295	CRDR G-C8105-0860 Cr10	8.600	0.3386	10	61	103	40	Cr10	2
75106300	CRDR G-C8105-0870 Cr10	8.700	0.3425	10	61	103	40	Cr10	2
75106303	CRDR G-C8105-0873 Cr10	8.730	11/32	10	61	103	40	Cr10	2
75106305	CRDR G-C8105-0880 Cr10	8.800	0.3465	10	61	103	40	Cr10	2
75106310	CRDR G-C8105-0890 Cr10	8.900	0.3504	10	61	103	40	Cr10	2
75106315	CRDR G-C8105-0900 Cr10	9.000	0.3543	10	61	103	40	Cr10	2
75106320	CRDR G-C8105-0910 Cr10	9.100	0.3583	10	61	103	40	Cr10	2



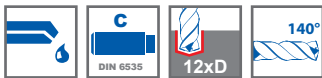
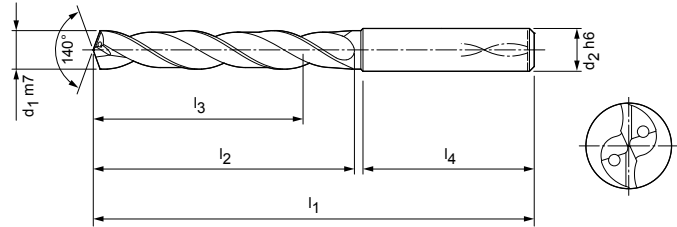
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106323	CRDR G-C8105-0913 Cr10	9.130	23/64	10	61	103	40	Cr10	2
75106325	CRDR G-C8105-0920 Cr10	9.200	0.3622	10	61	103	40	Cr10	2
75106330	CRDR G-C8105-0930 Cr10	9.300	0.3661	10	61	103	40	Cr10	2
75106335	CRDR G-C8105-0940 Cr10	9.400	0.3701	10	61	103	40	Cr10	2
75106340	CRDR G-C8105-0950 Cr10	9.500	0.3740	10	61	103	40	Cr10	2
75106343	CRDR G-C8105-0953 Cr10	9.530	3/8	10	61	103	40	Cr10	2
75106345	CRDR G-C8105-0960 Cr10	9.600	0.3780	10	61	103	40	Cr10	2
75106350	CRDR G-C8105-0970 Cr10	9.700	0.3819	10	61	103	40	Cr10	2
75106355	CRDR G-C8105-0980 Cr10	9.800	0.3858	10	61	103	40	Cr10	2
75106360	CRDR G-C8105-0990 Cr10	9.900	0.3898	10	61	103	40	Cr10	2
75106363	CRDR G-C8105-0992 Cr10	9.920	25/64	10	61	103	40	Cr10	2
75106365	CRDR G-C8105-1000 Cr10	10.000	0.3937	10	61	103	40	Cr10	2
75106370	CRDR G-C8105-1010 Cr10	10.100	0.3976	12	71	118	45	Cr10	2
75106375	CRDR G-C8105-1020 Cr10	10.200	0.4016	12	71	118	45	Cr10	2
75106380	CRDR G-C8105-1030 Cr10	10.300	0.4055	12	71	118	45	Cr10	2
75106383	CRDR G-C8105-1032 Cr10	10.320	13/32	12	71	118	45	Cr10	2
75106385	CRDR G-C8105-1040 Cr10	10.400	0.4094	12	71	118	45	Cr10	2
75106390	CRDR G-C8105-1050 Cr10	10.500	0.4134	12	71	118	45	Cr10	2
75106395	CRDR G-C8105-1060 Cr10	10.600	0.4173	12	71	118	45	Cr10	2
75106400	CRDR G-C8105-1070 Cr10	10.700	0.4213	12	71	118	45	Cr10	2
75106403	CRDR G-C8105-1072 Cr10	10.720	27/64	12	71	118	45	Cr10	2
75106405	CRDR G-C8105-1080 Cr10	10.800	0.4252	12	71	118	45	Cr10	2
75106410	CRDR G-C8105-1090 Cr10	10.900	0.4291	12	71	118	45	Cr10	2
75106415	CRDR G-C8105-1100 Cr10	11.000	0.4331	12	71	118	45	Cr10	2
75106418	CRDR G-C8105-1111 Cr10	11.110	7/16	12	71	118	45	Cr10	2
75106420	CRDR G-C8105-1120 Cr10	11.200	0.4409	12	71	118	45	Cr10	2
75106425	CRDR G-C8105-1150 Cr10	11.500	0.4528	12	71	118	45	Cr10	2
75106430	CRDR G-C8105-1200 Cr10	12.000	0.4724	12	71	118	45	Cr10	2
75106435	CRDR G-C8105-1250 Cr10	12.500	0.4921	14	77	124	45	Cr10	2
75106440	CRDR G-C8105-1300 Cr10	13.000	0.5118	14	77	124	45	Cr10	2
75106445	CRDR G-C8105-1350 Cr10	13.500	0.5315	14	77	124	45	Cr10	2
75106450	CRDR G-C8105-1400 Cr10	14.000	0.5512	14	77	124	45	Cr10	2
75106455	CRDR G-C8105-1450 Cr10	14.500	0.5709	16	83	133	48	Cr10	2
75106458	CRDR G-C8105-1468 Cr10	14.680	37/64	16	83	133	48	Cr10	2
75106460	CRDR G-C8105-1480 Cr10	14.800	0.5827	16	83	133	48	Cr10	2
75106465	CRDR G-C8105-1500 Cr10	15.000	0.5906	16	83	133	48	Cr10	2
75106468	CRDR G-C8105-1508 Cr10	15.080	19/32	16	83	133	48	Cr10	2
75106470	CRDR G-C8105-1550 Cr10	15.500	0.6102	16	83	133	48	Cr10	2
75106475	CRDR G-C8105-1580 Cr10	15.800	0.6220	16	83	133	48	Cr10	2
75106478	CRDR G-C8105-1588 Cr10	15.880	5/8	16	83	133	48	Cr10	2
75106480	CRDR G-C8105-1600 Cr10	16.000	0.6299	16	83	133	48	Cr10	2
75106481	CRDR G-C8105-1667 Cr10	16.670	21/32	18	93	143	48	Cr10	2
75106482	CRDR G-C8105-1746 Cr10	17.460	11/16	18	93	143	48	Cr10	2
75106483	CRDR G-C8105-1826 Cr10	18.260	23/32	20	101	153	50	Cr10	2
75106484	CRDR G-C8105-1905 Cr10	19.050	3/4	20	101	153	50	Cr10	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7500 in
3.00-19.05 mm

Bore tolerance IT9 (achievable)
Shank form Cyl. (DIN 6535)
Number of flutes 2
Number of margins 1
Point geometry Special point
Point angle 140°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106485	CRDR G-C8112-0300 Cr10	3.000	0.1181	6	54	92	36	Cr10	2
75106490	CRDR G-C8112-0310 Cr10	3.100	0.1220	6	54	92	36	Cr10	2
75106493	CRDR G-C8112-0318 Cr10	3.180	1/8	6	54	92	36	Cr10	2
75106495	CRDR G-C8112-0320 Cr10	3.200	0.1260	6	54	92	36	Cr10	2
75106500	CRDR G-C8112-0330 Cr10	3.300	0.1299	6	54	92	36	Cr10	2
75106505	CRDR G-C8112-0340 Cr10	3.400	0.1339	6	54	92	36	Cr10	2
75106510	CRDR G-C8112-0350 Cr10	3.500	0.1378	6	54	92	36	Cr10	2
75106513	CRDR G-C8112-0357 Cr10	3.570	9/64	6	54	92	36	Cr10	2
75106515	CRDR G-C8112-0360 Cr10	3.600	0.1417	6	54	92	36	Cr10	2
75106520	CRDR G-C8112-0370 Cr10	3.700	0.1457	6	54	92	36	Cr10	2
75106525	CRDR G-C8112-0380 Cr10	3.800	0.1496	6	64	102	36	Cr10	2
75106530	CRDR G-C8112-0390 Cr10	3.900	0.1535	6	64	102	36	Cr10	2
75106533	CRDR G-C8112-0397 Cr10	3.970	5/32	6	64	102	36	Cr10	2
75106535	CRDR G-C8112-0400 Cr10	4.000	0.1575	6	64	102	36	Cr10	2
75106540	CRDR G-C8112-0410 Cr10	4.100	0.1614	6	64	102	36	Cr10	2
75106545	CRDR G-C8112-0420 Cr10	4.200	0.1654	6	64	102	36	Cr10	2
75106550	CRDR G-C8112-0430 Cr10	4.300	0.1693	6	64	102	36	Cr10	2
75106553	CRDR G-C8112-0437 Cr10	4.370	11/64	6	64	102	36	Cr10	2
75106555	CRDR G-C8112-0440 Cr10	4.400	0.1732	6	64	102	36	Cr10	2
75106560	CRDR G-C8112-0450 Cr10	4.500	0.1772	6	64	102	36	Cr10	2
75106565	CRDR G-C8112-0460 Cr10	4.600	0.1811	6	64	102	36	Cr10	2
75106570	CRDR G-C8112-0470 Cr10	4.700	0.1850	6	64	102	36	Cr10	2
75106573	CRDR G-C8112-0476 Cr10	4.760	3/16	6	78	116	36	Cr10	2
75106575	CRDR G-C8112-0480 Cr10	4.800	0.1890	6	78	116	36	Cr10	2
75106580	CRDR G-C8112-0490 Cr10	4.900	0.1929	6	78	116	36	Cr10	2
75106585	CRDR G-C8112-0500 Cr10	5.000	0.1969	6	78	116	36	Cr10	2
75106590	CRDR G-C8112-0510 Cr10	5.100	0.2008	6	78	116	36	Cr10	2
75106593	CRDR G-C8112-0516 Cr10	5.160	13/64	6	78	116	36	Cr10	2
75106595	CRDR G-C8112-0520 Cr10	5.200	0.2047	6	78	116	36	Cr10	2
75106600	CRDR G-C8112-0530 Cr10	5.300	0.2087	6	78	116	36	Cr10	2
75106605	CRDR G-C8112-0540 Cr10	5.400	0.2126	6	78	116	36	Cr10	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106610	CRDR G-C8112-0550 Cr10	5.500	0.2165	6	78	116	36	Cr10	2
75106613	CRDR G-C8112-0556 Cr10	5.560	7/32	6	78	116	36	Cr10	2
75106615	CRDR G-C8112-0560 Cr10	5.600	0.2205	6	78	116	36	Cr10	2
75106620	CRDR G-C8112-0570 Cr10	5.700	0.2244	6	78	116	36	Cr10	2
75106625	CRDR G-C8112-0580 Cr10	5.800	0.2283	6	78	116	36	Cr10	2
75106630	CRDR G-C8112-0590 Cr10	5.900	0.2323	6	78	116	36	Cr10	2
75106633	CRDR G-C8112-0595 Cr10	5.950	15/64	6	78	116	36	Cr10	2
75106635	CRDR G-C8112-0600 Cr10	6.000	0.2362	6	78	116	36	Cr10	2
75106640	CRDR G-C8112-0610 Cr10	6.100	0.2402	8	108	146	36	Cr10	2
75106645	CRDR G-C8112-0620 Cr10	6.200	0.2441	8	108	146	36	Cr10	2
75106650	CRDR G-C8112-0630 Cr10	6.300	0.2480	8	108	146	36	Cr10	2
75106653	CRDR G-C8112-0635 Cr10	6.350	1/4	8	108	146	36	Cr10	2
75106655	CRDR G-C8112-0640 Cr10	6.400	0.2520	8	108	146	36	Cr10	2
75106660	CRDR G-C8112-0650 Cr10	6.500	0.2559	8	108	146	36	Cr10	2
75106665	CRDR G-C8112-0660 Cr10	6.600	0.2598	8	108	146	36	Cr10	2
75106670	CRDR G-C8112-0670 Cr10	6.700	0.2638	8	108	146	36	Cr10	2
75106673	CRDR G-C8112-0675 Cr10	6.750	17/64	8	108	146	36	Cr10	2
75106675	CRDR G-C8112-0690 Cr10	6.900	0.2717	8	108	146	36	Cr10	2
75106680	CRDR G-C8112-0700 Cr10	7.000	0.2756	8	108	146	36	Cr10	2
75106685	CRDR G-C8112-0710 Cr10	7.100	0.2795	8	108	146	36	Cr10	2
75106688	CRDR G-C8112-0714 Cr10	7.140	9/32	8	108	146	36	Cr10	2
75106690	CRDR G-C8112-0720 Cr10	7.200	0.2835	8	108	146	36	Cr10	2
75106695	CRDR G-C8112-0730 Cr10	7.300	0.2874	8	108	146	36	Cr10	2
75106700	CRDR G-C8112-0740 Cr10	7.400	0.2913	8	108	146	36	Cr10	2
75106705	CRDR G-C8112-0750 Cr10	7.500	0.2953	8	108	146	36	Cr10	2
75106708	CRDR G-C8112-0754 Cr10	7.540	19/64	8	108	146	36	Cr10	2
75106710	CRDR G-C8112-0760 Cr10	7.600	0.2992	8	108	146	36	Cr10	2
75106715	CRDR G-C8112-0770 Cr10	7.700	0.3031	8	108	146	36	Cr10	2
75106720	CRDR G-C8112-0780 Cr10	7.800	0.3071	8	108	146	36	Cr10	2
75106725	CRDR G-C8112-0790 Cr10	7.900	0.3110	8	108	146	36	Cr10	2
75106728	CRDR G-C8112-0794 Cr10	7.940	5/16	8	108	146	36	Cr10	2
75106730	CRDR G-C8112-0800 Cr10	8.000	0.3150	8	108	146	36	Cr10	2
75106735	CRDR G-C8112-0810 Cr10	8.100	0.3189	10	120	162	40	Cr10	2
75106740	CRDR G-C8112-0820 Cr10	8.200	0.3228	10	120	162	40	Cr10	2
75106745	CRDR G-C8112-0830 Cr10	8.300	0.3268	10	120	162	40	Cr10	2
75106748	CRDR G-C8112-0833 Cr10	8.330	21/64	10	120	162	40	Cr10	2
75106750	CRDR G-C8112-0840 Cr10	8.400	0.3307	10	120	162	40	Cr10	2
75106755	CRDR G-C8112-0850 Cr10	8.500	0.3346	10	120	162	40	Cr10	2
75106760	CRDR G-C8112-0870 Cr10	8.700	0.3425	10	120	162	40	Cr10	2
75106763	CRDR G-C8112-0873 Cr10	8.730	11/32	10	120	162	40	Cr10	2
75106765	CRDR G-C8112-0880 Cr10	8.800	0.3465	10	120	162	40	Cr10	2
75106770	CRDR G-C8112-0890 Cr10	8.900	0.3504	10	120	162	40	Cr10	2
75106775	CRDR G-C8112-0900 Cr10	9.000	0.3543	10	120	162	40	Cr10	2
75106780	CRDR G-C8112-0910 Cr10	9.100	0.3583	10	120	162	40	Cr10	2
75106783	CRDR G-C8112-0913 Cr10	9.130	23/64	10	120	162	40	Cr10	2
75106785	CRDR G-C8112-0920 Cr10	9.200	0.3622	10	120	162	40	Cr10	2
75106790	CRDR G-C8112-0930 Cr10	9.300	0.3661	10	120	162	40	Cr10	2
75106795	CRDR G-C8112-0940 Cr10	9.400	0.3701	10	120	162	40	Cr10	2
75106800	CRDR G-C8112-0950 Cr10	9.500	0.3740	10	120	162	40	Cr10	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106803	CRDR G-C8112-0953 Cr10	9.530	3/8	10	120	162	40	Cr10	2
75106805	CRDR G-C8112-0960 Cr10	9.600	0.3780	10	120	162	40	Cr10	2
75106810	CRDR G-C8112-0970 Cr10	9.700	0.3819	10	120	162	40	Cr10	2
75106815	CRDR G-C8112-0980 Cr10	9.800	0.3858	10	120	162	40	Cr10	2
75106820	CRDR G-C8112-0990 Cr10	9.900	0.3898	10	120	162	40	Cr10	2
75106823	CRDR G-C8112-0992 Cr11	9.920	25/64	10	120	162	40	Cr10	2
75106825	CRDR G-C8112-1000 Cr10	10.000	0.3937	10	120	162	40	Cr10	2
75106830	CRDR G-C8112-1010 Cr10	10.100	0.3976	12	156	204	45	Cr10	2
75106835	CRDR G-C8112-1020 Cr10	10.200	0.4016	12	156	204	45	Cr10	2
75106840	CRDR G-C8112-1030 Cr10	10.300	0.4055	12	156	204	45	Cr10	2
75106843	CRDR G-C8112-1032 Cr10	10.320	13/32	12	156	204	45	Cr10	2
75106845	CRDR G-C8112-1040 Cr10	10.400	0.4094	12	156	204	45	Cr10	2
75106850	CRDR G-C8112-1050 Cr10	10.500	0.4134	12	156	204	45	Cr10	2
75106855	CRDR G-C8112-1060 Cr10	10.600	0.4173	12	156	204	45	Cr10	2
75106860	CRDR G-C8112-1070 Cr10	10.700	0.4213	12	156	204	45	Cr10	2
75106863	CRDR G-C8112-1072 Cr10	10.720	27/64	12	156	204	45	Cr10	2
75106865	CRDR G-C8112-1080 Cr10	10.800	0.4252	12	156	204	45	Cr10	2
75106870	CRDR G-C8112-1090 Cr10	10.900	0.4291	12	156	204	45	Cr10	2
75106875	CRDR G-C8112-1100 Cr10	11.000	0.4331	12	156	204	45	Cr10	2
75106880	CRDR G-C8112-1110 Cr10	11.100	0.4370	12	156	204	45	Cr10	2
75106883	CRDR G-C8112-1111 Cr10	11.110	7/16	12	156	204	45	Cr10	2
75106885	CRDR G-C8112-1120 Cr10	11.200	0.4409	12	156	204	45	Cr10	2
75106890	CRDR G-C8112-1130 Cr10	11.300	0.4449	12	156	204	45	Cr10	2
75106895	CRDR G-C8112-1140 Cr10	11.400	0.4488	12	156	204	45	Cr10	2
75106900	CRDR G-C8112-1150 Cr10	11.500	0.4528	12	156	204	45	Cr10	2
75106905	CRDR G-C8112-1160 Cr10	11.600	0.4567	12	156	204	45	Cr10	2
75106910	CRDR G-C8112-1170 Cr10	11.700	0.4606	12	156	204	45	Cr10	2
75106915	CRDR G-C8112-1180 Cr10	11.800	0.4646	12	156	204	45	Cr10	2
75106920	CRDR G-C8112-1190 Cr10	11.900	0.4685	12	156	204	45	Cr10	2
75106925	CRDR G-C8112-1200 Cr10	12.000	0.4724	12	156	204	45	Cr10	2
75106926	CRDR G-C8112-1508 Cr10	15.080	19/32	16	208	260	48	Cr10	2
75106927	CRDR G-C8112-1588 Cr10	15.880	5/8	16	208	260	48	Cr10	2
75106928	CRDR G-C8112-1746 Cr10	17.460	11/16	18	234	285	48	Cr10	2
75106929	CRDR G-C8112-1905 Cr10	19.050	3/4	20	258	310	50	Cr10	2







CROMALU-C8000		Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm2)		Product model description								Recommended feed (f) for diameter ranges									
				C8103 (3 x d)				C8112 (12 x d)				0.118-0.197 in 3 à 5 mm		0.197-0.316 in 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm	
				SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Work Material	HRC	BHN	N/mm2																		
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700																		
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000																		
Stainless steel moderate 17-4PH, 15-5PH, 316L																					
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2																					
Cast iron, grey cast iron alloy GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 880 up to 850 over 850																		
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650																		
Aluminum (Si content >10%) 6061, 2025, 208, 360				295-984	70-200	295-984	70-200	295-984	70-200	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.014-.022	0.35-0.55		
Aluminum (Si content <10%) 413, 385, A390				328-1312	80-300	328-1312	80-300	328-1312	80-300	.004-.010	0.10-0.25	.006-.014	0.15-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50	.0014-.022	0.35-0.55		
Copper, brass, bronze beryllium copper, naval brass, AMP/CO				230-984	60-220	230-984	60-220	230-984	60-220	.003-.007	0.07-0.18	.005-.010	0.12-0.25	.008-.014	0.20-0.35	.010-.018	0.25-0.45	.012-.020	0.30-0.50		
Titanium alloy TiAl6V																					
High temperature alloy Inconel, haynes, waspaloy, hastelloy																					
Chilled cast iron	38-48	350-450	1173-1527																		
Hardened steel 50-60 HRC	50-55 56-60 61-65		1614-1970																		

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.
* For diameter < 3.00mm reduce cutting speed by 20-30%

CARBIDE DRILL

HIGH PERFORMANCE C9000 SERIES

- ⊙ Our new HIGH PERFORMANCE carbide drill bits are offered in a revolutionary new cutting edge geometry including three (3) variable pitch guide chamfers
- ⊙ This technology significantly prevents vibration and friction
- ⊙ The chip evacuation tip is highly polished and guarantees optimal drainage
- ⊙ These features paired with our new guide geometry and a grade of extra strong carbide are the perfect match for cutting steel, stainless steel and cast iron to produce a drilling operation with improvements of more than 30% compared to conventional geometries
- ⊙ This new HIGH PERFORMANCE product line can drill steel, stainless steel and cast iron with outstanding performance in diameters ranging from 3.00-20.00 mm, and depths of 3xD, 5xD and 8xD standard

Work Material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			C9100
	HRc	BHN	N/mm2	
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 - over 15	up to 178 up to 205 - over 205	up to 600 up to 700 - over 700	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27 up to 31 - over 31	up to 266 up to 297 - over 297	up to 900 up to 1000 - over 1000	
Stainless steel moderate 17-4PH, 15-5PH, 316L				
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2				
Titanium alloy TiAl4V				
High temperature alloy inconel, haynes, waspaloy, hastelloy				



Highly recommended



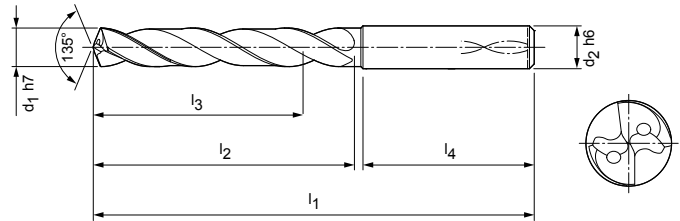
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

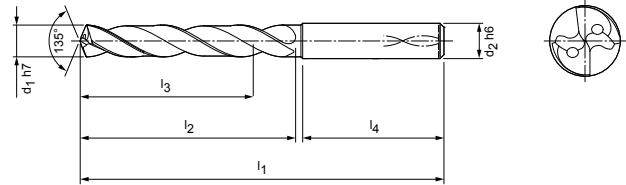
Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT9 (achievable)
Shank form Cyl.
Number of flutes 2
Number of margins 3
Point geometry Special point
Point angle 135°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75106930	CRDR G-C9103-0300 Cr65	3.000	0.1181	6	20	62	36	Cr65	2
75106935	CRDR G-C9103-0310 Cr65	3.100	0.1220	6	20	62	36	Cr65	2
75106940	CRDR G-C9103-0320 Cr65	3.200	0.1260	6	20	62	36	Cr65	2
75106945	CRDR G-C9103-0330 Cr65	3.300	0.1299	6	20	62	36	Cr65	2
75106950	CRDR G-C9103-0340 Cr65	3.400	0.1339	6	20	62	36	Cr65	2
75106955	CRDR G-C9103-0350 Cr65	3.500	0.1378	6	20	62	36	Cr65	2
75106960	CRDR G-C9103-0360 Cr65	3.600	0.1417	6	20	62	36	Cr65	2
75106965	CRDR G-C9103-0370 Cr65	3.700	0.1457	6	20	62	36	Cr65	2
75106970	CRDR G-C9103-0380 Cr65	3.800	0.1496	6	24	66	36	Cr65	2
75106975	CRDR G-C9103-0390 Cr65	3.900	0.1535	6	24	66	36	Cr65	2
75106980	CRDR G-C9103-0400 Cr65	4.000	0.1575	6	24	66	36	Cr65	2
75106985	CRDR G-C9103-0410 Cr65	4.100	0.1614	6	24	66	36	Cr65	2
75106990	CRDR G-C9103-0420 Cr65	4.200	0.1654	6	24	66	36	Cr65	2
75106995	CRDR G-C9103-0430 Cr65	4.300	0.1693	6	24	66	36	Cr65	2
75107000	CRDR G-C9103-0440 Cr65	4.400	0.1732	6	24	66	36	Cr65	2
75107005	CRDR G-C9103-0450 Cr65	4.500	0.1772	6	24	66	36	Cr65	2
75107010	CRDR G-C9103-0460 Cr65	4.600	0.1811	6	24	66	36	Cr65	2
75107015	CRDR G-C9103-0465 Cr65	4.650	0.1831	6	24	66	36	Cr65	2
75107020	CRDR G-C9103-0470 Cr65	4.700	0.1850	6	24	66	36	Cr65	2
75107025	CRDR G-C9103-0480 Cr65	4.800	0.1890	6	28	66	36	Cr65	2
75107030	CRDR G-C9103-0490 Cr65	4.900	0.1929	6	28	66	36	Cr65	2
75107035	CRDR G-C9103-0500 Cr65	5.000	0.1969	6	28	66	36	Cr65	2
75107040	CRDR G-C9103-0510 Cr65	5.100	0.2008	6	28	66	36	Cr65	2
75107045	CRDR G-C9103-0520 Cr65	5.200	0.2047	6	28	66	36	Cr65	2
75107050	CRDR G-C9103-0530 Cr65	5.300	0.2087	6	28	66	36	Cr65	2
75107055	CRDR G-C9103-0540 Cr65	5.400	0.2126	6	28	66	36	Cr65	2
75107060	CRDR G-C9103-0550 Cr65	5.500	0.2165	6	28	66	36	Cr65	2
75107065	CRDR G-C9103-0555 Cr65	5.550	0.2185	6	28	66	36	Cr65	2
75107070	CRDR G-C9103-0560 Cr65	5.600	0.2205	6	28	66	36	Cr65	2
75107075	CRDR G-C9103-0570 Cr65	5.700	0.2244	6	28	66	36	Cr65	2
75107080	CRDR G-C9103-0580 Cr65	5.800	0.2283	6	28	66	36	Cr65	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75107085	CRDR G-C9103-0590 Cr65	5.900	0.2323	6	28	66	36	Cr65	2
75107090	CRDR G-C9103-0600 Cr65	6.000	0.2362	6	28	66	36	Cr65	2
75107095	CRDR G-C9103-0610 Cr65	6.100	0.2402	8	34	79	36	Cr65	2
75107100	CRDR G-C9103-0620 Cr65	6.200	0.2441	8	34	79	36	Cr65	2
75107105	CRDR G-C9103-0630 Cr65	6.300	0.2480	8	34	79	36	Cr65	2
75107110	CRDR G-C9103-0640 Cr65	6.400	0.2520	8	34	79	36	Cr65	2
75107115	CRDR G-C9103-0650 Cr65	6.500	0.2559	8	34	79	36	Cr65	2
75107120	CRDR G-C9103-0660 Cr65	6.600	0.2598	8	34	79	36	Cr65	2
75107125	CRDR G-C9103-0670 Cr65	6.700	0.2638	8	34	79	36	Cr65	2
75107130	CRDR G-C9103-0680 Cr65	6.800	0.2677	8	34	79	36	Cr65	2
75107135	CRDR G-C9103-0690 Cr65	6.900	0.2717	8	34	79	36	Cr65	2
75107140	CRDR G-C9103-0700 Cr65	7.000	0.2756	8	34	79	36	Cr65	2
75107145	CRDR G-C9103-0710 Cr65	7.100	0.2795	8	41	79	36	Cr65	2
75107150	CRDR G-C9103-0720 Cr65	7.200	0.2835	8	41	79	36	Cr65	2
75107155	CRDR G-C9103-0730 Cr65	7.300	0.2874	8	41	79	36	Cr65	2
75107160	CRDR G-C9103-0740 Cr65	7.400	0.2913	8	41	79	36	Cr65	2
75107165	CRDR G-C9103-0750 Cr65	7.500	0.2953	8	41	79	36	Cr65	2
75107170	CRDR G-C9103-0760 Cr65	7.600	0.2992	8	41	79	36	Cr65	2
75107175	CRDR G-C9103-0770 Cr65	7.700	0.3031	8	41	79	36	Cr65	2
75107180	CRDR G-C9103-0780 Cr65	7.800	0.3071	8	41	79	36	Cr65	2
75107185	CRDR G-C9103-0790 Cr65	7.900	0.3110	8	41	79	36	Cr65	2
75107190	CRDR G-C9103-0800 Cr65	8.000	0.3150	8	41	79	36	Cr65	2
75107195	CRDR G-C9103-0810 Cr65	8.100	0.3189	10	47	89	40	Cr65	2
75107200	CRDR G-C9103-0820 Cr65	8.200	0.3228	10	47	89	40	Cr65	2
75107205	CRDR G-C9103-0830 Cr65	8.300	0.3268	10	47	89	40	Cr65	2
75107210	CRDR G-C9103-0840 Cr65	8.400	0.3307	10	47	89	40	Cr65	2
75107215	CRDR G-C9103-0850 Cr65	8.500	0.3346	10	47	89	40	Cr65	2
75107220	CRDR G-C9103-0860 Cr65	8.600	0.3386	10	47	89	40	Cr65	2
75107225	CRDR G-C9103-0870 Cr65	8.700	0.3425	10	47	89	40	Cr65	2
75107230	CRDR G-C9103-0880 Cr65	8.800	0.3465	10	47	89	40	Cr65	2
75107235	CRDR G-C9103-0890 Cr65	8.900	0.3504	10	47	89	40	Cr65	2
75107240	CRDR G-C9103-0900 Cr65	9.000	0.3543	10	47	89	40	Cr65	2
75107245	CRDR G-C9103-0910 Cr65	9.100	0.3583	10	47	89	40	Cr65	2
75107250	CRDR G-C9103-0920 Cr65	9.200	0.3622	10	47	89	40	Cr65	2
75107255	CRDR G-C9103-0930 Cr65	9.300	0.3661	10	47	89	40	Cr65	2
75107260	CRDR G-C9103-0940 Cr65	9.400	0.3701	10	47	89	40	Cr65	2
75107265	CRDR G-C9103-0950 Cr65	9.500	0.3740	10	47	89	40	Cr65	2
75107270	CRDR G-C9103-0960 Cr65	9.600	0.3780	10	47	89	40	Cr65	2
75107275	CRDR G-C9103-0970 Cr65	9.700	0.3819	10	47	89	40	Cr65	2
75107280	CRDR G-C9103-0980 Cr65	9.800	0.3858	10	47	89	40	Cr65	2
75107285	CRDR G-C9103-0990 Cr65	9.900	0.3898	10	47	89	40	Cr65	2
75107290	CRDR G-C9103-1000 Cr65	10.000	0.3937	10	47	89	40	Cr65	2
75107295	CRDR G-C9103-1010 Cr65	10.100	0.3976	12	55	102	45	Cr65	2
75107300	CRDR G-C9103-1020 Cr65	10.200	0.4016	12	55	102	45	Cr65	2
75107305	CRDR G-C9103-1030 Cr65	10.300	0.4055	12	55	102	45	Cr65	2
75107310	CRDR G-C9103-1040 Cr65	10.400	0.4094	12	55	102	45	Cr65	2
75107315	CRDR G-C9103-1050 Cr65	10.500	0.4134	12	55	102	45	Cr65	2
75107320	CRDR G-C9103-1060 Cr65	10.600	0.4173	12	55	102	45	Cr65	2
75107325	CRDR G-C9103-1070 Cr65	10.700	0.4213	12	55	102	45	Cr65	2



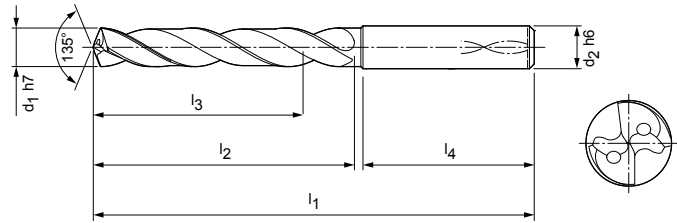
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75107330	CRDR G-C9103-1080 Cr65	10.800	0.4252	12	55	102	45	Cr65	2
75107335	CRDR G-C9103-1090 Cr65	10.900	0.4291	12	55	102	45	Cr65	2
75107340	CRDR G-C9103-1100 Cr65	11.000	0.4331	12	55	102	45	Cr65	2
75107345	CRDR G-C9103-1110 Cr65	11.100	0.4370	12	55	102	45	Cr65	2
75107350	CRDR G-C9103-1120 Cr65	11.200	0.4409	12	55	102	45	Cr65	2
75107355	CRDR G-C9103-1130 Cr65	11.300	0.4449	12	55	102	45	Cr65	2
75107360	CRDR G-C9103-1140 Cr65	11.400	0.4488	12	55	102	45	Cr65	2
75107365	CRDR G-C9103-1150 Cr65	11.500	0.4528	12	55	102	45	Cr65	2
75107370	CRDR G-C9103-1160 Cr65	11.600	0.4567	12	55	102	45	Cr65	2
75107375	CRDR G-C9103-1170 Cr65	11.700	0.4606	12	55	102	45	Cr65	2
75107380	CRDR G-C9103-1180 Cr65	11.800	0.4646	12	55	102	45	Cr65	2
75107385	CRDR G-C9103-1190 Cr65	11.900	0.4685	12	55	102	45	Cr65	2
75107390	CRDR G-C9103-1200 Cr65	12.000	0.4724	12	55	102	45	Cr65	2
75107395	CRDR G-C9103-1250 Cr65	12.500	0.4921	14	60	107	45	Cr65	2
75107400	CRDR G-C9103-1280 Cr65	12.800	0.5039	14	60	107	45	Cr65	2
75107405	CRDR G-C9103-1300 Cr65	13.000	0.5118	14	60	107	45	Cr65	2
75107410	CRDR G-C9103-1350 Cr65	13.500	0.5315	14	60	107	45	Cr65	2
75107415	CRDR G-C9103-1380 Cr65	13.800	0.5433	14	60	107	45	Cr65	2
75107420	CRDR G-C9103-1400 Cr65	14.000	0.5512	14	60	107	45	Cr65	2
75107425	CRDR G-C9103-1450 Cr65	14.500	0.5709	16	65	115	48	Cr65	2
75107430	CRDR G-C9103-1480 Cr65	14.800	0.5827	16	65	115	48	Cr65	2
75107435	CRDR G-C9103-1500 Cr65	15.000	0.5906	16	65	115	48	Cr65	2
75107440	CRDR G-C9103-1550 Cr65	15.500	0.6102	16	65	115	48	Cr65	2
75107445	CRDR G-C9103-1580 Cr65	15.800	0.6220	16	65	115	48	Cr65	2
75107450	CRDR G-C9103-1600 Cr65	16.000	0.6299	16	65	115	48	Cr65	2
75107455	CRDR G-C9103-1650 Cr65	16.500	0.6496	18	73	123	48	Cr65	2
75107460	CRDR G-C9103-1680 Cr65	16.800	0.6614	18	73	123	48	Cr65	2
75107465	CRDR G-C9103-1700 Cr65	17.000	0.6693	18	73	123	48	Cr65	2
75107470	CRDR G-C9103-1750 Cr65	17.500	0.6890	18	73	123	48	Cr65	2
75107475	CRDR G-C9103-1780 Cr65	17.800	0.7008	18	73	123	48	Cr65	2
75107480	CRDR G-C9103-1800 Cr65	18.000	0.7087	18	73	123	48	Cr65	2
75107485	CRDR G-C9103-1850 Cr65	18.500	0.7283	20	79	131	50	Cr65	2
75107490	CRDR G-C9103-1880 Cr65	18.800	0.7402	20	79	131	50	Cr65	2
75107495	CRDR G-C9103-1900 Cr65	19.000	0.7480	20	79	131	50	Cr65	2
75107500	CRDR G-C9103-1950 Cr65	19.500	0.7677	20	79	131	50	Cr65	2
75107505	CRDR G-C9103-1980 Cr65	19.800	0.7795	20	79	131	50	Cr65	2
75107510	CRDR G-C9103-2000 Cr65	20.000	0.7874	20	79	131	50	Cr65	2

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT10 (achievable)
Shank form Cyl.
Number of flute 2
Number of margin 3
Point geometry Special point
Point angle 135°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75107515	CRDR G-C9105-0300 Cr65	3.000	0.1181	6	28	66	36	Cr65	2
75107520	CRDR G-C9105-0310 Cr65	3.100	0.1220	6	28	66	36	Cr65	2
75107525	CRDR G-C9105-0320 Cr65	3.200	0.1260	6	28	66	36	Cr65	2
75107530	CRDR G-C9105-0330 Cr65	3.300	0.1299	6	28	66	36	Cr65	2
75107535	CRDR G-C9105-0340 Cr65	3.400	0.1339	6	28	66	36	Cr65	2
75107540	CRDR G-C9105-0350 Cr65	3.500	0.1378	6	28	66	36	Cr65	2
75107545	CRDR G-C9105-0360 Cr65	3.600	0.1417	6	28	66	36	Cr65	2
75107550	CRDR G-C9105-0370 Cr65	3.700	0.1457	6	28	66	36	Cr65	2
75107555	CRDR G-C9105-0380 Cr65	3.800	0.1496	6	36	74	36	Cr65	2
75107560	CRDR G-C9105-0390 Cr65	3.900	0.1535	6	36	74	36	Cr65	2
75107565	CRDR G-C9105-0400 Cr65	4.000	0.1575	6	36	74	36	Cr65	2
75107570	CRDR G-C9105-0410 Cr65	4.100	0.1614	6	36	74	36	Cr65	2
75107575	CRDR G-C9105-0420 Cr65	4.200	0.1654	6	36	74	36	Cr65	2
75107580	CRDR G-C9105-0430 Cr65	4.300	0.1693	6	36	74	36	Cr65	2
75107585	CRDR G-C9105-0440 Cr65	4.400	0.1732	6	36	74	36	Cr65	2
75107590	CRDR G-C9105-0450 Cr65	4.500	0.1772	6	36	74	36	Cr65	2
75107595	CRDR G-C9105-0460 Cr65	4.600	0.1811	6	36	74	36	Cr65	2
75107600	CRDR G-C9105-0465 Cr65	4.650	0.1831	6	36	74	36	Cr65	2
75107605	CRDR G-C9105-0470 Cr65	4.700	0.1850	6	36	74	36	Cr65	2
75107610	CRDR G-C9105-0480 Cr65	4.800	0.1890	6	44	82	36	Cr65	2
75107615	CRDR G-C9105-0490 Cr65	4.900	0.1929	6	44	82	36	Cr65	2
75107620	CRDR G-C9105-0500 Cr65	5.000	0.1969	6	44	82	36	Cr65	2
75107625	CRDR G-C9105-0510 Cr65	5.100	0.2008	6	44	82	36	Cr65	2
75107630	CRDR G-C9105-0520 Cr65	5.200	0.2047	6	44	82	36	Cr65	2
75107635	CRDR G-C9105-0530 Cr65	5.300	0.2087	6	44	82	36	Cr65	2
75107640	CRDR G-C9105-0540 Cr65	5.400	0.2126	6	44	82	36	Cr65	2
75107645	CRDR G-C9105-0550 Cr65	5.500	0.2165	6	44	82	36	Cr65	2
75107650	CRDR G-C9105-0555 Cr65	5.550	0.2185	6	44	82	36	Cr65	2
75107655	CRDR G-C9105-0560 Cr65	5.600	0.2205	6	44	82	36	Cr65	2
75107660	CRDR G-C9105-0570 Cr65	5.700	0.2244	6	44	82	36	Cr65	2
75107665	CRDR G-C9105-0580 Cr65	5.800	0.2283	6	44	82	36	Cr65	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75107670	CRDR G-C9105-0590 Cr65	5.900	0.2323	6	44	82	36	Cr65	2
75107675	CRDR G-C9105-0600 Cr65	6.000	0.2362	6	44	82	36	Cr65	2
75107680	CRDR G-C9105-0610 Cr65	6.100	0.2402	8	53	91	36	Cr65	2
75107685	CRDR G-C9105-0620 Cr65	6.200	0.2441	8	53	91	36	Cr65	2
75107690	CRDR G-C9105-0630 Cr65	6.300	0.2480	8	53	91	36	Cr65	2
75107695	CRDR G-C9105-0640 Cr65	6.400	0.2520	8	53	91	36	Cr65	2
75107700	CRDR G-C9105-0650 Cr65	6.500	0.2559	8	53	91	36	Cr65	2
75107705	CRDR G-C9105-0660 Cr65	6.600	0.2598	8	53	91	36	Cr65	2
75107710	CRDR G-C9105-0670 Cr65	6.700	0.2638	8	53	91	36	Cr65	2
75107715	CRDR G-C9105-0680 Cr65	6.800	0.2677	8	53	91	36	Cr65	2
75107720	CRDR G-C9105-0690 Cr65	6.900	0.2717	8	53	91	36	Cr65	2
75107725	CRDR G-C9105-0700 Cr65	7.000	0.2756	8	53	91	36	Cr65	2
75107730	CRDR G-C9105-0710 Cr65	7.100	0.2795	8	53	91	36	Cr65	2
75107735	CRDR G-C9105-0720 Cr65	7.200	0.2835	8	53	91	36	Cr65	2
75107740	CRDR G-C9105-0730 Cr65	7.300	0.2874	8	53	91	36	Cr65	2
75107745	CRDR G-C9105-0740 Cr65	7.400	0.2913	8	53	91	36	Cr65	2
75107750	CRDR G-C9105-0750 Cr65	7.500	0.2953	8	53	91	36	Cr65	2
75107755	CRDR G-C9105-0760 Cr65	7.600	0.2992	8	53	91	36	Cr65	2
75107760	CRDR G-C9105-0770 Cr65	7.700	0.3031	8	53	91	36	Cr65	2
75107765	CRDR G-C9105-0780 Cr65	7.800	0.3071	8	53	91	36	Cr65	2
75107770	CRDR G-C9105-0790 Cr65	7.900	0.3110	8	53	91	36	Cr65	2
75107775	CRDR G-C9105-0800 Cr65	8.000	0.3150	8	53	91	36	Cr65	2
75107780	CRDR G-C9105-0810 Cr65	8.100	0.3189	10	61	103	40	Cr65	2
75107785	CRDR G-C9105-0820 Cr65	8.200	0.3228	10	61	103	40	Cr65	2
75107790	CRDR G-C9105-0830 Cr65	8.300	0.3268	10	61	103	40	Cr65	2
75107795	CRDR G-C9105-0840 Cr65	8.400	0.3307	10	61	103	40	Cr65	2
75107800	CRDR G-C9105-0850 Cr65	8.500	0.3346	10	61	103	40	Cr65	2
75107805	CRDR G-C9105-0860 Cr65	8.600	0.3386	10	61	103	40	Cr65	2
75107810	CRDR G-C9105-0870 Cr65	8.700	0.3425	10	61	103	40	Cr65	2
75107815	CRDR G-C9105-0880 Cr65	8.800	0.3465	10	61	103	40	Cr65	2
75107820	CRDR G-C9105-0890 Cr65	8.900	0.3504	10	61	103	40	Cr65	2
75107825	CRDR G-C9105-0900 Cr65	9.000	0.3543	10	61	103	40	Cr65	2
75107830	CRDR G-C9105-0910 Cr65	9.100	0.3583	10	61	103	40	Cr65	2
75107835	CRDR G-C9105-0920 Cr65	9.200	0.3622	10	61	103	40	Cr65	2
75107840	CRDR G-C9105-0930 Cr65	9.300	0.3661	10	61	103	40	Cr65	2
75107845	CRDR G-C9105-0940 Cr65	9.400	0.3701	10	61	103	40	Cr65	2
75107850	CRDR G-C9105-0950 Cr65	9.500	0.3740	10	61	103	40	Cr65	2
75107855	CRDR G-C9105-0960 Cr65	9.600	0.3780	10	61	103	40	Cr65	2
75107860	CRDR G-C9105-0970 Cr65	9.700	0.3819	10	61	103	40	Cr65	2
75107865	CRDR G-C9105-0980 Cr65	9.800	0.3858	10	61	103	40	Cr65	2
75107870	CRDR G-C9105-0990 Cr65	9.900	0.3898	10	61	103	40	Cr65	2
75107875	CRDR G-C9105-1000 Cr65	10.000	0.3937	10	61	103	40	Cr65	2
75107880	CRDR G-C9105-1010 Cr65	10.100	0.3976	12	71	118	45	Cr65	2
75107885	CRDR G-C9105-1020 Cr65	10.200	0.4016	12	71	118	45	Cr65	2
75107890	CRDR G-C9105-1030 Cr65	10.300	0.4055	12	71	118	45	Cr65	2
75107895	CRDR G-C9105-1040 Cr65	10.400	0.4094	12	71	118	45	Cr65	2
75107900	CRDR G-C9105-1050 Cr65	10.500	0.4134	12	71	118	45	Cr65	2
75107905	CRDR G-C9105-1060 Cr65	10.600	0.4173	12	71	118	45	Cr65	2
75107910	CRDR G-C9105-1070 Cr65	10.700	0.4213	12	71	118	45	Cr65	2

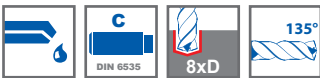
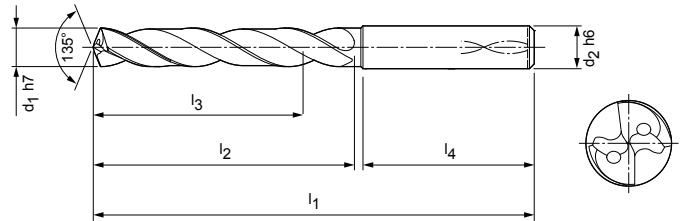
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75107915	CRDR G-C9105-1080 Cr65	10.800	0.4252	12	71	118	45	Cr65	2
75107920	CRDR G-C9105-1090 Cr65	10.900	0.4291	12	71	118	45	Cr65	2
75107925	CRDR G-C9105-1100 Cr65	11.000	0.4331	12	71	118	45	Cr65	2
75107930	CRDR G-C9105-1110 Cr65	11.100	0.4370	12	71	118	45	Cr65	2
75107935	CRDR G-C9105-1120 Cr65	11.200	0.4409	12	71	118	45	Cr65	2
75107940	CRDR G-C9105-1130 Cr65	11.300	0.4449	12	71	118	45	Cr65	2
75107945	CRDR G-C9105-1140 Cr65	11.400	0.4488	12	71	118	45	Cr65	2
75107950	CRDR G-C9105-1150 Cr65	11.500	0.4528	12	71	118	45	Cr65	2
75107955	CRDR G-C9105-1160 Cr65	11.600	0.4567	12	71	118	45	Cr65	2
75107960	CRDR G-C9105-1170 Cr65	11.700	0.4606	12	71	118	45	Cr65	2
75107965	CRDR G-C9105-1180 Cr65	11.800	0.4646	12	71	118	45	Cr65	2
75107970	CRDR G-C9105-1190 Cr65	11.900	0.4685	12	71	118	45	Cr65	2
75107975	CRDR G-C9105-1200 Cr65	12.000	0.4724	12	71	118	45	Cr65	2
75107980	CRDR G-C9105-1250 Cr65	12.500	0.4921	14	77	124	45	Cr65	2
75107985	CRDR G-C9105-1280 Cr65	12.800	0.5039	14	77	124	45	Cr65	2
75107990	CRDR G-C9105-1300 Cr65	13.000	0.5118	14	77	124	45	Cr65	2
75107995	CRDR G-C9105-1350 Cr65	13.500	0.5315	14	77	124	45	Cr65	2
75108000	CRDR G-C9105-1380 Cr65	13.800	0.5433	14	77	124	45	Cr65	2
75108005	CRDR G-C9105-1400 Cr65	14.000	0.5512	14	77	124	45	Cr65	2
75108010	CRDR G-C9105-1450 Cr65	14.500	0.5709	16	83	133	48	Cr65	2
75108015	CRDR G-C9105-1480 Cr65	14.800	0.5827	16	83	133	48	Cr65	2
75108020	CRDR G-C9105-1500 Cr65	15.000	0.5906	16	83	133	48	Cr65	2
75108025	CRDR G-C9105-1550 Cr65	15.500	0.6102	16	83	133	48	Cr65	2
75108030	CRDR G-C9105-1580 Cr65	15.800	0.6220	16	83	133	48	Cr65	2
75108035	CRDR G-C9105-1600 Cr65	16.000	0.6299	16	83	133	48	Cr65	2
75108040	CRDR G-C9105-1650 Cr65	16.500	0.6496	18	93	143	48	Cr65	2
75108045	CRDR G-C9105-1680 Cr65	16.800	0.6614	18	93	143	48	Cr65	2
75108050	CRDR G-C9105-1700 Cr65	17.000	0.6693	18	93	143	48	Cr65	2
75108055	CRDR G-C9105-1750 Cr65	17.500	0.6890	18	93	143	48	Cr65	2
75108060	CRDR G-C9105-1780 Cr65	17.800	0.7008	18	93	143	48	Cr65	2
75108065	CRDR G-C9105-1800 Cr65	18.000	0.7087	18	93	143	48	Cr65	2
75108070	CRDR G-C9105-1850 Cr65	18.500	0.7283	20	101	153	50	Cr65	2
75108075	CRDR G-C9105-1880 Cr65	18.800	0.7402	20	101	153	50	Cr65	2
75108080	CRDR G-C9105-1900 Cr65	19.000	0.7480	20	101	153	50	Cr65	2
75108085	CRDR G-C9105-1950 Cr65	19.500	0.7677	20	101	153	50	Cr65	2
75108090	CRDR G-C9105-1980 Cr65	19.800	0.7795	20	101	153	50	Cr65	2
75108095	CRDR G-C9105-2000 Cr65	20.000	0.7874	20	101	153	50	Cr65	2

CARBIDE DRILL

TECHNICAL DETAILS

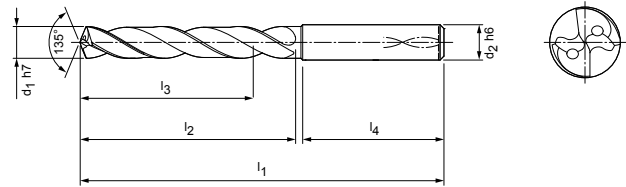
Tool Diameter Range 0.1181-0.7874 in
3.00-20.00 mm

Bore tolerance IT10 (achievable)
Shank form Cyl.
Number of flutes 2
Number of margins 3
Point geometry Special point
Point angle 135°
Helix angle 30°
Coolant Internal



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75108100	CRDR G-C9108-0300 Cr65	3.000	0.1181	6	34	72	36	Cr65	2
75108105	CRDR G-C9108-0310 Cr65	3.100	0.1220	6	34	72	36	Cr65	2
75108110	CRDR G-C9108-0320 Cr65	3.200	0.1260	6	34	72	36	Cr65	2
75108115	CRDR G-C9108-0330 Cr65	3.300	0.1299	6	34	72	36	Cr65	2
75108120	CRDR G-C9108-0340 Cr65	3.400	0.1339	6	34	72	36	Cr65	2
75108125	CRDR G-C9108-0350 Cr65	3.500	0.1378	6	34	72	36	Cr65	2
75108130	CRDR G-C9108-0360 Cr65	3.600	0.1417	6	34	72	36	Cr65	2
75108135	CRDR G-C9108-0370 Cr65	3.700	0.1457	6	34	72	36	Cr65	2
75108140	CRDR G-C9108-0380 Cr65	3.800	0.1496	6	43	81	36	Cr65	2
75108145	CRDR G-C9108-0390 Cr65	3.900	0.1535	6	43	81	36	Cr65	2
75108150	CRDR G-C9108-0400 Cr65	4.000	0.1575	6	43	81	36	Cr65	2
75108155	CRDR G-C9108-0410 Cr65	4.100	0.1614	6	43	81	36	Cr65	2
75108160	CRDR G-C9108-0420 Cr65	4.200	0.1654	6	43	81	36	Cr65	2
75108165	CRDR G-C9108-0430 Cr65	4.300	0.1693	6	43	81	36	Cr65	2
75108170	CRDR G-C9108-0440 Cr65	4.400	0.1732	6	43	81	36	Cr65	2
75108175	CRDR G-C9108-0450 Cr65	4.500	0.1772	6	43	81	36	Cr65	2
75108180	CRDR G-C9108-0460 Cr65	4.600	0.1811	6	43	81	36	Cr65	2
75108185	CRDR G-C9108-0465 Cr65	4.650	0.1831	6	43	81	36	Cr65	2
75108190	CRDR G-C9108-0470 Cr65	4.700	0.1850	6	43	81	36	Cr65	2
75108195	CRDR G-C9108-0480 Cr65	4.800	0.1890	6	57	95	36	Cr65	2
75108200	CRDR G-C9108-0490 Cr65	4.900	0.1929	6	57	95	36	Cr65	2
75108205	CRDR G-C9108-0500 Cr65	5.000	0.1969	6	57	95	36	Cr65	2
75108210	CRDR G-C9108-0510 Cr65	5.100	0.2008	6	57	95	36	Cr65	2
75108215	CRDR G-C9108-0520 Cr65	5.200	0.2047	6	57	95	36	Cr65	2
75108220	CRDR G-C9108-0530 Cr65	5.300	0.2087	6	57	95	36	Cr65	2
75108225	CRDR G-C9108-0540 Cr65	5.400	0.2126	6	57	95	36	Cr65	2
75108230	CRDR G-C9108-0550 Cr65	5.500	0.2165	6	57	95	36	Cr65	2
75108235	CRDR G-C9108-0555 Cr65	5.550	0.2185	6	57	95	36	Cr65	2
75108240	CRDR G-C9108-0560 Cr65	5.600	0.2205	6	57	95	36	Cr65	2
75108245	CRDR G-C9108-0570 Cr65	5.700	0.2244	6	57	95	36	Cr65	2
75108250	CRDR G-C9108-0580 Cr65	5.800	0.2283	6	57	95	36	Cr65	2

EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75108255	CRDR G-C9108-0590 Cr65	5.900	0.2323	6	57	95	36	Cr65	2
75108260	CRDR G-C9108-0600 Cr65	6.000	0.2362	6	57	95	36	Cr65	2
75108265	CRDR G-C9108-0610 Cr65	6.100	0.2402	8	76	114	36	Cr65	2
75108270	CRDR G-C9108-0620 Cr65	6.200	0.2441	8	76	114	36	Cr65	2
75108275	CRDR G-C9108-0630 Cr65	6.300	0.2480	8	76	114	36	Cr65	2
75108280	CRDR G-C9108-0640 Cr65	6.400	0.2520	8	76	114	36	Cr65	2
75108285	CRDR G-C9108-0650 Cr65	6.500	0.2559	8	76	114	36	Cr65	2
75108290	CRDR G-C9108-0660 Cr65	6.600	0.2598	8	76	114	36	Cr65	2
75108295	CRDR G-C9108-0670 Cr65	6.700	0.2638	8	76	114	36	Cr65	2
75108300	CRDR G-C9108-0680 Cr65	6.800	0.2677	8	76	114	36	Cr65	2
75108305	CRDR G-C9108-0690 Cr65	6.900	0.2717	8	76	114	36	Cr65	2
75108310	CRDR G-C9108-0700 Cr65	7.000	0.2756	8	76	114	36	Cr65	2
75108315	CRDR G-C9108-0710 Cr65	7.100	0.2795	8	76	114	36	Cr65	2
75108320	CRDR G-C9108-0720 Cr65	7.200	0.2835	8	76	114	36	Cr65	2
75108325	CRDR G-C9108-0730 Cr65	7.300	0.2874	8	76	114	36	Cr65	2
75108330	CRDR G-C9108-0740 Cr65	7.400	0.2913	8	76	114	36	Cr65	2
75108335	CRDR G-C9108-0750 Cr65	7.500	0.2953	8	76	114	36	Cr65	2
75108340	CRDR G-C9108-0760 Cr65	7.600	0.2992	8	76	114	36	Cr65	2
75108345	CRDR G-C9108-0770 Cr65	7.700	0.3031	8	76	114	36	Cr65	2
75108350	CRDR G-C9108-0780 Cr65	7.800	0.3071	8	76	114	36	Cr65	2
75108355	CRDR G-C9108-0790 Cr65	7.900	0.3110	8	76	114	36	Cr65	2
75108360	CRDR G-C9108-0800 Cr65	8.000	0.3150	8	76	114	36	Cr65	2
75108365	CRDR G-C9108-0810 Cr65	8.100	0.3189	10	95	142	40	Cr65	2
75108370	CRDR G-C9108-0820 Cr65	8.200	0.3228	10	95	142	40	Cr65	2
75108375	CRDR G-C9108-0830 Cr65	8.300	0.3268	10	95	142	40	Cr65	2
75108380	CRDR G-C9108-0840 Cr65	8.400	0.3307	10	95	142	40	Cr65	2
75108385	CRDR G-C9108-0850 Cr65	8.500	0.3346	10	95	142	40	Cr65	2
75108390	CRDR G-C9108-0860 Cr65	8.600	0.3386	10	95	142	40	Cr65	2
75108395	CRDR G-C9108-0870 Cr65	8.700	0.3425	10	95	142	40	Cr65	2
75108400	CRDR G-C9108-0880 Cr65	8.800	0.3465	10	95	142	40	Cr65	2
75108405	CRDR G-C9108-0890 Cr65	8.900	0.3504	10	95	142	40	Cr65	2
75108410	CRDR G-C9108-0900 Cr65	9.000	0.3543	10	95	142	40	Cr65	2
75108415	CRDR G-C9108-0910 Cr65	9.100	0.3583	10	95	142	40	Cr65	2
75108420	CRDR G-C9108-0920 Cr65	9.200	0.3622	10	95	142	40	Cr65	2
75108425	CRDR G-C9108-0930 Cr65	9.300	0.3661	10	95	142	40	Cr65	2
75108430	CRDR G-C9108-0940 Cr65	9.400	0.3701	10	95	142	40	Cr65	2
75108435	CRDR G-C9108-0950 Cr65	9.500	0.3740	10	95	142	40	Cr65	2
75108440	CRDR G-C9108-0960 Cr65	9.600	0.3780	10	95	142	40	Cr65	2
75108445	CRDR G-C9108-0970 Cr65	9.700	0.3819	10	95	142	40	Cr65	2
75108450	CRDR G-C9108-0980 Cr65	9.800	0.3858	10	95	142	40	Cr65	2
75108455	CRDR G-C9108-0990 Cr65	9.900	0.3898	10	95	142	40	Cr65	2
75108460	CRDR G-C9108-1000 Cr65	10.000	0.3937	10	95	142	40	Cr65	2
75108465	CRDR G-C9108-1010 Cr65	10.100	0.3976	12	114	162	45	Cr65	2
75108470	CRDR G-C9108-1020 Cr65	10.200	0.4016	12	114	162	45	Cr65	2
75108475	CRDR G-C9108-1030 Cr65	10.300	0.4055	12	114	162	45	Cr65	2
75108480	CRDR G-C9108-1040 Cr65	10.400	0.4094	12	114	162	45	Cr65	2
75108485	CRDR G-C9108-1050 Cr65	10.500	0.4134	12	114	162	45	Cr65	2
75108490	CRDR G-C9108-1060 Cr65	10.600	0.4173	12	114	162	45	Cr65	2
75108495	CRDR G-C9108-1070 Cr65	10.700	0.4213	12	114	162	45	Cr65	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
75108500	CRDR G-C9108-1080 Cr65	10.800	0.4252	12	114	162	45	Cr65	2
75108505	CRDR G-C9108-1090 Cr65	10.900	0.4291	12	114	162	45	Cr65	2
75108510	CRDR G-C9108-1100 Cr65	11.000	0.4331	12	114	162	45	Cr65	2
75108515	CRDR G-C9108-1110 Cr65	11.100	0.4370	12	114	162	45	Cr65	2
75108520	CRDR G-C9108-1120 Cr65	11.200	0.4409	12	114	162	45	Cr65	2
75108525	CRDR G-C9108-1130 Cr65	11.300	0.4449	12	114	162	45	Cr65	2
75108530	CRDR G-C9108-1140 Cr65	11.400	0.4488	12	114	162	45	Cr65	2
75108535	CRDR G-C9108-1150 Cr65	11.500	0.4528	12	114	162	45	Cr65	2
75108540	CRDR G-C9108-1160 Cr65	11.600	0.4567	12	114	162	45	Cr65	2
75108545	CRDR G-C9108-1170 Cr65	11.700	0.4606	12	114	162	45	Cr65	2
75108550	CRDR G-C9108-1180 Cr65	11.800	0.4646	12	114	162	45	Cr65	2
75108555	CRDR G-C9108-1190 Cr65	11.900	0.4685	12	114	162	45	Cr65	2
75108560	CRDR G-C9108-1200 Cr65	12.000	0.4724	12	114	162	45	Cr65	2
75108565	CRDR G-C9108-1250 Cr65	12.500	0.4921	14	133	178	45	Cr65	2
75108570	CRDR G-C9108-1280 Cr65	12.800	0.5039	14	133	178	45	Cr65	2
75108575	CRDR G-C9108-1300 Cr65	13.000	0.5118	14	133	178	45	Cr65	2
75108580	CRDR G-C9108-1350 Cr65	13.500	0.5315	14	133	178	45	Cr65	2
75108585	CRDR G-C9108-1380 Cr65	13.800	0.5433	14	133	178	45	Cr65	2
75108590	CRDR G-C9108-1400 Cr65	14.000	0.5512	14	133	178	45	Cr65	2
75108595	CRDR G-C9108-1450 Cr65	14.500	0.5709	16	152	203	48	Cr65	2
75108600	CRDR G-C9108-1480 Cr65	14.800	0.5827	16	152	203	48	Cr65	2
75108605	CRDR G-C9108-1500 Cr65	15.000	0.5906	16	152	203	48	Cr65	2
75108610	CRDR G-C9108-1550 Cr65	15.500	0.6102	16	152	203	48	Cr65	2
75108615	CRDR G-C9108-1580 Cr65	15.800	0.6220	16	152	203	48	Cr65	2
75108620	CRDR G-C9108-1600 Cr65	16.000	0.6299	16	152	203	48	Cr65	2
75108625	CRDR G-C9108-1650 Cr65	16.500	0.6496	18	171	222	48	Cr65	2
75108630	CRDR G-C9108-1680 Cr65	16.800	0.6614	18	171	222	48	Cr65	2
75108635	CRDR G-C9108-1700 Cr65	17.000	0.6693	18	171	222	48	Cr65	2
75108640	CRDR G-C9108-1750 Cr65	17.500	0.6890	18	171	222	48	Cr65	2
75108645	CRDR G-C9108-1780 Cr65	17.800	0.7008	18	171	222	48	Cr65	2
75108650	CRDR G-C9108-1800 Cr65	18.000	0.7087	18	171	222	48	Cr65	2
75108655	CRDR G-C9108-1850 Cr65	18.500	0.7283	20	190	243	50	Cr65	2
75108660	CRDR G-C9108-1880 Cr65	18.800	0.7402	20	190	243	50	Cr65	2
75108665	CRDR G-C9108-1900 Cr65	19.000	0.7480	20	190	243	50	Cr65	2
75108670	CRDR G-C9108-1950 Cr65	19.500	0.7677	20	190	243	50	Cr65	2
75108675	CRDR G-C9108-1980 Cr65	19.800	0.7795	20	190	243	50	Cr65	2
75108680	CRDR G-C9108-2000 Cr65	20.000	0.7874	20	190	243	50	Cr65	2

APPLICATION RANGE

HIGH PERFORMANCE-C9000		Hardness Rockwell (HRC) Hardness Brinell (BHN) Tensile Strength (N/mm2)				Product model description						Recommended feed (f) for diameter ranges								
		HRc	BHN	N/mm2	C9103 (3 x d)		C9105 (5 x d)		C9108 (8 x d)		0.118-0.197 in 3 to 5 mm		0.197-0.316 in 5 to 8 mm		0.316-0.472 in 8 to 12 mm		0.472-0.630 in 12 to 16 mm		0.630-0.787 in 16 to 20 mm	
					SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572 410, 416	up to 8	up to 178	up to 600	591-722	180-220	591-722	180-220	591-722	180-220	0.04-.007	0.10-0.18	0.06-.010	0.15-0.25	0.09-.014	0.22-0.35	0.12-.018	0.30-0.45	0.14-.020	0.35-.050	
	up to 15	up to 205	up to 700	525-656	160-200	525-656	160-200	525-656	160-200	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.009-.014	0.22-0.35	.012-.018	0.30-0.45	.014-.020	0.35-.050	
	over 15	over 205	over 700	459-591	140-180	459-591	140-180	459-591	140-180	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.009-.014	0.22-0.35	.012-.018	0.30-0.45	.014-.020	0.35-.050	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Stainless steel 410, 416	up to 27	up to 266	up to 900	427-558	130-170	427-558	130-170	427-558	130-170	.004-.007	0.10-0.18	.006-.010	0.15-0.25	.009-.014	0.22-0.35	.012-.018	0.30-0.45	.014-.020	0.35-.050	
	up to 31	up to 297	up to 1000	394-525	120-160	394-525	120-160	394-525	120-160	.003-.006	0.08-0.16	.005-.009	0.14-0.22	.008-.013	0.20-0.32	.010-.016	0.26-0.40	.012-.018	0.30-.045	
	over 31	over 297	over 1000	262-394	80-120	262-394	80-120	262-394	80-120	.003-.005	0.08-0.14	.005-.008	0.12-0.20	.007-.011	0.18-0.28	.010-.014	0.24-0.35	.010-.016	0.26-.040	
Stainless steel inox moderate 17-4PH, 15-5PH, 316L																				
	Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2																			
Cast iron, grey cast iron alloy GG10-GG40, A46	up to 14	up to 200	up to 680	525-656	160-200	525-656	160-200	525-656	160-200	.006-.009	0.16-0.24	.008-.014	0.20-0.35	.010-.016	0.25-0.40	.014-.020	0.35-0.50	.016-.025	0.40-.063	
	up to 24	up to 250	up to 850	394-525	120-160	394-525	120-160	394-525	120-160	.005-.009	0.14-0.22	.007-.011	0.18-0.28	.009-.014	0.22-0.35	.012-.018	0.30-0.45	.014-.022	0.35-.056	
	over 24	over 2050	over 850	262-394	80-120	262-394	80-120	262-394	80-120	.005-.008	0.12-0.20	.006-.010	0.16-0.25	.008-.012	0.20-0.30	.011-.016	0.28-0.40	.012-.018	0.30-.045	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8	up to 178	up to 600	459-591	140-180	459-591	140-180	459-591	140-180	.006-.009	0.16-0.24	.008-.014	0.20-0.35	.010-.016	0.25-0.40	.014-.020	0.35-0.50	.016-.025	0.40-.070	
	over 8	over 178	over 650	328-492	100-150	328-492	100-150	328-492	100-150	.005-.009	0.14-0.22	.007-.011	0.18-0.28	.009-.014	0.22-0.35	.012-.018	0.30-0.45	.014-.024	0.35-.060	
Aluminum (Si content >10%) 6061, 2025, 2008, 360																				
	Aluminum (Si content <10%) 413, 385, A390																			
Copper, brass, bronze beryllium copper, naval brass, AMPCO																				
	Titanium alloy Ti6Al4V																			
High temperature alloy Inconel, haynes, waspaley, hastelloy																				
	Chilled cast iron	38-48	350-450	1173-1527																
Hardened steel 50-60 HRc	50-55																			
	56-60																			
	61-65																			

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.

* For diameter < 3.00mm reduce cutting speed by 20-30%

DISCOVER OUR

TAPPING



Summary application chart-TAPPING

CROMSON High Performance Taps

Select the proper tap for your application:

CRP3 (HSSE)

General softer materials (ductile) below 25 HRc
Low carbon steel
Medium carbon steel
Brass
Copper
Aluminum
Cast iron

CRPS (HSSE)

Tough materials up to 35 HRc
High carbon steel
High alloy
Titanium
Aluminum

CRM (HSSE)

Stainless steel
Low carbon steel
Medium carbon steel
Alloyed high carbon

CRS (POWDER METAL) up to 48 HRc

High tensile materials
Tool steels
Titanium
Nickel alloys
Stainless steel

CRN (HSSE /HSS)

Aluminum including roll forming

TECHNICAL DETAILS

General application	Steel
Machine or manual	Machine and manual
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	1018, 1010, 1035,
Other	1045, 1050, 1065
Hardness	Up to 25 HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76000005	CRP3 - 4-40 - SP	4	40	2	H2	1.7/8	0.433
76000010	CRP3 - 6-32 - SP	6	32	3	H3	2	0.512
76000015	CRP3 - 6-40 - SP	6	40	3	H2	2	0.512
76000020	CRP3 - 8-32 - SP	8	32	3	H3	2.1/8	0.512
76000025	CRP3 - 10-24 - SP	10	24	2	H3	2.3/8	0.512
76000030	CRP3 - 10-24 - SP	10	24	3	H3	2.3/8	0.512
76000035	CRP3 - 10-32 - SP	10	32	2	H3	2.3/8	0.512
76000040	CRP3 - 10-32 - SP	10	32	3	H3	2.3/8	0.512
76000045	CRP3 - 12-24 - SP	12	24	3	H3	2.3/8	0.512
76000050	CRP3 - 1/4-20 - SP	1/4	20	2	H3	2.1/2	0.630
76000055	CRP3 - 1/4-20 - SP	1/4	20	3	H3	2.1/2	0.630
76000060	CRP3 - 1/4-28 - SP	1/4	28	2	H3	2.1/2	0.630
76000065	CRP3 - 1/4-28 - SP	1/4	28	3	H3	2.1/2	0.630
76000070	CRP3 - 5/16-18 - SP	5/16	18	2	H3	2.23/32	0.748
76000075	CRP3 - 5/16-18 - SP	5/16	18	3	H3	2.23/32	0.748
76000080	CRP3 - 5/16-24 - SP	5/16	24	2	H3	2.23/32	0.748
76000085	CRP3 - 5/16-24 - SP	5/16	24	3	H3	2.23/32	0.748
76000090	CRP3 - 3/8-16 - SP	3/8	16	2	H3	2.15/16	0.748
76000095	CRP3 - 3/8-16 - SP	3/8	16	3	H3	2.15/16	0.748
76000100	CRP3 - 3/8-24 - SP	3/8	24	2	H3	2.15/16	0.748
76000105	CRP3 - 3/8-24 - SP	3/8	24	3	H3	2.15/16	0.748
76000110	CRP3 - 7/16-14 - SP	7/16	14	3	H3	3.5/32	à.866
76000115	CRP3 - 7/16-20 - SP	7/16	20	3	H3	3.5/32	0.866
76000120	CRP3 - 1/2-13 - SP	1/2	13	3	H3	3.3/8	0.945
76000125	CRP3 - 1/2-20 - SP	1/2	20	3	H3	3.3/8	0.945
76000130	CRP3 - 5/8-11 - SP	5/8	11	3	H3	3.13/16	1.102
76000135	CRP3 - 5/8-18 - SP	5/8	18	3	H3	3.13/16	1.102
76000140	CRP3 - 3/4-10 - SP	3/4	10	3	H3	4.1/4	1.220
76000145	CRP3 - 3/4-16 - SP	3/4	16	3	H3	4.1/4	1.220
76000150	CRP3 - 1-8 - SP	1	8	3	H4	5.1/8	1.496
76000155	CRP3 - 1-12 - SP	1	12	3	H4	5.1/8	1.496

EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76000160	CRP3 - M2-0.4 - SP	M2	0.4	2	D3	1.3/4	0.433
76000165	CRP3 - M2.5-0.45 - SP	M2.5	0.45	2	D3	1.13/16	0.512
76000170	CRP3 - M3-0.5 - SP	M3	0.5	3	D3	1.15/16	0.433
76000175	CRP3 - M3.5-0.6 - SP	M3.5	0.6	3	D4	2	0.512
76000180	CRP3 - M4-0.7 - SP	M4	0.7	3	D4	2.1/8	0.512
76000185	CRP3 - M4.5-0.75 - SP	M4.5	0.75	3	D4	2.3/8	0.512
76000190	CRP3 - M5-0.8 - SP	M5	0.8	3	D4	2.3/8	0.512
76000195	CRP3 - M6-1 - SP	M6	1	3	D5	2.1/2	0.630
76000200	CRP3 - M7-1 - SP	M7	1	3	D5	2.23/32	0.630
76000205	CRP3 - M8-1 - SP	M8	1	3	D5	2.23/32	0.748
76000210	CRP3 - M8-1.25 - SP	M8	1.25	3	D5	2.23/32	0.748
76000215	CRP3 - M10-1.25 - SP	M10	1.25	3	D5	2.15/16	0.748
76000220	CRP3 - M10-1.5 - SP	M10	1.5	3	D6	2.15/16	0.748
76000225	CRP3 - M12-1.25 - SP	M12	1.25	3	D5	3.3/8	0.945
76000230	CRP3 - M12-1.75 - SP	M12	1.75	3	D6	3.3/8	0.945
76000235	CRP3 - M14-1.5 - SP	M14	1.5	3	D6	3.19/32	0.984
76000240	CRP3 - M14-2 - SP	M14	2	3	D7	3.19/32	0.984
76000245	CRP3 - M16-1.5 - SP	M16	1.5	3	D6	3.13/16	1.102
76000250	CRP3 - M16-2 - SP	M16	2	3	D7	3.13/16	1.102

HSSE SPIRAL FLUTE TAPS - CRP3

TECHNICAL DETAILS

General application	Steel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	1018, 1010, 1035,
Other	1045, 1050, 1066
Hardness	Up to 25 HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76000255	CRP3 - 4-40 - SF	4	40	2	H2	1.7/8	0.433
76000260	CRP3 - 6-32 - SF	6	32	3	H3	2	0.512
76000265	CRP3 - 8-32 - SF	8	32	3	H3	2.1/8	0.512
76000270	CRP3 - 10-24 - SF	10	24	3	H3	2.3/8	0.512
76000275	CRP3 - 10-32 - SF	10	32	3	H3	2.3/8	0.512
76000280	CRP3 - 1/4-20 - SF	1/4	20	3	H3	2.3/8	0.630
76000285	CRP3 - 1/4-28 - SF	1/4	28	3	H3	2.1/2	0.630
76000290	CRP3 - 5/16-18 - SF	5/16	18	3	H3	2.1/2	0.748

EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76000295	CRP3 - 5/16-24 - SF	5/16	24	3	H3	2.23/32	0.748
76000300	CRP3 - 3/8-16 - SF	3/8	16	3	H3	2.23/32	0.748
76000305	CRP3 - 3/8-24 - SF	3/8	24	3	H3	2.15/16	0.748
76000310	CRP3 - 7/16-14 - SF	7/16	14	3	H3	2.15/16	0.866
76000315	CRP3 - 7/16-20 - SF	7/16	20	3	H3	2.15/16	0.866
76000320	CRP3 - 1/2-13 - SF	1/2	13	3	H3	3.3/8	0.945
76000325	CRP3 - 1/2-20 - SF	1/2	20	3	H3	3.3/8	0.945
76000330	CRP3 - 5/8-11 - SF	5/8	11	4	H3	3.13/16	1.102
76000335	CRP3 - 5/8-18 - SF	5/8	18	4	H3	3.13/16	1.102
76000340	CRP3 - 3/4-10 - SF	3/4	10	4	H3	4.1/4	1.220
76000345	CRP3 - 3/4-16 - SF	3/4	16	4	H3	4.1/4	1.220
76000350	CRP3 - 7/8-9 - SF	7/8	9	4	H4	4.11/16	1.339
76000355	CRP3 - 7/8-14 - SF	7/8	14	4	H4	4.11/16	1.339
76000360	CRP3 - 1-8 - SF	1	8	4	H4	5.1/8	1.496
76000365	CRP3 - 1-12 - SF	1	12	4	H4	5.1/8	1.496
76000370	CRP3 - M3-0.5 - SF	M3	0.5	3	D3	1.15/16	0.433
76000375	CRP3 - M3.5-0.6 - SF	M3.5	0.6	3	D4	2	0.512
76000380	CRP3 - M4-0.7 - SF	M4	0.7	3	D4	2.1/8	0.512
76000385	CRP3 - M5-0.8 - SF	M5	0.8	3	D4	2.3/8	0.512
76000390	CRP3 - M6-1 - SF	M6	1	3	D5	2.1/2	0.630
76000395	CRP3 - M7-1 - SF	M7	1	3	D5	2.23/32	0.630
76000400	CRP3 - M8-1 - SF	M8	1	3	D5	2.23/32	0.748
76000405	CRP3 - M8-1.25 - SF	M8	1.25	3	D5	2.23/32	0.748
76000410	CRP3 - M10-1.25 - SF	M10	1.25	3	D5	2.15/16	0.748
76000415	CRP3 - M10-1.5 - SF	M10	1.5	3	D6	2.15/16	0.748
76000420	CRP3 - M12-1.25 - SF	M12	1.25	3	D5	3.3/8	0.945
76000425	CRP3 - M12-1.75 - SF	M12	1.75	3	D6	3.3/8	0.945
76000430	CRP3 - M14-1.5 - SF	M14	1.5	3	D6	3.19/32	0.984
76000435	CRP3 - M14-2 - SF	M14	2	3	D7	3.19/32	0.984
76000440	CRP3 - M16-1.5 - SF	M16	1.5	3	D6	3.13/16	1.102
76000445	CRP3 - M16-2 - SF	M16	2	3	D7	3.13/16	1.102
76000450	CRP3 - M18-1.5 - SF	M18	1.5	4	D6	4.1/32	1.102
76000455	CRP3 - M18-2.5 - SF	M18	2.5	4	D7	4.1/32	1.102
76000460	CRP3 - M20-1.5 - SF	M20	1.5	4	D5	4.15/32	1.220
76000465	CRP3 - M20-2.5 - SF	M20	2.5	4	D6	4.15/32	1.220

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRC
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76001005	CRPS - 2-56 - SP	2	56	2	H2	1.3/4	0.433
76001010	CRPS - 3-48 - SP	3	48	2	H2	1.13/16	0.512
76001015	CRPS - 4-40 - SP	4	40	2	H3	1.7/8	0.433
76001020	CRPS - 4-40 - SP	4	40	2	H2	1.7/8	0.433
76001025	CRPS - 6-32 - SP	6	32	3	H3	2	0.512
76001030	CRPS - 6-40 - SP	6	40	3	H3	2	0.512
76001035	CRPS - 8-32 - SP	8	32	3	H3	2.1/8	0.512
76001040	CRPS - 10-24 - SP	10	24	3	H3	2.3/8	0.512
76001045	CRPS - 10-32 - SP	10	32	3	H3	2.3/8	0.512
76001050	CRPS - 12-24 - SP	12	24	3	H3	2.3/8	0.512
76001055	CRPS - 1/4-20 - SP	1/4	20	3	H3	2.1/2	0.630
76001060	CRPS - 1/4-28 - SP	1/4	28	3	H3	2.1/2	0.630
76001065	CRPS - 5/16-18 - SP	5/16	18	3	H3	2.23/32	0.748
76001070	CRPS - 5/16-24 - SP	5/16	24	3	H3	2.23/32	0.748
76001075	CRPS - 3/8-16 - SP	3/8	16	3	H3	2.15/16	0.748
76001080	CRPS - 3/8-24 - SP	3/8	24	3	H3	2.15/16	0.748
76001085	CRPS - 7/16-20 - SP	7/16	20	3	H3	3.5/32	0.866
76001090	CRPS - 1/2-13 - SP	1/2	13	3	H3	3 3/8	0.945
76001095	CRPS - 1/2-20 - SP	1/2	20	3	H3	3.3/8	0.945
76001100	CRPS - 5/8-11 - SP	5/8	11	3	H3	3.13/16	1.102
76001105	CRPS - 5/8-18 - SP	5/8	18	3	H3	3.13/16	1.102
76001110	CRPS - 3/4-10 - SP	3/4	10	3	H3	4.1/4	1.220
76001115	CRPS - 3/4-16 - SP	3/4	16	3	H3	4.1/4	1.220
76001120	CRPS - M2-0.4 - SP	M2	0.4	2	D3	1.3/4	0.433
76001125	CRPS - M2.5-0.45 - SP	M2.5	0.45	2	D3	1.13/16	0.512
76001130	CRPS - M3-0.5 - SP	M3	0.5	3	D3	1.15/16	0.433
76001135	CRPS - M3.5-0.6 - SP	M3.5	0.6	3	D4	2	0.512
76001140	CRPS - M4-0.7 - SP	M4	0.7	3	D4	2.1/8	0.512
76001145	CRPS - M4.5-0.75 - SP	M4.5	0.75	3	D4	2.3/8	0.512
76001150	CRPS - M5-0.8 - SP	M5	0.8	3	D4	2.3/8	0.512
76001155	CRPS - M6-1 - SP	M6	1	3	D5	2.1/2	0.630
76001160	CRPS - M7-1 - SP	M7	1	3	D5	2.23/32	0.630
76001165	CRPS - M8-1 - SP	M8	1	3	D5	2.23/32	0.748
76001170	CRPS - M8-1.25 - SP	M8	1.25	3	D5	2.23/32	0.748

EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76001175	CRPS - M10-1.5 - SP	M10	1.5	3	D6	2.15/16	0.748
76001180	CRPS - M10-1.25 - SP	M10	1.25	3	D5	2.15/16	0.748
76001185	CRPS - M12-1.75 - SP	M12	1.75	3	D6	3.3/8	0.945
76001190	CRPS - M12-1.25 - SP	M12	1.25	3	D5	3.3/8	0.945
76001195	CRPS - M14-1.5 - SP	M14	1.5	3	D7	3.19/32	0.984
76001200	CRPS - M14-2 - SP	M14	2	3	D6	3.19/32	0.984
76001205	CRPS - M16-2 - SP	M16	2	3	D7	3.13/16	1.102
76001210	CRPS - M16-1.5 - SP	M16	1.5	3	D6	3.13/16	1.102
76001215	CRPS - M18-1.5 - SP	M18	1.5	4	D6	4.1/32	1.102
76001220	CRPS - M18-2.5 - SP	M18	2.5	4	D7	4.1/32	1.102
76001225	CRPS - M20-1.5 - SP	M20	1.5	4	D5	4.15/32	1.220
76001230	CRPS - M20-2.5 - SP	M20	2.5	4	D6	4.15/32	1.220
76001235	CRPS - M22-1.5 - SP	M22	1.5	4	D6	4.11/16	1.339
76001240	CRPS - M22-2.5 - SP	M22	2.5	4	D6	4.11/16	1.339
76001245	CRPS - M24-1.5 - SP	M24	1.5	4	D5	4.29/32	1.339
76001250	CRPS - M24-3 - SP	M24	3	4	D7	4.29/32	1.339
76001255	CRPS - M27-1.5 - SP	M27	1.5	4	D7	5.1/8	1.181
76001260	CRPS - M27-3 - SP	M27	3	4	D7	5.1/8	1.181
76001265	CRPS - M30-1.5 - SP	M30	1.5	4	D7	5.7/16	1.378
76001270	CRPS - M30-3.5 - SP	M30	3.5	4	D7	5.7/16	1.378

HSSE SPIRAL FLUTE TAPS - CRPS

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002005	CRPS - 2-56 - SF	2	56	2	H2	1.3/4	0.433
76002010	CRPS - 3-48 - SF	3	48	2	H2	1.13/16	0.512
76002015	CRPS - 4-40 - SF	4	40	2	H3	1.7/8	0.250
76002020	CRPS - 6-32 - SF	6	32	3	H2	2	0.313
76002025	CRPS - 8-32 - SF	8	32	3	H2	2.1/8	0.313

EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002030	CRPS - 10-24 - SF	10	24	3	H3	2.3/8	0.417
76002035	CRPS - 10-32 - SF	10	32	3	H3	2.3/8	0.417
76002040	CRPS - 1/4-20 - SF	1/4	20	3	H3	2.1/2	0.500
76002045	CRPS - 1/4-28 - SF	1/4	28	3	H3	2.1/2	0.500
76002050	CRPS - 5/16-18 - SF	5/16	18	3	H3	2.23/32	0.556
76002055	CRPS - 5/16-24 - SF	5/16	24	3	H3	2.23/32	0.556
76002060	CRPS - 3/8-16 - SF	3/8	16	3	H3	2.15/16	0.625
76002065	CRPS - 3/8-24 - SF	3/8	24	3	H3	2.15/16	0.625
76002070	CRPS - 7/16-14 - SF	7/16	14	3	H3	3.5/32	0.714
76002075	CRPS - 7/16-20 - SF	7/16	20	3	H3	3.5/32	0.714
76002080	CRPS - 1/2-13 - SF	1/2	13	3	H3	3.3/8	0.769
76002085	CRPS - 1/2-20 - SF	1/2	20	3	H3	3.3/8	0.769
76002090	CRPS - 5/8-11 - SF	5/8	11	4	H3	3.13/16	0.909
76002095	CRPS - 5/8-18 - SF	5/8	18	4	H3	3.13/16	0.909
76002100	CRPS - 3/4-10 - SF	3/4	10	4	H3	4.1/4	1.000
76002105	CRPS - 3/4-16 - SF	3/4	16	4	H3	4.1/4	1.000
76002110	CRPS - M3-0.5 - SF	M3	0.5	3	D3	2.3/8	0.197
76002115	CRPS - M3.5-0.6 - SF	M3.5	0.6	3	D4	2.3/8	0.236
76002120	CRPS - M4-0.7 - SF	M4	0.7	3	D4	2.3/8	0.276
76002125	CRPS - M5-0.8 - SF	M5	0.8	3	D4	2.3/8	0.315
76002130	CRPS - M6-1 - SF	M6	1	3	D5	2.1/2	0.394
76002135	CRPS - M7-1 - SF	M7	1	3	D5	2.23/32	0.394
76002140	CRPS - M8-1.25 - SF	M8	1.25	3	D5	2.23/32	0.492
76002145	CRPS - M8-1 - SF	M8	1	3	D5	2.23/32	0.492
76002150	CRPS - M10-1.5 - SF	M10	1.5	3	D6	2.15/16	0.591
76002155	CRPS - M10-1.25 - SF	M10	1.25	3	D5	2.15/16	0.591
76002160	CRPS - M12-1.75 - SF	M12	1.75	3	D6	3.3/8	0.689
76002165	CRPS - M12-1.25 - SF	M12	1.25	3	D5	3.3/8	0.689
76002170	CRPS - M14-1.5 - SF	M14	1.5	3	D6	3.19/32	0.787
76002175	CRPS - M14-2 - SF	M14	2	3	D7	3.19/32	0.787
76002180	CRPS - M16-1.5 - SF	M16	1.5	3	D6	3.13/16	0.787
76002185	CRPS - M16-2 - SF	M16	2	3	D7	3.13/16	0.787
76002190	CRPS - M18-1.5 - SF	M18	1.5	4	D6	4.1/32	0.984
76002195	CRPS - M18-2.5 - SF	M18	2.5	4	D7	4.1/32	0.984
76002200	CRPS - M20-1.5 - SF	M20	1.5	4	D5	4.15/32	0.984
76002205	CRPS - M20-2.5 - SF	M20	2.5	4	D6	4.15/32	0.984
76002210	CRPS - M22-1.5 - SF	M22	1.5	4	D6	4.11/16	0.984
76002215	CRPS - M22-2.5 - SF	M22	2.5	4	D6	4.11/16	0.984
76002220	CRPS - M24-1.5 - SF	M24	1.5	4	D5	4.29/32	1.181
76002225	CRPS - M24-3 - SF	M24	3	4	D7	4.29/32	1.181
76002230	CRPS - M27-1.5 - SF	M27	1.5	4	D7	5.1/8	1.181
76002235	CRPS - M27-3 - SF	M27	3	4	D7	5.1/8	1.181
76002240	CRPS - M30-1.5 - SF	M30	1.5	4	D7	5.7/16	1.378
76002245	CRPS - M30-3.5 - SF	M30	3.5	4	D7	5.7/16	1.378

HSSE SPIRAL POINT TAPS - CRPS DIN LENGTH ANSI SHANK

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRC
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002500	CRPS - 10-24 - SP	10	24	3	H3	2.756	0.591
76002505	CRPS - 1/4-20 - SP	1/4	20	3	H3	3.150	0.669
76002510	CRPS - 5/16-18 - SP	5/16	18	3	H3	3.543	0.669
76002515	CRPS - 3/8-16 - SP	3/8	16	3	H3	3.937	0.787
76002520	CRPS - 7/16-14 - SP	7/16	14	3	H3	3.937	0.866
76002525	CRPS - 1/2-13 - SP	1/2	13	3	H3	4.331	0.984
76002530	CRPS - 5/8-11 - SP	5/8	11	3	H3	4.331	1.063
76002535	CRPS - 3/4-10 - SP	3/4	10	3	H3	4.921	1.181

HSSE SPIRAL POINT TAPS - CRPS 4" AND 6" OAL

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRc
Tap length	Long



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002600	CRPS - 4-40 - SP	4	40	2	H2	4.000	0.433
76002605	CRPS - 6-32 - SP	6	32	3	H3	4.000	0.512
76002610	CRPS - 8-32 - SP	8	32	3	H3	4.000	0.512
76002615	CRPS - 10-24 - SP	10	24	3	H3	6.000	0.512
76002620	CRPS - 10-32 - SP	10	32	3	H3	6.000	0.512
76002625	CRPS - 1/4-20 - SP	1/4	20	3	H3	6.000	0.630
76002630	CRPS - 1/4-28 - SP	1/4	28	3	H3	6.000	0.630
76002635	CRPS - 5/16-18 - SP	5/16	18	3	H3	6.000	0.748
76002640	CRPS - 5/16-24 - SP	5/16	24	3	H3	6.000	0.748
76002645	CRPS - 3/8-16 - SP	3/8	16	3	H3	6.000	0.748
76002650	CRPS - 3/8-24 - SP	3/8	24	3	H3	6.000	0.748
76002655	CRPS - 7/16-14 - SP	7/16	14	3	H3	6.000	0.866
76002660	CRPS - 7/16-20 - SP	7/16	20	3	H3	6.000	0.866
76002665	CRPS - 1/2-13 - SP	1/2	13	3	H3	6.000	0.945
76002670	CRPS - 1/2-20 - SP	1/2	20	3	H3	6.000	0.945
76002675	CRPS - 5/8-11 - SP	5/8	11	3	H3	6.000	1.102
76002680	CRPS - 3/4-10 - SP	3/4	10	3	H3	6.000	1.220
76002685	CRPS - 7/8-9 - SP	7/8	9	3	H4	6.000	1.339
76002690	CRPS - 1-8 - SP	1	8	4	H4	6.000	1.496

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRc
Tap length	Long



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002800	CRPS - 4-40 - SF	4	40	2	H2	4.000	0.433
76002805	CRPS - 6-32 - SF	6	32	3	H3	4.000	0.512
76002810	CRPS - 8-32 - SF	8	32	3	H3	4.000	0.512
76002815	CRPS - 10-24 - SF	10	24	3	H3	4.000	0.512
76002820	CRPS - 10-32 - SF	10	32	3	H3	6.000	0.512
76002825	CRPS - 1/4-20 - SF	1/4	20	3	H3	6.000	0.630
76002830	CRPS - 1/4-28 - SF	1/4	28	3	H3	6.000	0.630
76002835	CRPS - 5/16-18 - SF	5/16	18	3	H3	6.000	0.748
76002840	CRPS - 5/16-24 - SF	5/16	24	3	H3	6.000	0.748
76002845	CRPS - 3/8-16 - SF	3/8	16	3	H3	6.000	0.748
76002850	CRPS - 3/8-24 - SF	3/8	24	3	H3	6.000	0.748
76002855	CRPS - 7/16-14 - SF	7/16	14	3	H3	6.000	0.866
76002860	CRPS - 7/16-20 - SF	7/16	20	3	H3	6.000	0.866
76002865	CRPS - 1/2-13 - SF	1/2	13	3	H3	6.000	0.945
76002870	CRPS - 1/2-20 - SF	1/2	20	3	H3	6.000	0.945
76002875	CRPS - 5/8-11 - SF	5/8	11	4	H3	6.000	1.102
76002880	CRPS - 3/4-10 - SF	3/4	10	4	H3	6.000	1.220
76002885	CRPS - 7/8-9 - SF	7/8	9	4	H4	6.000	1.339
76002890	CRPS - 1-8 - SF	1	8	4	H4	6.000	1.496

TECHNICAL DETAILS

General application	Hardened steel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	4140, 4340, H13
Other	D2, P20
Hardness	Up to 35 HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76002900	CRPS - 1/16-27 - SP	1/16	27	4	-	2.1/8	0.688
76002905	CRPS - 1/8-27 - SP	1/8	27	4	-	2.1/8	0.750
76002910	CRPS - 1/4-18 - SP	1/4	18	4	-	2.7/16	1.063
76002915	CRPS - 3/8-18 - SP	3/8	18	4	-	2.9/16	1.063
76002920	CRPS - 1/2-14 - SP	1/2	14	4	-	3.1/8	1.375
76002925	CRPS - 3/4-14 - SP	3/4	14	5	-	3.1/4	1.375
76002930	CRPS - 1-11.5 - SP	1	11.5	5	-	3.3/4	1.750
76002935	CRPS - 1-1/4-11.5 - SP	1 1/4	11.5	5	-	4	1.750
76002940	CRPS - 1-1/2-11.5 - SP	1 1/2	11.5	5	-	4.1/4	1.750
76002945	CRPS - 2-11.5 - SP	2	11.5	5	-	4.1/2	1.750

For pre-tapping operation, please refer to our TAPERMILL line on page 35



TECHNICAL DETAILS

General application	Stainless Steel
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	304, 316, 316L
Other	17-4PH, 15-5PH, A286
Hardness	Up to 35 HRC
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76003000	CRM - 2-56 - SP	2	56	2	H2	1.3/4	0.433
76003005	CRM - 3-48 - SP	3	48	2	H2	1.13/16	0.512
76003010	CRM - 4-40 - SP	4	40	2	H2	1 7/8	0.433
76003015	CRM - 6-32 - SP	6	32	3	H3	2	0.512
76003020	CRM - 8-32 - SP	8	32	3	H3	2.1/8	0.512
76003025	CRM - 10-24 - SP	10	24	3	H3	2.3/8	0.512
76003030	CRM - 10-32 - SP	10	32	3	H3	2.3/8	0.512
76003035	CRM - 1/4-20 - SP	1/4	20	3	H3	2.1/2	0.630
76003040	CRM - 1/4-28 - SP	1/4	28	3	H3	2.1/2	0.630
76003045	CRM - 5/16-18 - SP	5/16	18	3	H3	2.23/32	0.748
76003050	CRM - 5/16-24 - SP	5/16	24	3	H3	2.23/32	0.748
76003055	CRM - 3/8-16 - SP	3/8	16	3	H3	2.15/16	0.748
76003060	CRM - 3/8-24 - SP	3/8	24	3	H3	2.15/16	0.748
76003065	CRM - 7/16-14 - SP	7/16	14	3	H3	3.5/32	0.866
76003070	CRM - 7/16-20 - SP	7/16	20	3	H3	3.5/32	0.866
76003075	CRM - 1/2-13 - SP	1/2	13	3	H3	3.3/8	0.945
76003080	CRM - 1/2-20 - SP	1/2	20	3	H3	3.3/8	0.945
76003085	CRM - 5/8-11 - SP	5/8	11	3	H3	3.13/16	1.102
76003090	CRM - 5/8-18 - SP	5/8	18	3	H3	3.13/16	1.102
76003095	CRM - 3/4-10 - SP	3/4	10	3	H3	4.1/4	1.220
76003100	CRM - 3/4-16 - SP	3/4	16	3	H3	4.1/4	1.220
76003105	CRM - M3-0.5 - SP	M3	0.5	3	D3	1.15/16	0.433
76003110	CRM - M4-0.7 - SP	M4	0.7	3	D4	2.1/8	0.512
76003115	CRM - M5-0.8 - SP	M5	0.8	3	D4	2.3/8	0.512
76003120	CRM - M6-1 - SP	M6	1	3	D5	2.1/2	0.630
76003125	CRM - M8-1.25 - SP	M8	1.25	3	D5	2.23/32	0.748
76003130	CRM - M10-1.25 - SP	M10	1.25	3	D5	2.15/16	0.748
76003135	CRM - M10-1.5 - SP	M10	1.5	3	D6	2.15/16	0.748
76003140	CRM - M12-1.75 - SP	M12	1.75	3	D6	3.3/8	0.945

TECHNICAL DETAILS

General application	Stainless steel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	304, 316, 316L
Other	17-4, 15-5, A286
Hardness	Up to 35HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76003200	CRM - 2-56 - SF	2	56	2	H2	1.3/4	0.433
76003205	CRM - 3-48 - SF	3	48	2	H2	1.13/16	0.512
76003210	CRM - 4-40 - SF	4	40	2	H2	1.7/8	0.250
76003215	CRM - 6-32 - SF	6	32	3	H2	2	0.313
76003220	CRM - 8-32 - SF	8	32	3	H2	2.1/8	0.313
76003225	CRM - 10-24 - SF	10	24	3	H3	2.3/8	0.417
76003230	CRM - 10-32 - SF	10	32	3	H3	2.3/8	0.417
76003235	CRM - 1/4-20 - SF	1/4	20	3	H3	2.1/2	0.500
76003240	CRM - 1/4-28 - SF	1/4	28	3	H3	2.1/2	0.500
76003245	CRM - 5/16-18 - SF	5/16	18	3	H3	2.23/32	0.556
76003250	CRM - 5/16-24 - SF	5/16	24	3	H3	2.23/32	0.556
76003255	CRM - 3/8-16 - SF	3/8	16	3	H3	2.15/16	0.625
76003260	CRM - 3/8-24 - SF	3/8	24	3	H3	2.15/16	0.625
76003265	CRM - 7/16-14 - SF	7/16	14	3	H3	3.5/32	0.714
76003270	CRM - 7/16-20 - SF	7/16	20	3	H3	3.5/32	0.714
76003275	CRM - 1/2-13 - SF	1/2	13	3	H3	3.3/8	0.769
76003280	CRM - 1/2-20 - SF	1/2	20	3	H3	3.3/8	0.769
76003285	CRM - 9/16-12 - SF	9/16	12	4	H3	3.19/32	0.880
76003290	CRM - 5/8-11 - SF	5/8	11	4	H3	3.13/16	0.909
76003295	CRM - 5/8-18 - SF	5/8	18	4	H3	3.13/16	0.909
76003300	CRM - 3/4-10 - SF	3/4	10	4	H3	4.1/4	1.000
76003305	CRM - 3/4-16 - SF	3/4	16	4	H3	4.1/4	1.000
76003310	CRM - M3-0.5 - SF	M3	0.5	3	D3	1.15/16	0.197
76003315	CRM - M4-0.7 - SF	M4	0.7	3	D4	2.1/8	0.276
76003320	CRM - M5-0.8 - SF	M5	0.8	3	D4	2.3/8	0.315
76003325	CRM - M6-1 - SF	M6	1	3	D5	2.1/2	0.394
76003330	CRM - M8-1.25 - SF	M8	1.25	3	D5	2.23/32	0.492
76003335	CRM - M10-1.25 - SF	M10	1.25	3	D5	2.15/16	0.591
76003340	CRM - M10-1.5 - SF	M10	1.5	3	D6	2.15/16	0.591
76003345	CRM - M12-1.75 - SF	M12	1.75	3	D6	3.3/8	0.689
76003350	CRM - M14-2 - SF	M14	2	3	D7	3.19/32	0.787
76003355	CRM - M16-2 - SF	M16	2	3	D7	3.13/16	0.787

TECHNICAL DETAILS

General application	Titanium, Inconel
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Steam
Materials to be machined	Steel, 4340
Other	Titanium, inconel, waspaloy
Hardness	Up to 48 HRc
Tap length	Standard Powder metal



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76003500	POWDER METAL - 4-40 - SP	4	40	2	H2	1.7/8	0.433
76003505	POWDER METAL - 5-40 - SP	5	40	3	H2	1.15/16	0.433
76003510	POWDER METAL - 6-32 - SP	6	32	3	H3	2	0.512
76003515	POWDER METAL - 8-32 - SP	8	32	3	H3	2.1/8	0.512
76003520	POWDER METAL - 10-24 - SP	10	24	3	H3	2.3/8	0.512
76003525	POWDER METAL - 10-32 - SP	10	32	3	H3	2.3/8	0.512
76003530	POWDER METAL - 1/4-20 - SP	1/4	20	3	H3	2.1/2	0.630
76003535	POWDER METAL - 1/4-28 - SP	1/4	28	3	H3	2.1/2	0.630
76003540	POWDER METAL - 5/16-18 - SP	5/16	18	3	H3	2.23/32	0.748
76003545	POWDER METAL - 5/16-24 - SP	5/16	24	3	H3	2.23/32	0.748
76003550	POWDER METAL - 3/8-16 - SP	3/8	16	3	H3	2.15/16	0.748
76003555	POWDER METAL - 3/8-24 - SP	3/8	24	3	H3	2.15/16	0.748
76003560	POWDER METAL - 7/16-14 - SP	7/16	14	3	H3	3.5/32	0.866
76003565	POWDER METAL - 7/16-20 - SP	7/16	20	3	H3	3.5/32	0.866
76003570	POWDER METAL - 1/2-13 - SP	1/2	13	3	H3	3.3/8	0.945
76003575	POWDER METAL - 1/2-20 - SP	1/2	20	3	H3	3.3/8	0.945
76003580	POWDER METAL - 5/8-11 - SP	5/8	11	3	H3	3.13/16	1.102
76003585	POWDER METAL - 5/8-18 - SP	5/8	18	3	H3	3.13/16	1.102
76003590	POWDER METAL - 3/4-10 - SP	3/4	10	4	H3	4.1/4	1.220
76003595	POWDER METAL - 3/4-16 - SP	3/4	16	4	H3	4.1/4	1.220
76003600	POWDER METAL - M3-0.5 - SP	M3	0.5	3	D3	1.15/16	0.433
76003605	POWDER METAL - M4-0.7 - SP	M4	0.7	3	D4	2.1/8	0.512
76003610	POWDER METAL - M5-0.8 - SP	M5	0.8	3	D4	2.3/8	0.512
76003615	POWDER METAL - M6-1 - SP	M6	1	3	D5	2.1/2	0.630
76003620	POWDER METAL - M8-1.25 - SP	M8	1.25	3	D5	2.23/32	0.748
76003625	POWDER METAL - M10-1.25 - SP	M10	1.25	3	D5	2.15/16	0.748
76003630	POWDER METAL - M10-1.5 - SP	M10	1.5	3	D6	2.15/16	0.748
76003635	POWDER METAL - M12-1.75 - SP	M12	1.75	3	D6	3.3/8	0.945

SPIRAL FLUTE TAPS “POWDER METAL” CRS

TECHNICAL DETAILS

General application	Titanium, Inconel
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Steam
Materials to be machined	Steel, 4340
Other	Titanium, inconel, waspalo
Hardness	Up to 48 HRc
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length
76003700	POWDER METAL - 4-40 - SF	4	40	2	H2	1.7/8	0.250
76003705	POWDER METAL - 6-32 - SF	6	32	3	H3	2	0.313
76003710	POWDER METAL - 8-32 - SF	8	32	3	H3	2.1/8	0.313
76003715	POWDER METAL - 10-24 - SF	10	24	3	H3	2.3/8	0.417
76003720	POWDER METAL - 10-32 - SF	10	32	3	H3	2.3/8	0.417
76003725	POWDER METAL - 1/4-20 - SF	1/4	20	3	H3	2.1/2	0.500
76003730	POWDER METAL - 1/4-28 - SF	1/4	28	3	H3	2.1/2	0.500
76003735	POWDER METAL - 5/16-18 - SF	5/16	18	3	H3	2.23/32	0.556
76003740	POWDER METAL - 5/16-24 - SF	5/16	24	3	H3	2.23/32	0.556
76003745	POWDER METAL - 3/8-16 - SF	3/8	16	3	H3	2.15/16	0.625
76003750	POWDER METAL - 3/8-24 - SF	3/8	24	3	H3	2.15/16	0.625
76003755	POWDER METAL - 7/16-14 - SF	7/16	14	3	H3	3.5/32	0.714
76003760	POWDER METAL - 7/16-20 - SF	7/16	20	3	H3	3.5/32	0.714
76003765	POWDER METAL - 1/2-13 - SF	1/2	13	3	H3	3.3/8	0.769
76003770	POWDER METAL - 1/2-20 - SF	1/2	20	3	H3	3.3/8	0.769
76003775	POWDER METAL - 5/8-11 - SF	5/8	11	4	H3	3.13/16	0.909
76003780	POWDER METAL - 5/8-18 - SF	5/8	18	4	H3	3.13/16	0.909
76003785	POWDER METAL - 3/4-10 - SF	3/4	10	4	H3	4.1/4	1.000
76003790	POWDER METAL - 3/4-16 - SF	3/4	16	4	H3	4.1/4	1.000
76003795	POWDER METAL - M3-0.5 - SF	M3	0.5	3	D3	1.15/16	0.197
76003800	POWDER METAL - M4-0.7 - SF	M4	0.7	3	D4	2.1/8	0.276
76003805	POWDER METAL - M5-0.8 - SF	M5	0.8	3	D4	2.3/8	0.315
76003810	POWDER METAL - M6-1 - SF	M6	1	3	D5	2.1/2	0.394
76003815	POWDER METAL - M8-1.25 - SF	M8	1.25	3	D5	2.23/32	0.492
76003820	POWDER METAL - M10-1.25 - SF	M10	1.25	3	D5	2.15/16	0.591
76003825	POWDER METAL - M10-1.5 - SF	M10	1.5	3	D6	2.15/16	0.591
76003830	POWDER METAL - M12-1.75 - SF	M12	1.75	3	D6	3.3/8	0.689

TECHNICAL DETAILS

General application	Aluminum
Machine or manual	Machine
Hole type	Blind hole
Surface treatment	Bright
Materials to be machined	Aluminum, copper, brass, bronze
Other	
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004000	CRN - 4-40 - SF	4	40	2	H2	1.7/8	0.250	CRN
76004005	CRN - 6-32 - SF	6	32	2	H3	2	0.313	CRN
76004010	CRN - 8-32 - SF	8	32	2	H3	2.1/8	0.313	CRN
76004015	CRN - 10-24 - SF	10	24	2	H3	2.3/8	0.417	CRN
76004020	CRN - 10-32 - SF	10	32	2	H3	2.3/8	0.417	CRN
76004025	CRN - 1/4-20 - SF	1/4	20	2	H3	2.1/2	0.500	CRN
76004030	CRN - 1/4-28 - SF	1/4	28	2	H3	2.1/2	0.500	CRN
76004035	CRN - 5/16-18 - SF	5/16	18	2	H3	2.23/32	0.556	CRN
76004040	CRN - 5/16-24 - SF	5/16	24	2	H3	2.23/32	0.556	CRN
76004045	CRN - 3/8-16 - SF	3/8	16	2	H3	2.15/16	0.625	CRN
76004050	CRN - 3/8-24 - SF	3/8	24	2	H3	2.15/16	0.625	CRN
76004055	CRN - M3-0.5 - SF	M3	0.5	2	D3	1.15/16	0.197	CRN
76004060	CRN - M4-0.7 - SF	M4	0.7	2	D4	2.1/8	0.276	CRN
76004065	CRN - M5-0.8 - SF	M5	0.8	2	D5	2.3/8	0.315	CRN
76004070	CRN - M6-1 - SF	M6	1	2	D5	2.1/2	0.394	CRN
76004075	CRN - M8-1.25 - SF	M8	1.25	2	D5	2.23/32	0.492	CRN
76004080	CRN - M10-1.25 - SF	M10	1.25	2	D5	2.15/16	0.591	CRN
76004085	CRN - M10-1.5 - SF	M10	1.5	2	D6	2.15/16	0.591	CRN

TECHNICAL DETAILS

General application	Aluminum
Machine or manual	Machine
Hole type	Through bore
Surface treatment	Bright
Materials to be machined	Low carbide, aluminum
Other	Bronze, brass, copper
Hardness	Max. 20 HRc
Tap length	Standard - Roll Formed Thread



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004200	CRN - 4-40 - RF	4	40	-	H5	1 7/8	0.560	CRN
76004205	CRN - 6-32 - RF	6	32	-	H5	2	0.480	CRN
76004210	CRN - 8-32 - RF	8	32	-	H5	2.1/8	0.500	CRN
76004215	CRN - 10-24 - RF	10	24	-	H6	2.3/8	0.640	CRN
76004220	CRN - 10-32 - RF	10	32	-	H6	2.3/8	0.640	CRN
76004225	CRN - 1/4-20 - RF	1/4	20	-	H6	2.1/2	0.830	CRN
76004230	CRN - 1/4-28 - RF	1/4	28	-	H6	2.1/2	0.830	CRN
76004235	CRN - 5/16-18 - RF	5/16	18	-	H7	2.23/32	0.930	CRN
76004240	CRN - 5/16-24 - RF	5/16	24	-	H7	2.23/32	0.930	CRN
76004245	CRN - 3/8-16 - RF	3/8	16	-	H7	2.15/16	0.980	CRN
76004250	CRN - 3/8-24 - RF	3/8	24	-	H7	2.15/16	0.980	CRN
76004255	CRN - 1/2-13 - RF	1/2	13	-	H8	2.23/32	0.930	CRN
76004260	CRN - 1/2-20 - RF	1/2	20	-	H8	2.15/16	0.980	CRN
76004265	CRN - M3-0.5 - RF	M3	0.5	-	D5	1.15/16	0.620	CRN
76004270	CRN - M4-0.7 - RF	M4	0.7	-	D6	2.1/8	0.500	CRN
76004275	CRN - M5-0.8 - RF	M5	0.8	-	D7	2.3/8	0.640	CRN
76004280	CRN - M6-1 - RF	M6	1	-	D8	2.1/2	0.830	CRN
76004285	CRN - M8-1.25 - RF	M8	1.25	-	D9	2.23/32	0.930	CRN
76004290	CRN - M10-1.5 - RF	M10	1.5	-	D10	2.15/16	0.980	CRN

TECHNICAL DETAILS

General application Aluminum
 Machine or manual Machine
 Hole type Blind hole
 Surface treatment Bright
 Materials to be machined **Low carbide, aluminum**
 Other **Bronze, brass, copper**
 Hardness Max. 20 HRc
 Tap length Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004300	CRN - 4-40 - SF - STI	4	40	2	-	1.7/8	0.250	CRN
76004305	CRN - 6-32 - SF - STI	6	32	2	-	2	0.313	CRN
76004310	CRN - 8-32 - SF - STI	8	32	2	-	2.1/8	0.313	CRN
76004315	CRN - 10-24 - SF - STI	10	24	2	-	2.3/8	0.417	CRN
76004320	CRN - 10-32 - SF - STI	10	32	2	-	2.3/8	0.417	CRN
76004325	CRN - 1/4-20 - SF - STI	1/4	20	2	-	2.1/2	0.500	CRN
76004330	CRN - 1/4-28 - SF - STI	1/4	28	2	-	2.1/2	0.500	CRN
76004335	CRN - 5/16-18 - SF - STI	5/16	18	2	-	2.23/32	0.556	CRN
76004340	CRN - 5/16-24 - SF - STI	5/16	24	2	-	2.23/32	0.556	CRN
76004345	CRN - 3/8-16 - SF - STI	3/8	16	2	-	2.15/16	0.625	CRN
76004350	CRN - 3/8-24 - SF - STI	3/8	24	2	-	2.15/16	0.625	CRN

TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	Ferrous
Other	Non-ferrous
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004401	HSS - 6-32-NC	6	32	3	H3	2	0.688	HSS
76004411	HSS - 8-32-NC	8	32	4	H3	2.1/8	0.750	HSS
76004431	HSS - 10-24-NC	10	24	4	H3	2.3/8	0.875	HSS
76004441	HSS - 12-24-NC	12	24	4	H3	2.3/8	0.938	HSS
76004461	HSS - 10-32-NF	10	32	4	H3	2.3/8	0.875	HSS
76004471	HSS - 1/4-20-NC	1/4	20	4	H3	2.1/2	1.000	HSS
76004491	HSS - 1/4-28-NF	1/4	28	4	H3	2.1/2	1.000	HSS
76004511	HSS - 5/16-28-NC	5/16	18	4	H3	2.23/32	1.125	HSS
76004521	HSS - 5/16-24-NF	5/16	24	4	H3	2.23/32	1.125	HSS
76004531	HSS - 3/8-16-NC	3/8	16	4	H3	2.15/16	1.250	HSS
76004551	HSS - 3/8-24-NF	3/8	24	4	H3	2.15/16	1.250	HSS
76004561	HSS - 7/16-14-NC	7/16	14	4	H3	3.5/32	1.438	HSS
76004581	HSS - 7/16-20-NF	7/16	20	4	H3	3.5/32	1.438	HSS
76004591	HSS - 1/2-13-NC	1/2	13	4	H3	3.3/8	1.656	HSS
76004611	HSS - 1/2-20-NF	1/2	20	4	H3	3.3/8	1.656	HSS
76004621	HSS - 9/16-12-NC	9/16	12	4	H3	3.19/32	1.656	HSS
76004641	HSS - 9/16-18-NF	9/16	18	4	H3	3.19/32	1.656	HSS
76004651	HSS - 5/8-11-NC	5/8	11	4	H3	3.13/16	1.813	HSS
76004671	HSS - 5/8-18-NF	5/8	18	4	H3	3.13/16	1.813	HSS
76004681	HSS - 3/4-10-NC	3/4	10	4	H3	4.1/4	2.000	HSS
76004701	HSS - 3/4-16-NF	3/4	16	4	H3	4.1/4	2.000	HSS

TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	Ferrous
Other	Non-ferrous
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004400	HSS - 6-32 -NC1	HAND TAPS HSS TAPER	6	32	3	H3	2	0.688	HSS
76004405	HSS - 6-32 -NC2	HAND TAPS HSS PLUG	6	32	3	H3	2	0.688	HSS
76004410	HSS - 6-32 -NC3	HAND TAPS HSS BOTTOMING	6	32	3	H3	2	0.688	HSS
76004415	HSS - 8-32 -NC1	HAND TAPS HSS TAPER	8	32	4	H3	2.1/8	0.750	HSS
76004420	HSS - 8-32 -NC2	HAND TAPS HSS PLUG	8	32	4	H3	2.1/8	0.750	HSS
76004425	HSS - 8-32 -NC3	HAND TAPS HSS BOTTOMING	8	32	4	H3	2.1/8	0.750	HSS
76004430	HSS - 10-24 -NC1	HAND TAPS HSS TAPER	10	24	4	H3	2.3/8	0.875	HSS
76004435	HSS - 10-24 -NC2	HAND TAPS HSS PLUG	10	24	4	H3	2.3/8	0.875	HSS
76004440	HSS - 10-24 -NC3	HAND TAPS HSS BOTTOMING	10	24	4	H3	2.3/8	0.875	HSS
76004445	HSS - 12-24 -NC1	HAND TAPS HSS TAPER	12	24	4	H3	2.3/8	0.938	HSS
76004450	HSS - 12-24 -NC2	HAND TAPS HSS PLUG	12	24	4	H3	2.3/8	0.938	HSS
76004455	HSS - 12-24 -NC3	HAND TAPS HSS BOTTOMING	12	24	4	H3	2.3/8	0.938	HSS
76004460	HSS - 10-32 -NF1	HAND TAPS HSS TAPER	10	32	4	H3	2.3/8	0.875	HSS
76004465	HSS - 10-32 -NF2	HAND TAPS HSS PLUG	10	32	4	H3	2.3/8	0.875	HSS
76004470	HSS - 10-32 -NF3	HAND TAPS HSS BOTTOMING	10	32	4	H3	2.3/8	0.875	HSS
76004475	HSS - 1/4-20 -NC1	HAND TAPS HSS TAPER	1/4	20	4	H3	2.1/2	1.000	HSS
76004480	HSS - 1/4-20 -NC2	HAND TAPS HSS PLUG	1/4	20	4	H3	2.1/2	1.000	HSS
76004485	HSS - 1/4-20 -NC3	HAND TAPS HSS BOTTOMING	1/4	20	4	H3	2.1/2	1.000	HSS
76004490	HSS - 1/4-28 -NF1	HAND TAPS HSS TAPER	1/4	28	4	H3	2.1/2	1.000	HSS
76004495	HSS - 1/4-28 -NF2	HAND TAPS HSS PLUG	1/4	28	4	H3	2.1/2	1.000	HSS
76004500	HSS - 1/4-28 -NF3	HAND TAPS HSS BOTTOMING	1/4	28	4	H3	2.1/2	1.000	HSS
76004505	HSS - 5/16-18 -NC1	HAND TAPS HSS TAPER	5/16	18	4	H3	2.23/32	1.125	HSS
76004510	HSS - 5/16-18 -NC2	HAND TAPS HSS PLUG	5/16	18	4	H3	2.23/32	1.125	HSS
76004515	HSS - 5/16-18 -NC3	HAND TAPS HSS BOTTOMING	5/16	18	4	H3	2.23/32	1.125	HSS
76004520	HSS - 5/16-24 -NF1	HAND TAPS HSS TAPER	5/16	24	4	H3	2.23/32	1.125	HSS
76004525	HSS - 5/16-24 -NF2	HAND TAPS HSS PLUG	5/16	24	4	H3	2.23/32	1.125	HSS
76004530	HSS - 5/16-24 -NF3	HAND TAPS HSS BOTTOMING	5/16	24	4	H3	2.23/32	1.125	HSS
76004535	HSS - 3/8-16 -NC1	HAND TAPS HSS TAPER	3/8	16	4	H3	2.15/16	1.250	HSS
76004540	HSS - 3/8-16 -NC2	HAND TAPS HSS PLUG	3/8	16	4	H3	2.15/16	1.250	HSS
76004545	HSS - 3/8-16 -NC3	HAND TAPS HSS BOTTOMING	3/8	16	4	H3	2.15/16	1.250	HSS
76004550	HSS - 3/8-24 -NF1	HAND TAPS HSS TAPER	3/8	24	4	H3	2.15/16	1.250	HSS
76004555	HSS - 3/8-24 -NF2	HAND TAPS HSS PLUG	3/8	24	4	H3	2.15/16	1.250	HSS
76004560	HSS - 3/8-24 -NF3	HAND TAPS HSS BOTTOMING	3/8	24	4	H3	2.15/16	1.250	HSS
76004565	HSS - 7/16-14 -NC1	HAND TAPS HSS TAPER	7/16	14	4	H3	3.5/32	1.438	HSS
76004570	HSS - 7/16-14 -NC2	HAND TAPS HSS PLUG	7/16	14	4	H3	3.5/32	1.438	HSS


EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004575	HSS - 7/16-14 -NC3	HAND TAPS HSS BOTTOMING	7/16	14	4	H3	3.5/32	1.438	HSS
76004580	HSS - 7/16-20 -NF1	HAND TAPS HSS TAPER	7/16	20	4	H3	3.5/32	1.438	HSS
76004585	HSS - 7/16-20 -NF2	HAND TAPS HSS PLUG	7/16	20	4	H3	3.5/32	1.438	HSS
76004590	HSS - 7/16-20 -NF3	HAND TAPS HSS BOTTOMING	7/16	20	4	H3	3.5/32	1.438	HSS
76004595	HSS - 1/2-13 -NC1	HAND TAPS HSS TAPER	1/2	13	4	H3	3.3/8	1.656	HSS
76004600	HSS - 1/2-13 -NC2	HAND TAPS HSS PLUG	1/2	13	4	H3	3.3/8	1.656	HSS
76004605	HSS - 1/2-13 -NC3	HAND TAPS HSS BOTTOMING	1/2	13	4	H3	3.3/8	1.656	HSS
76004610	HSS - 1/2-20 -NF1	HAND TAPS HSS TAPER	1/2	20	4	H3	3.3/8	1.656	HSS
76004615	HSS - 1/2-20 -NF2	HAND TAPS HSS PLUG	1/2	20	4	H3	3.3/8	1.656	HSS
76004620	HSS - 1/2-20 -NF3	HAND TAPS HSS BOTTOMING	1/2	20	4	H3	3.3/8	1.656	HSS
76004625	HSS - 9/16-12 -NC1	HAND TAPS HSS TAPER	9/16	12	4	H3	3.19/32	1.656	HSS
76004630	HSS - 9/16-12 -NC2	HAND TAPS HSS PLUG	9/16	12	4	H3	3.19/32	1.656	HSS
76004635	HSS - 9/16-12 -NC3	HAND TAPS HSS BOTTOMING	9/16	12	4	H3	3.19/32	1.656	HSS
76004640	HSS - 9/16-18 -NF1	HAND TAPS HSS TAPER	9/16	18	4	H3	3.19/32	1.656	HSS
76004645	HSS - 9/16-18 -NF2	HAND TAPS HSS PLUG	9/16	18	4	H3	3.19/32	1.656	HSS
76004650	HSS - 9/16-18 -NF3	HAND TAPS HSS BOTTOMING	9/16	18	4	H3	3.19/32	1.656	HSS
76004655	HSS - 5/8-11 -NC1	HAND TAPS HSS TAPER	5/8	11	4	H3	3.13/16	1.813	HSS
76004660	HSS - 5/8-11 -NC2	HAND TAPS HSS PLUG	5/8	11	4	H3	3.13/16	1.813	HSS
76004665	HSS - 5/8-11 -NC3	HAND TAPS HSS BOTTOMING	5/8	11	4	H3	3.13/16	1.813	HSS
76004670	HSS - 5/8-18 -NF1	HAND TAPS HSS TAPER	5/8	18	4	H3	3.13/16	1.813	HSS
76004675	HSS - 5/8-18 -NF2	HAND TAPS HSS PLUG	5/8	18	4	H3	3.13/16	1.813	HSS
76004680	HSS - 5/8-18 -NF3	HAND TAPS HSS BOTTOMING	5/8	18	4	H3	3.13/16	1.813	HSS
76004685	HSS - 3/4-10 -NC1	HAND TAPS HSS TAPER	3/4	10	4	H3	4.1/4	2.000	HSS
76004690	HSS - 3/4-10 -NC2	HAND TAPS HSS PLUG	3/4	10	4	H3	4.1/4	2.000	HSS
76004695	HSS - 3/4-10 -NC3	HAND TAPS HSS BOTTOMING	3/4	10	4	H3	4.1/4	2.000	HSS
76004700	HSS - 3/4-16 -NF1	HAND TAPS HSS TAPER	3/4	16	4	H3	4.1/4	2.000	HSS
76004705	HSS - 3/4-16 -NF2	HAND TAPS HSS PLUG	3/4	16	4	H3	4.1/4	2.000	HSS
76004710	HSS - 3/4-16 -NF3	HAND TAPS HSS BOTTOMING	3/4	16	4	H3	4.1/4	2.000	HSS

TECHNICAL DETAILS

General application	Ferrous and non-ferrous
Machine or manual	Manual
Hole type	Through bore or blind hole
Surface treatment	Bright
Materials to be machined	Ferrous
Other	Non-ferrous
Hardness	
Tap length	Standard



EDP Cromson	Cromson Description	Type of finish	Diam. Thread	Nb Thread	Nb Flutes	Thread Limit	OAL	Tap length	Cromson Grade
76004800	HSS - M3-0.5 -1	HAND TAPS HSS TAPER	M3	0.5	3	D3	1.15/16	5/8	HSS
76004805	HSS - M3-0.5 -2	HAND TAPS HSS PLUG	M3	0.5	3	D3	1.15/16	5/8	HSS
76004810	HSS - M3-0.5 -3	HAND TAPS HSS BOTTOMING	M3	0.5	3	D3	1.15/16	5/8	HSS
76004815	HSS - M4-0.7 -1	HAND TAPS HSS TAPER	M4	0.7	3	D4	2.1/8	3/4	HSS
76004820	HSS - M4-0.7 -2	HAND TAPS HSS PLUG	M4	0.7	3	D4	2.1/8	3/4	HSS
76004825	HSS - M4-0.7 -3	HAND TAPS HSS BOTTOMING	M4	0.7	3	D4	2.1/8	3/4	HSS
76004830	HSS - M5-0.8 -1	HAND TAPS HSS TAPER	M5	0.8	3	D4	2.3/8	7/8	HSS
76004835	HSS - M5-0.8 -2	HAND TAPS HSS PLUG	M5	0.8	3	D4	2.3/8	7/8	HSS
76004840	HSS - M5-0.8 -3	HAND TAPS HSS BOTTOMING	M5	0.8	3	D4	2.3/8	7/8	HSS
76004845	HSS - M6-1 -1	HAND TAPS HSS TAPER	M6	1	4	D5	2.1/2	1	HSS
76004850	HSS - M6-1 -2	HAND TAPS HSS PLUG	M6	1	4	D5	2.1/2	1	HSS
76004855	HSS - M6-1 -3	HAND TAPS HSS BOTTOMING	M6	1	4	D5	2.1/2	1	HSS
76004860	HSS - M8-1.25 -1	HAND TAPS HSS TAPER	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004865	HSS - M8-1.25 -2	HAND TAPS HSS PLUG	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004870	HSS - M8-1.25 -3	HAND TAPS HSS BOTTOMING	M8	1.25	4	D5	2.23/32	1.1/8	HSS
76004875	HSS - M10-1.25 -1	HAND TAPS HSS TAPER	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004880	HSS - M10-1.25 -2	HAND TAPS HSS PLUG	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004885	HSS - M10-1.25 -3	HAND TAPS HSS BOTTOMING	M10	1.25	4	D5	2.15/16	1.1/4	HSS
76004890	HSS - M10-1.5 -1	HAND TAPS HSS TAPER	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004895	HSS - M10-1.5 -2	HAND TAPS HSS PLUG	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004900	HSS - M10-1.5 -3	HAND TAPS HSS BOTTOMING	M10	1.5	4	D6	2.15/16	1.1/4	HSS
76004905	HSS - M12-1.75 -1	HAND TAPS HSS TAPER	M12	1.75	4	D6	3.3/8	1.21/32	HSS
76004910	HSS - M12-1.75 -2	HAND TAPS HSS PLUG	M12	1.75	4	D6	3.3/8	1.21/32	HSS
76004915	HSS - M12-1.75 -3	HAND TAPS HSS BOTTOMING	M12	1.75	4	D6	3.3/8	1.21/32	HSS

Work material	Hardness Rockwell (HRc) Hardness Brinnel (BHN) Tensile Strength (N/mm2)			material	LOW /MED CARBON STEEL	
	HRc	BHN	N/mm2	model	CRP3	
				ft. / min.	Cutting Speed SFM	
				Condition	Normalized	As Cast
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8 up to 15 over 15	up to 178 up to 205 over 205	up to 600 up to 700 over 700		20-50 20-40 20-40 	
Alloyed steel 5132, 4130, 8620, 4340, 5140, 6150 Tool Steel, 01, A2, D2, H-13, P-20.	up to 27 up to 31 over 31	up to 266 up to 297 over 297	up to 900 up to 1000 over 1000			
Stainless steel moderate 17-4PH, 15-5PH, 316L						
Stainless and acid resistant steel (Cr-Ni-Alloys) 304, 316, 17CrNi16-2						
Cast iron, grey cast iron alloys GG10-GG40, A48	up to 14 up to 24 over 24	up to 200 up to 250 over 2050	up to 680 up to 850 over 850		20-40	
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650			
Aluminum (Si content >10%) 6061, 2025, 208, 360						
Aluminum (Si content <10%) 413, 385, A390						
Copper, brass, bronze Beryllium copper, naval brass, AMPCO						
Titanium alloys TiAl4V						
High Temperature alloys Inconel, haynes, waspaloy, hastelloy						
Chilled cast iron	38-48				20-40	
Hardened steel 50-60 HRc	50-55 56-60 61-65					

** The machining values shown are guidelines. The optimum data for a particular machining process should be determined in trials or during machining.



Highly recommended

MED /HIGH CARBON STEEL		STAINLESS STEEL		TITANIUM. NICKEL ALLOY		ALUMINUM	
CRPS		CRM		CRS		CRN	
Cutting Speed SFM		Cutting Speed SFM		Cutting Speed SFM		Cutting Speed SFM	
Normalized	Annealed	Annealed	Hardened	Annealed/hard.	Hardened	Cutting	Roll Form
20-30		25-50					20-50
20-30 	15-25	20-30		10-20	15-20		
20-30		20-35 	15-20				
		20-35 	15-20		12-20		
						25-60	30-60
						30-80 	30-80 
		20-30				30-80	30-80
15-30				8-15 			
					5-20		

DISCOVER OUR

MICRO



SUMMARY

CENTER DRILL 60° (double) HSS / carbide Short and long	M01	194
MULTI-STEPS DRILL HSS-E Thin sheet material	M02	195
MINIATURE DRILL Carbide 0.10 to 1.00mm External fluid	M03	196
PROFILING END DRILL Carbide Micro ball nose 220°	M12	197
BALL NOSE END MILL Carbide Micro hemispherical	M04	197
CHAMFERING END MILL Carbide - 90° and 60° Profiling	M05	198
THREADING END MILL Carbide (thread M0.8 to M10) CNC interpolation	M06	200
ENGRAVING TOOL Carbide Typ : .05 to .20mm	M07	200
COUNTERSINK HSS-E and carbide 90° and 82°	M08	201
CORNER ROUNDING END MILL Carbide Radius : 0.5 to 3.0mm	M09	202
MICRO END MILL Carbide (1.5-5-8xD) Steel - hardened steel <67 HRc. titanium, aluminum	M10	203
O-RING AND CIRCLIP END MILL Carbide 1.4 to 3.8mm	M11	206

60° CENTER DRILL (DOUBLE)

MICRO

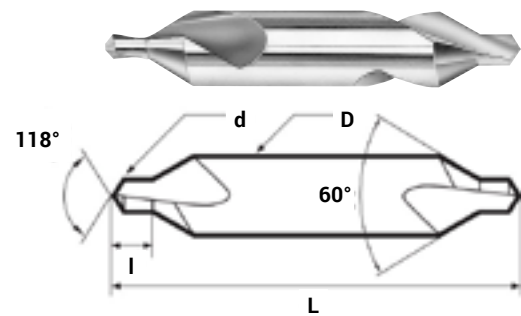
TECHNICAL DETAILS

Material Hardness 63 HRC for the machining of steels up to 800N/mm²
Copper, brass, bronze, aluminum up to 6% Si

Form Angle 60°

Series M01 - metric / imperial

Use Machine



CROMSON M0110 HSS	CROMSON M0110-C HSS TiN	CROMSON M0120 Carbide	ASA	D x d		L +/-1	l	
				h7	k12		min	maxi
77100100			00	3.17 x 0.51 (1/8 x .025)		31	0.7-1.0	
77100102			0	3.17 x 0.79 (1/8 x .1/32)		31	0.9-1.2	
77100104	77100120	77100150	1	3.17 x 1.19 (1/8 x .3/64)		31	1.4-1.7	
77100106	77100122	77100152	2	4.76 x 1.98 (3/16 x 5/64)		47	2.4-2.7	
77100108	77100124	77100154	3	6.35 x 2.77 (1/4 x 7/64)		50	3.3-3.9	
77100110	77100126	77100156	4	7.93 x 3.17 (5/16 x 1/8)		54	3.8-4.4	
77100112	77100128	77100158	5	11.11 x 4.76 (7/16 x 3/13)		63	5.9-6.5	
77100114	77100130	77100160	6	12.70 x 5.55 (1/2 x 7/32)		70	6.9-7.5	
77100116			7	15.87 x 6.35 (5/8 x 1/4)		76	8.0-8.6	
77100118			8	19.05 x 7.93 (3/4 x 5/16)		82	10.0-10.6	

60° LONG SERIES CENTER DRILL (DOUBLE)

TECHNICAL DETAILS

Material Hardness 63 HRC for the machining of steels up to 800N/mm²
Copper, brass, bronze, aluminum up to 6% Si

Form Angle 60°

Series M01 - metric / imperial

Use machine

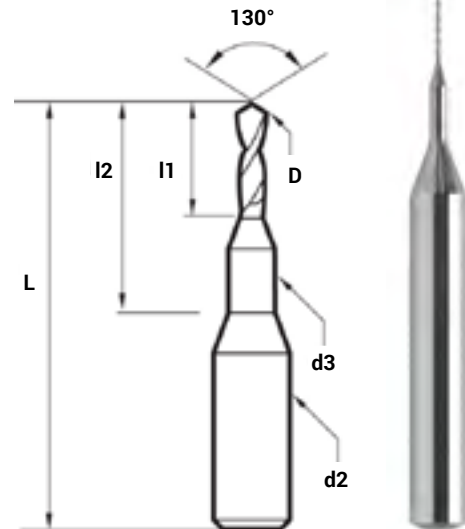


CROMSON M0015 HSS	ASA	D x d	h7 x k12	L +/-1
77100170	1 x 3	3.17 x 1.19	1/8 x 3/64	76
77100172	1 x 5	3.17 x 1.19	1/8 x 3/64	127
77100174	2 x 3	4.76 x 1.98	3/16 x 5/64	76
77100176	2 x 5	4.76 x 1.98	3/16 x 5/64	127
77100178	3 x 3	6.35 x 2.77	1/4 x 7/64	76
77100180	3 x 5	6.35 x 2.77	1/4 x 7/64	127
77100182	4 x 3	7.93 x 3.17	5/16 x 1/8	76
77100184	4 x 5	7.93 x 3.17	5/16 x 1/8	127
77100186	5 x 5	11.11 x 4.76	7/16 x 3/13	127
77100188	6 x 5	12.70 x 5.55	1/2 x 7/32	127

TECHNICAL DETAILS

Material CARBIDE
Series M03 - metric
Use Machine

Our carbide combined with a 30° flute allows to machine hardened steels up to 67HRc. Stainless steel, titanium alloys, hard bronzes, inconel, nimonic, waspaloy, hard iron, and all other materials... Thermoplast, nylon, laminate, plastics with glass or carbon fibers, ceramics, glass

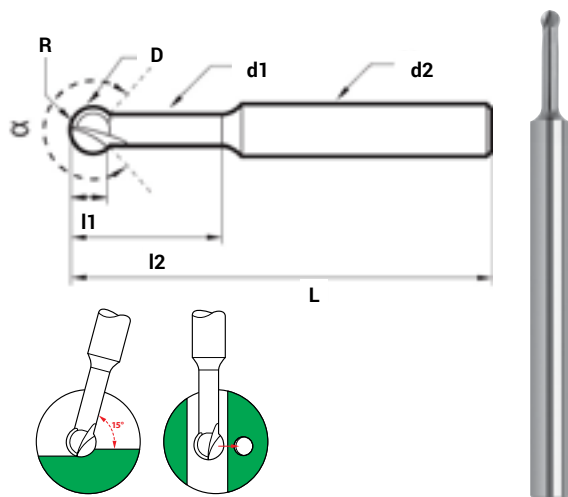


CROMSON M0305	Diam.	d2 (mm)	d3 (+/- 0.01)	l1 min	l2	L
77100800	0.10	3.0	1	0.50	5	38
77100810	0.15	3.0	1	0.80	5	38
77100820	0.20	3.0	1	1.00	5	38
77100830	0.25	3.0	1	1.25	5	38
77100840	0.30	3.0	1	1.50	5	38
77100850	0.35	3.0	1	1.75	5	38
77100860	0.40	3.0	1	2.00	5	38
77100870	0.45	3.0	1	2.25	5	38
77100880	0.50	3.0	1.5	2.50	10	38
77100890	0.55	3.0	1.5	3.00	10	38
77100900	0.60	3.0	1.5	3.00	10	38
77100910	0.65	3.0	1.5	3.50	10	38
77100920	0.70	3.0	1.5	3.50	10	38
77100930	0.75	3.0	1.5	4.00	10	38
77100940	0.80	3.0	1.5	4.00	10	38
77100950	0.85	3.0	1.5	4.50	10	38
77100960	0.90	3.0	1.5	4.50	10	38
77100970	0.95	3.0	1.5	5.00	10	38
77100980	1.00	3.0	2	5.00	10	38

PROFILING END MILL 220° BALL NOSE - 2 FLUTES

TECHNICAL DETAILS

Material CARBIDE
Coating Cr 55
Series M12 - metric
Use Machine
Type 2 flutes



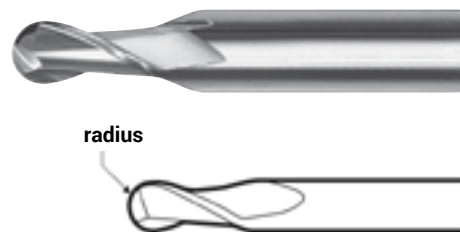
Our carbide combined with Cr 55 PVD coating allows to machine hardened steels up to 67 HRc. Stainless steel, titanium alloys, hard bronzes, and all other materials.... Thermoplast, nylon, PVC, laminate, graphite, plastics with glass or carbon fibers, ceramics, glass

CROMSON M1220 Uncoated	CROMSON M1220-C CR 55 PVD	D	d1	d2	L	l1	l2 5xD	R
77400400	77400405	0.50	0.44	3	60	0.33	2.50	0.25
77400410	77400415	0.80	0.70	3	60	0.55	4.00	0.40
77400420	77400425	1.00	0.85	3	60	0.70	5.00	0.50
77400430	77400435	1.20	1.00	3	60	0.80	6.00	0.60
77400440	77400445	1.50	1.30	3	60	1.00	7.50	0.75
77400450	77400455	2.00	1.70	3	60	1.35	10.00	1.00
77400460	77400465	3.00	2.60	3	60	2.00	15.00	1.50

BALL NOSE END MILL (1.5XD) 2 FLUTES

TECHNICAL DETAILS

Material CARBIDE
Coating Cr 55
Series M04 - metric
Use Machine
Type 2 flutes - 30° spiral

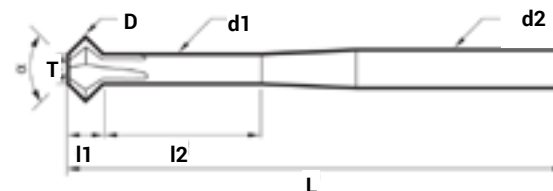
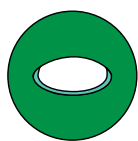


CROMSON M0425 Uncoated	CROMSON M0425-C CR 55 PVD	D	L	l	d2	R
77400480	77400485	0.30	38	0.45	3	0.15
77400490	77400495	0.40	38	0.60	3	0.20
77400500	77400505	0.50	38	0.75	3	0.25
77400510	77400515	0.60	38	0.90	3	0.30
77400520	77400525	0.80	38	1.20	3	0.40
77400530	77400535	1.00	38	1.50	3	0.50
77400540	77400545	1.20	38	1.80	3	0.60
77400550	77400555	1.40	38	2.10	4	0.70
77400560	77400565	1.50	38	2.25	4	0.75
77400570	77400575	1.60	38	2.40	4	0.80
77400580	77400585	1.80	38	2.70	4	0.90
77400590	77400595	2.00	38	3.00	4	1.00

CHAMFERING END MILL 90° V-GROOVING (FRONT AND BACK CHAMFERING) 3 FLUTES

TECHNICAL DETAILS

Angle	90°
Material	CARBIDE
Coating	Cr 55
Form	Angle 90°
Series	M05 - metric
Use	Machine
Others	from 0.20 to 0.50 = 1 flute



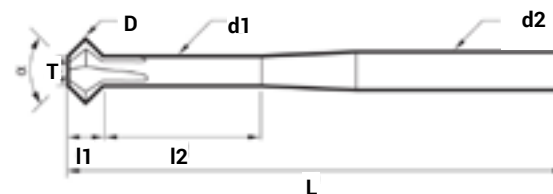
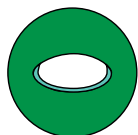
For high quality surface finishing, this range features a constant relief profile that makes longitudinal or interpolated machining easier for front and back faces of holes and surface chamfering

CROMSON M0520 Uncoated	CROMSON M0525-C CR 55 PVD	D	d1 max	T max	L	l1	l2 min	d2 (mm)
77300730	77300735	0.20	0.12	0.12	38	0.11	0.29	3.0
77300740	77300745	0.25	0.15	0.15	38	0.13	0.37	3.0
77300750	77300755	0.30	0.18	0.18	38	0.15	0.45	3.0
77300760	77300765	0.40	0.24	0.24	38	0.19	0.61	3.0
77300770	77300775	0.50	0.30	0.30	38	0.23	0.77	3.0
77300780	77300785	0.60	0.36	0.36	38	0.27	0.93	3.0
77300790	77300795	0.80	0.48	0.48	38	0.35	1.25	3.0
77300800	77300805	1.00	0.70	0.30	60	0.50	5.00	3.0
77300810	77300815	1.50	1.10	0.45	60	0.73	6.00	3.0
77300820	77300825	1.80	1.40	0.60	60	0.75	8.00	3.0
77300830	77300835	2.00	1.50	0.60	60	0.95	8.00	3.0
77300840	77300845	2.80	2.10	0.90	60	1.30	10.00	3.0
77300850	77300855	3.00	2.10	0.90	60	1.50	10.00	3.0

CHAMFERING END MILL 90° V-GROOVING (FRONT AND BACK CHAMFERING) 4 FLUTES

TECHNICAL DETAILS

Angle	90°
Material	CARBIDE
Coating	Cr 55
Form	Angle 90°
Series	M09 - metric
Use	Machine



For high quality surface finishing, this range features a constant relief profile that makes longitudinal or interpolated machining easier for front and back faces of holes and surface chamfering

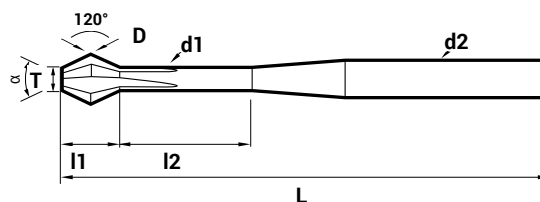
CROMSON M0535 Uncoated	CROMSON M0540-C CR 55 PVD	D	d1 maxi	T maxi	d2 h6	l1	l2 mini	L (mm)
77300860	77300865	2.80	2.20	1.20	6	1.10	10	100
77300870	77300875	3.00	2.20	1.20	6	1.30	10	100
77300880	77300885	3.80	2.90	1.60	6	1.55	12	100
77300890	77300895	4.00	2.90	1.60	6	1.75	12	100
77300900	77300905	4.80	3.40	2.00	6	2.10	15	100

CROMSON M0535 Uncoated	CROMSON M0540-C CR 55 PVD	D	d1 maxi	T maxi	d2 h6	l1	l2 mini	L (mm)
77300910	77300915	5.00	3.40	2.00	6	2.30	15	100
77300920	77300925	5.80	3.80	2.40	6	2.70	18	100
77300930	77300935	6.00	3.80	2.40	6	2.90	18	100
77300940	77300945	7.80	4.90	4.90	6	2.80	34	100
77300950	77300955	8.00	4.90	4.90	6	3.10	34	100
77300960	77300965	9.80	5.90	5.90	6	3.80	34	100
77300970	77300975	1.00	5.90	5.90	6	4.10	34	100
77300980	77300985	11.80	5.90	5.90	6	5.80	34	100
77300990	77300995	12.00	5.90	5.90	6	6.10	34	100
77301000	77301005	15.80	7.90	7.90	10	7.80	34	100
77301010	77301015	16.00	7.90	7.90	10	8.10	34	100

CHAMFERING END MILL 60°V-GROOVING (FRONT AND BACK CHAMFERING) 4 FLUTES

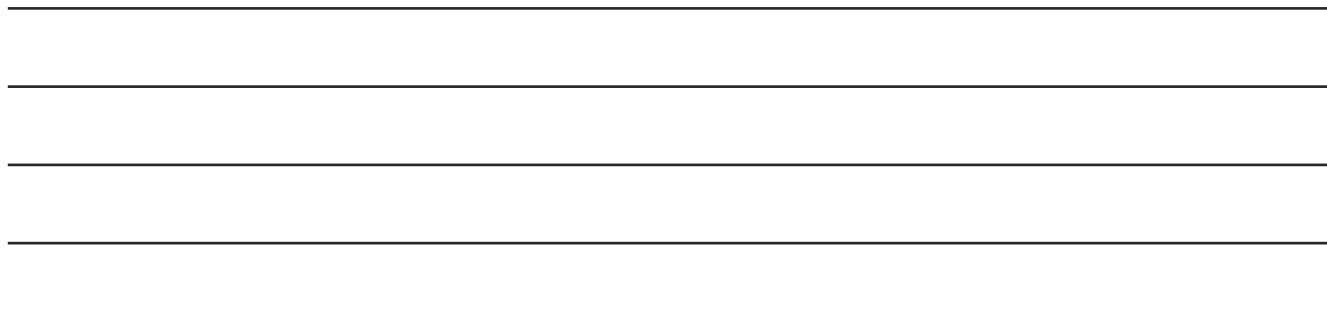
TECHNICAL DETAILS

Angle	60°
Material	CARBIDE
Coating	Cr 55
Series	M06 - metric
Use	Machine



For high quality surface finishing, this range features a constant relief profile that makes longitudinal or interpolated machining easier for front and back faces of holes and surface chamfering

CROMSON M0610-C	D	d1 maxi	T maxi	d2 h6	l1	l2 mini	L (mm)
77300565	2.0	1.50	0.60	3	1.70	8	100
77300575	5.0	3.40	3.40	6	2.80	15	100
77300585	8.0	4.90	4.90	6	5.40	34	100
77300595	12.0	5.90	5.90	6	10.60	34	100

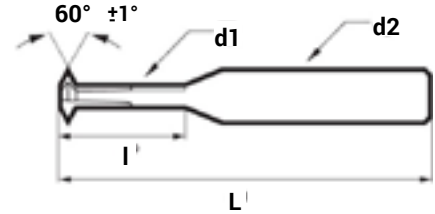


THREADING END MILL 3 FLUTES

MICRO

TECHNICAL DETAILS

Angle	60°
Material	CARBIDE
Coating	Cr 55
Series	M06 - metric
Use	Machine



Our carbide combined with Cr 55 PVD coating to machine hardened steels up to 67 HRc.

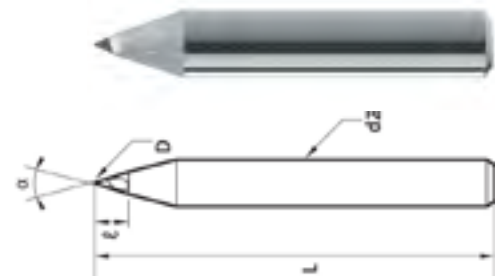
Stainless steel, titanium alloys, hard bronzes and all other materials... Thermoplast, nylon, PVC, laminate, graphite, plastics with fiber glass or carbon fibers, ceramics, glass. The same tool will achieve ISO thread, right or left hand, in blind or through holes

CROMSON M0605-C	Metric thread	D	d1	d2 h5	L	l min	C Flat dimension
77300415	M0.8	0.57	0.27	3	38	2.4	0.01
77300425	M0.9	0.64	0.31	3	38	2.7	0.01
77300435	M1.0	0.71	0.35	3	38	3	0.015
77300445	M1.2	0.91	0.55	3	38	3.6	0.015
77300455	M1.4	1.06	0.62	3	38	4.2	0.02
77300465	M1.6	1.20	0.69	3	38	4.8	0.02
77300475	M1.8	1.35	0.84	3	38	5.5	0.02
77300485	M2.0	1.50	0.92	3	38	6	0.02
77300495	M2.5	1.90	1.27	3	38	7	0.025
77300505	M3	2.30	1.57	6	66	9	0.03
77300515	M4	3.10	2.09	6	66	12	0.04
77300525	M5	4.00	2.90	6	66	15	0.05
77300535	M6	4.80	3.47	6	75	18	0.07
77300545	M8	6.50	4.85	8	80	22	0.08
77300555	M10	7.90	5.95	8	80	26	0.09

ENGRAVING TOOL

TECHNICAL DETAILS

Angle	40°
Material	CARBIDE
Use	Machine
Series	M07 - metric
Hardness	Up to 67 HRc

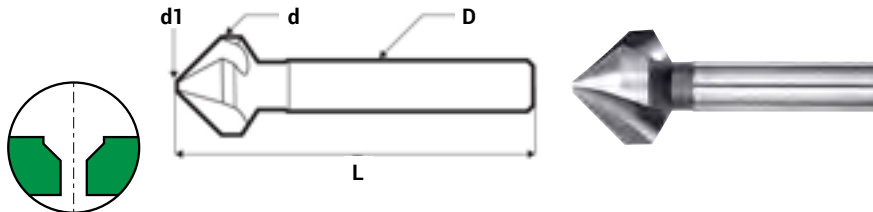


CROMSON M0705	D +/- 0.01	L	l	d2
77301300	0.05	38	1.00	3
77301310	0.06	38	1.00	3
77301320	0.07	38	1.00	3
77301330	0.08	38	1.00	3
77301340	0.09	38	1.00	3
77301350	0.10	38	1.00	3
77301360	0.15	38	1.00	3
77301370	0.20	38	1.00	3

90° COUNTERSINK 3 FLUTES

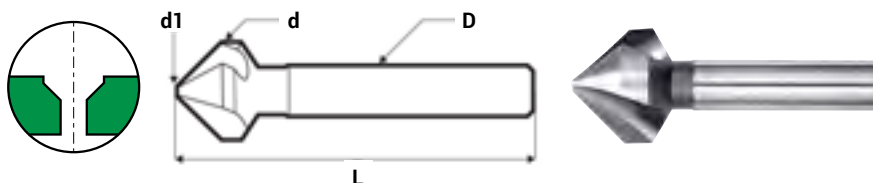
TECHNICAL DETAILS

Angle DIN 335-C
90°
Material HSS-E Cobalt / carbide
Series M08 - metric / imperial
Use Machine



CROMSON M0805 HSS Co	CROMSON M0805-C HSS Co TiN	CROMSON M0890 Carbide	Diam. d Metric	Diam. d Imperial	d1 maxi	D h9	L +/- 1
77200300	77200305	77200500	6.30		1.50	5.00	45
77200400	77200405		6.35	(1/4)	1.50	6.35	45
77200410	77200415		7.93	(5/16)	2.00	6.35	45
	77200365	77200510	8.30		2.50	6.00	50
77200420	77200425		9.52	(3/8)	2.50	6.35	50
77200310	77200315	77200520	10.40			6.00	50
77200320	77200325	77200530	12.40		2.80	8.00	56
77200430	77200435		12.70	(1/2)	2.90	6.35	50
77200440	77200445		15.87	(5/8)	3.20	9.52	60
77200330	77200335	77200540	16.50		3.20	8.00	56
77200450	77200455		19.05	(3/4)	3.50	9.52	60
77200340	77200345	77200550	20.50		3.50	10.00	63
77200350	77200355		25.00		3.80	10.00	67
77200460	77200465		25.40	(1)	3.80	9.52	70

82° COUNTERSINK 3 FLUTES



TECHNICAL DETAILS

Angle 82°
Material HSS-E Cobalt
Series M08 - metric / imperial
Use Machine

High performance countersink is a highly improved version of the traditional multiflute milling cutter :

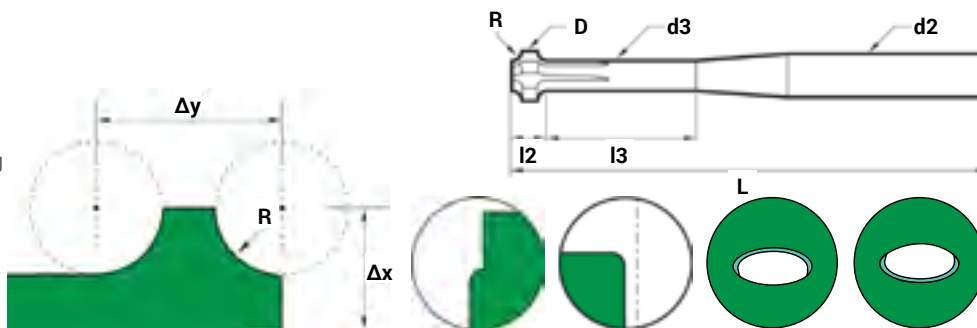
- grooves opened wide to allow chips flow evacuation
- high positive cut
- constant profile relief for easier regrind
- dimensions are in accordance with 90° and 82° screw caps
- we recommend the usage of coolant

CROMSON M0882 HSS Co	Diam. d Metric	Diam. d Imperial	d1 maxi	D h9	L +/- 1
77200600	6.35	(1/4)	1.50	6.35	45
77200610	7.93	(5/16)	2.00	6.35	45
77200620	9.52	(3/8)	2.50	6.35	50
77200630	12.70	(1/2)	2.90	6.35	50
77200640	15.87	(5/8)	3.20	9.52	60
77200650	19.05	(3/4)	3.50	9.52	60
77200660	25.40	(1)	3.80	9.52	70

CORNER ROUNDING END MILL 3 FLUTES

TECHNICAL DETAILS

Material CARBIDE
 Coating Uncoated
 Form Corner rounding
 Series M09 - metric
 Use Machine
 Total length 100



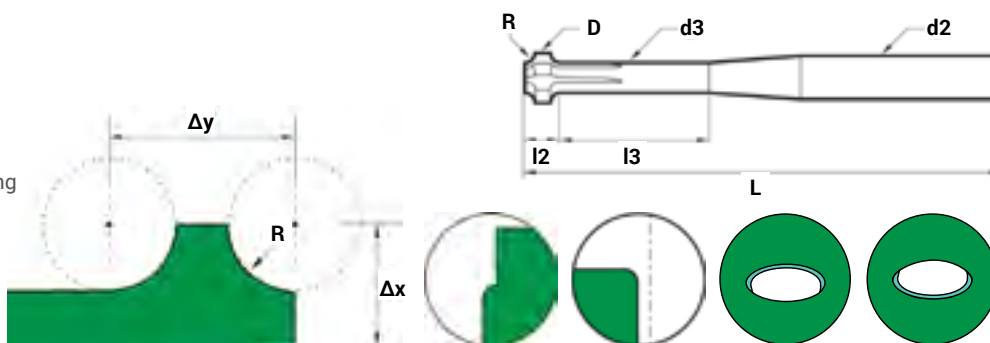
For high quality surface finishing, this range features a constant relief profile that makes longitudinal or interpolated machining easier for front and back faces of holes and surface chamfering

CROMSON M0945	R +/- 0.02	D maxi	d3 maxi	d2 h6	delta X	delta Y	l1	l2	l3
77301070	0.5	4.90	3.65	6	2.37	3.17	2.15	3.30	20
77301080	0.6	5.20	3.75	6	2.52	3.37	2.14	3.50	25
77301090	0.8	5.90	4.05	6	2.89	3.77	2.14	3.90	30
77301100	1	6.60	4.35	8	3.22	4.27	2.23	4.30	35
77301110	1.2	7.40	4.75	8	3.62	5.07	2.63	5.20	35
77301120	1.5	8.40	5.10	10	4.12	5.77	2.73	5.80	35
77301130	1.8	9.30	5.40	10	4.57	6.37	2.72	6.40	35
77301140	2	9.90	5.60	10	4.87	6.87	2.82	6.80	35
77301150	2.5	10.90	5.60	12	5.37	7.97	2.90	7.80	35
77301160	3	11.90	5.60	12	5.87	9.07	3.00	8.80	35

CORNER ROUNDING END MILL 2 FLUTES

TECHNICAL DETAILS

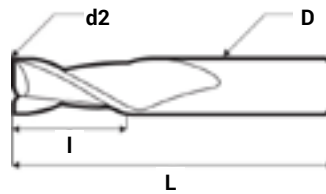
Material CARBIDE
 Coating Cr 55
 Form Corner rounding
 Series M09 - metric
 Use Machine
 Total length 60



CROMSON M0945-C	R +/- 0.02	D maxi	d3 maxi	d2 h6	delta X	delta Y	l1	l2	l3
77301025	0.2	1.90	1.25	1.32	0.87	1.32	0.90	1.45	8
77301035	0.3	2.30	1.45	1.82	1.07	1.82	1.20	1.95	9
77301045	0.4	2.60	1.55	2.37	1.22	2.37	1.55	2.50	10
77301055	0.5	2.90	1.65	2.87	1.37	2.87	1.85	3.00	12

TECHNICAL DETAILS

Material	CARBIDE
Coating	Cr 55
Series	M10 - metric
Use	Machine
Type	2 flutes - helix 30°



Our carbide combined with Cr 55 PVD coating to machine hardened steels up to 67 HRc.

Stainless steel, titanium alloys, hard bronzes, and all other materials.... Thermoplast, nylon, PVC, laminate, graphite, plastics with fiber glass or carbon fibers, ceramics, glass

CROMSON M1005 Uncoated	CROMSON M1005-C Cr 55 PVD	d2 (h7)	L	l	D (h5)
77400010	77400015	0.30	38	0.45	3
77400020	77400025	0.40	38	0.60	3
77400030	77400035	0.50	38	0.75	3
77400040	77400045	0.60	38	0.90	3
77400050	77400055	0.80	38	1.20	3
77400060	77400065	1.00	38	1.50	3
77400070	77400075	1.20	38	1.80	3
77400080	77400085	1.40	38	2.10	3
77400090	77400095	1.50	38	2.25	3
77400100	77400105	1.60	38	2.40	3
77400110	77400115	1.80	38	2.70	3
77400120	77400125	2.00	38	3.00	3

MICRO END MILL (5xD) 2 FLUTES

TECHNICAL DETAILS

Material	CARBIDE
Coating	Cr 55
Series	M10 - metric
Use	Machine
Type	2 flutes - helix 30°



CROMSON M1010 Uncoated	CROMSON M1010-C Cr 55 PVD	d2 (h7)	L	l	D (h5)
77400140	77400145	0.30	38	1.50	3
77400150	77400155	0.40	38	2.00	3
77400160	77400165	0.50	38	2.50	3
77400170	77400175	0.60	38	3.00	3
77400180	77400185	0.80	38	4.00	3
77400190	77400195	1.00	38	5.00	3
77400200	77400205	1.20	38	6.00	3
77400210	77400215	1.40	38	7.00	3
77400220	77400225	1.50	38	7.50	3
77400230	77400235	1.60	38	8.00	3
77400240	77400245	1.80	38	9.00	3
77400250	77400255	2.00	38	10.00	3

MICRO END MILL (8xD) 2 FLUTES

MICRO

TECHNICAL DETAILS

Material	CARBIDE
Coating	Cr 55
Series	M10 - metric
Use	Machine
Type	2 flutes - helix 30°



Our carbide combined with Cr 55 PVD coating to machine hardened steels up to 67 HRc. Stainless steel, titanium alloys, hard bronzes, and all other materials.... Thermoplast, nylon, PVC, laminate, graphite, plastics with fiber glass or carbon fibers, ceramics, glass

CROMSON M1015 Uncoated	CROMSON M1015-C Cr 55 PVD	d2h7	L	l	Dh5
77400260	77400265	0.30	38	2.40	3
77400270	77400275	0.40	38	3.20	3
77400280	77400285	0.50	38	4.00	3
77400290	77400295	0.60	38	4.80	3
77400300	77400305	0.80	38	6.40	3
77400310	77400315	1.00	38	8.00	3
77400320	77400325	1.20	38	9.60	3
77400330	77400335	1.40	44	11.20	4
77400340	77400345	1.50	44	12.00	4
77400350	77400355	1.60	44	12.80	4
77400360	77400365	1.80	44	14.40	4
77400370	77400375	2.00	44	16.00	4

MICRO END MILL (3xD) 2 FLUTES AL/TI

TECHNICAL DETAILS

Material	CARBIDE
Coating	ALU-TITANE
Series	M04 - metric
Use	Machine
Type	2 flutes - helix 45°

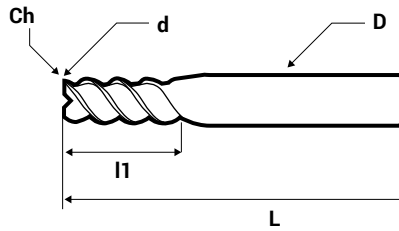


Carbide tool with a 45° spiral and special clearance angle. End-mills designed to machine ductile and abrasive materials, aluminums, titanium alloys, the cutting edge preparation improves chips evacuation and generates an optimum surface condition

CROMSON M0435 Uncoated	d2 (h7)	Ch 45°	L	l	D (h5)
77400600	0.50	0.025	39	1.50	3
77400610	0.60	0.030	39	1.50	3
77400620	0.80	0.040	39	2.00	3
77400630	1.00	0.050	39	3.00	3
77400640	1.20	0.060	39	4.00	3
77400650	1.50	0.075	39	4.00	3
77400660	2.00	0.100	39	5.00	3

TECHNICAL DETAILS

Material CARBIDE
 Coating Cr 55
 S eries M10 - metric
 Use Machine
 Type 2 flutes - 45° helix
 Hardness Up to 67 HRC

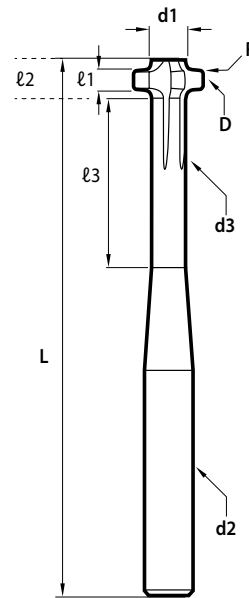
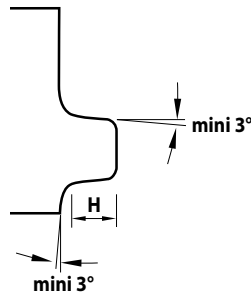


Our carbide combined with Cr 55 PVD coating to machine hardened steels up to 67 HRC. Stainless steel, titanium alloys, hard bronzes, and all other materials.... Thermoplast, nylon, PVC, laminate, graphite, plastics with fiber glass or carbon fibers, ceramics, glass

CROMSON M1040-C Cr 55 PVD	d (h7)	Ch 45°	L	l	D (h5)	z
77400675	0.50	0.025	38	1.50	3	2
77400685	0.60	0.030	38	1.50	3	2
77400695	0.80	0.040	38	2.00	3	2
77400705	1.00	0.050	38	3.00	3	3
77400715	1.20	0.060	38	4.00	3	3
77400725	1.50	0.075	38	4.00	3	3
77400735	2.00	0.100	38	5.00	3	3

TECHNICAL DETAILS

Material CARBIDE
Coating Cr 55 PVD
Séries M11 - metric
Use Machine
Form O-Ring for grooves



To insure the complete sealing, the O-rings are compressed and go out of the shape. So it is recommended they be set-up in square grooves with smooth surface.

The radius protects the O-ring against any damage :

- when setting up
- during use, when mis-formed it secures the expected seal protection.

The M1100-C milling cutters are designed to machine conformed grooves, for static or dynamic use of the O-Ring.

Applications :

- interpolated on CNC machining centers
- fixed on automatic lathe machines

CROMSON M1100-C	D	R	H	d1	d2 (h5)	d3	l1	l2	l3	L
77300305	4.9	0.20	0.85	3.19	6	3.10	1.40	1.91	10	75
77300315	5.9	0.24	1.10	3.69	6	3.60	1.60	2.13	10	75
77300325	7.6	0.32	1.35	4.89	8	4.80	2.00	2.56	12	80
77300335	7.9	0.36	1.50	4.89	8	4.80	2.30	2.88	12	80
77300345	9.3	0.40	1.70	5.89	10	5.80	2.50	3.10	14	90
77300355	9.9	0.44	1.90	6.09	10	6.00	2.80	3.42	14	90
77300365	11.7	0.50	2.10	7.49	12	7.40	3.20	3.85	16	100
77300375	12	0.53	2.25	7.49	14	7.40	3.30	3.96	18	110
77300385	13.5	0.56	2.35	8.79	14	8.70	3.40	4.07	18	110
77300395	13.9	0.60	2.55	8.79	14	8.70	3.80	4.49	18	110

THREAD/SCREW - DRILL & TAP CHART

Machine screw size		Threads per inch	Minor Dia	Tap Drills				Clearance Hole Drills			
				Alum. Brass. & Plastics 75% Thread		Stainless Steel. Steels & Iron 50% Thread		All materials			
				Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Close fit		Free fit	
# or Dia	Major Dia					Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.		
0	.0600	80	.0447	3/64	.0469	55	.0520	52	.0635	50	.0700
1	.0730	64	.0538	53	.0595	1/16	.0625	48	.0760	46	.0810
		72	.0560	53	.0595	52	.0635				
2	.0860	56	.0641	50	.0700	49	.0730	43	.0890	41	.0960
		64	.0668	50	.0700	48	.0760				
3	.0990	48	.0734	47	.0785	44	.0860	37	.1040	35	.1100
		56	.0771	45	.0820	43	.0890				
4	.1120	40	.0813	43	.0890	41	.0960	32	.1160	30	.1285
		48	.0864	42	.0935	40	.0980				
5	.125	40	.0943	38	.1015	7/64	.1094	30	.1285	29	.1360
		44	.0971	37	.1040	35	.1100				
6	.138	32	.0997	36	.1065	32	.1160	27	.1440	25	.1495
		40	.1073	33	.1130	31	.1200				
8	.1640	32	.1257	29	.1360	27	.1440	18	.1695	16	.1770
		36	.1299	29	.1360	26	.1470				
10	.1900	24	.1389	25	.1495	20	.1610	9	.1960	7	.2010
		32	.1517	21	.1590	18	.1695				
12	.2160	24	.1649	16	.1770	12	.1890	2	.2210	1	.2280
		28	.1722	14	.1820	10	.1935				
		32	.1777	13	.1850	9	.1960				
1/4	.2500	20	.1887	7	.2010	7/32	.2188	F	.2570	H	.2660
		28	.2062	3	.2130	1	.2280				
		32	.2117	7/32	.2188	1	.2280				
5/16	.3125	18	.2443	F	.2570	J	.2770	P	.3230	Q	.3320
		24	.2614	I	.2720	9/32	.2812				
		32	.2742	9/32	.2812	L	.2900				
3/8	.3750	16	.2983	5/16	.3125	Q	.3320	W	.3860	X	.3970
		24	.3239	Q	.3320	S	.3480				
		32	.3367	11/32	.3438	T	.3580				
7/16	.4375	14	.3499	U	.3680	25/64	.3906	29/64	.4531	15/32	.4687
		20	.3762	25/64	.3906	13/32	.4062				
		28	.3937	Y	.4040	Z	.4130				
1/2	.5000	13	.4056	27/64	.4219	29/64	.4531	33/64	.5156	17/32	.5312
		20	.4387	29/64	.4531	15/32	.4688				
		28	.4562	15/32	.4688	15/32	.4688				
9/16	.5625	12	.4603	31/64	.4844	33/64	.5156	37/64	.5781	19/32	.5938
		18	.4943	33/64	.5156	17/32	.5312				
		24	.5114	33/64	.5156	17/32	.5312				
5/8	.6250	11	.5135	17/32	.5312	9/16	.5625	41/64	.6406	21/32	.6562
		18	.5568	37/64	.5781	19/32	.5938				
		24	.5739	37/64	.5781	19/32	.5938				
11/16	.6875	24	.6364	41/64	.6406	21/32	.6562	45/64	.7031	23/32	.6562
		10	.6273	21/32	.6562	11/16	.6875				
		16	.6733	11/16	.6875	45/64	.7031				
3/4	.7500	20	.6887	45/64	.7031	23/32	.7188	49/64	.7656	25/32	.7812
		20	.6887	45/64	.7031	23/32	.7188				
13/16	.8125	20	.7512	49/64	.7656	25/32	.7812	53/64	.8281	27/32	.8438
7/8	.8750	9	.7387	49/64	.7656	51/64	.7969	57/64	.8906	29/32	.9062
		14	.7874	13/16	.8125	53/64	.8281				
		20	.8137	53/64	.8281	27/32	.8438				
15/16	.9375	20	.8762	57/64	.8906	29/32	.9062	61/64	.9531	31/32	.9688
1	1.000	8	.8466	7/8	.8750	59/64	.9219	1-1/64	1.0156	1-1/32	1.0313
		12	.8978	15/16	.9375	61/64	.9531				
		20	.9387	61/64	.9531	31/32	.9688				

METRIC THREAD - DRILL & TAP CHART

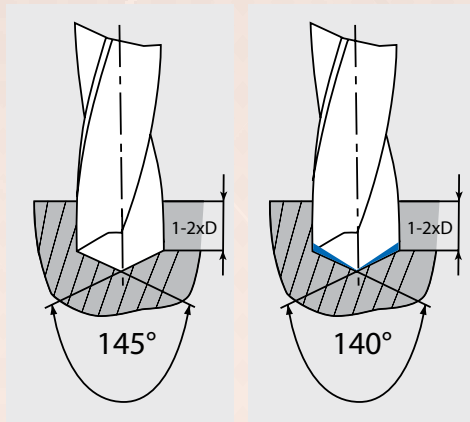
COURSE THREAD SIZES

Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)
M1 x 0.25	0.75	M3.5 x 0.6	2.90	M12 x 1.75	10.20	M36 x 4	32.00
M1.1 x 0.25	0.85	M4 x 0.7	3.30	M14 x 2	12.00	M39 x 4	35.00
M1.2 x 0.25	0.95	M4.5 x 0.75	3.70	M16 x 2	14.00	M42 x 4.5	37.50
M1.4 x 0.3	1.10	M5 x 0.8	4.20	M18 x 2.5	15.50	M45 x 4.5	40.50
M1.6 x 0.35	1.25	M6 x 1	5.00	M20 x 2.5	17.50	M48 x 5	43.00
M1.8 x 0.35	1.45	M7 x 1	6.00	M22 x 2.5	19.50	M52 x 5	47.00
M2 x 0.4	1.60	M8 x 1.25	6.80	M24 x 3	21.00	M56 x 5.5	50.50
M2.2 x 0.45	1.75	M9 x 1.25	7.80	M27 x 3	24.00	M60 x 5.5	54.50
M2.5 x 0.45	2.05	M10 x 1.5	8.50	M30 x 3.5	26.50	M64 x 6	58.00
M3 x 0.5	2.50	M11 x 1.5	9.50	M33 x 3.5	29.50	M68 x 6	62.00

FINE THREAD

Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)	Thread size	Tap Drill (mm)
M4 x 0.35	3.60	M10 x 0.75	9.25	M16 x 1	15.0	M24 x 1.5	22.5
M4 x 0.5	3.50	M10 x 1	9.0	M16 x 1.5	15.0	M24 x 2	22.0
M5 x 0.5	4.50	M10 x 1.25	8.8	M18 x 1	17.0	M26 x 1.5	24.5
M6 x .5	5.50	M11 x 1	10.0	M18 x 2	16.0	M27 x 1.5	25.5
M6 x .75	5.25	M12 x .75	11.25	M20 x 1	19.0	M27 x 2	25.0
M7 x .75	6.25	M12 x 1	11.0	M20 x 1.5	18.5	M28 x 1.5	26.5
M8 x .5	7.00	M12 x 1.5	10.5	M20 x 2	18.0	M30 x 1.5	28.5
M8 x .75	7.25	M14 x 1	13.0	M22 x 1	21.0	M30 x 2	28.0
M8 x 1	7.50	M14 x 1.25	12.8	M22 x 1.5	20.5	M33 x 2	31.0
M9 x 1	8.00	M14 x 1.5	12.5	M22 x 2	20.0	M36 x 3	33.0

PILOT DRILLS

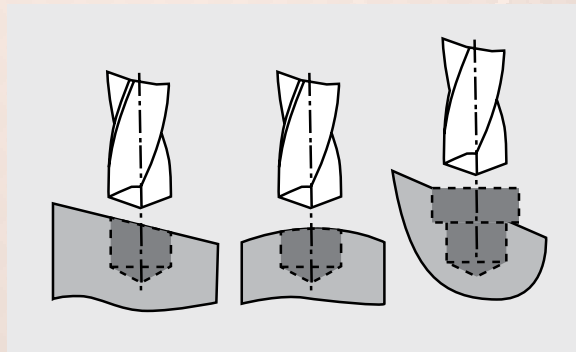


Pilot drills are recommended for drilling depths greater than 8xD. Generally the pilot drill needs to drill 1-2xD deep.

The angle of the pilot drill should be approximately 5° bigger than the following tool (this avoids the following drill starting with the corners instead of the center).

The diameter of the pilot drill should be approx. 0.02 mm larger than the following tool to avoid engaging the corners of the following tool first as well as adding additional friction.

ANGLED, UNEVEN SURFACES



When entering on angled surfaces the feed rate of the drill should be reduced.

If the drill is not able to start the drilling operation, a negative result and possible breakage may occur.

For extremely uneven surfaces it is strongly suggested to start with a spot face of 180°.




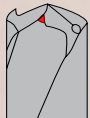
	Incline angle (deg)	Straight flute	Spiral flute
Feed Rate	1	80%	100%
Feed Rate	2	50%	80%
Feed Rate	3	30%	65%
Feed Rate	4	-	50%
Feed Rate	5	-	30%

CUTTING FLUID FLOW RATES FOR INTEGRATED FLUID DRILLS

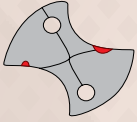
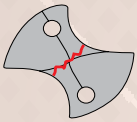
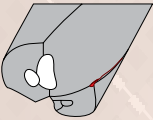
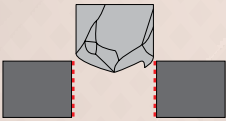
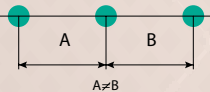
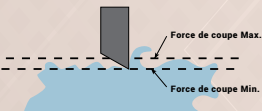
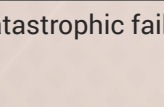
Flow depends on the diameter of the coolant bore and the pressure (bar)

Shank diameter	Drill diameter range	Diameter coolant bore	Flow in dm ³ /min		
			at 10 bar	at 20 bar	at 30 bar
6	3.0–6.0	0.5	0.9–1.1	1.2-1.4	1.8-2.0
8	6.1–8.0	0.9	2.0	2.8	4.0
10	8.1–10.0	1.2	3.6	5.1	7.2
12	10.1–12.0	1.3	4.2	6.0	8.5
14	12.1–14.0	1.6	6.4	9.0	12.5
16	14.1–16.0	2.0	10.0	14.0	20.0
18	16.1-18.0	2.2	12.0	17.0	24.0
20	18.1-20.0	2.5	15.5	22.0	30.0

TROUBLESHOOTING

	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
<p>Cutting edge build up</p> 	<p>Spindle speed too slow / feed too light Cutting edge dull Insufficient coolant Hone width too large Improper rake or clearance</p>	<p>Increase feed then RPM Check tool wear Improve coolant pressure or concentration Decrease hone width Choose tool with improved shearing properties Change coating</p>
<p>Corner Chipping</p> 	<p>Spindle feed too high Corner too sharp Poor rigidity Interrupted cut Tool overhang Clearance angle too high</p>	<p>Decrease RPM Chamfer corner or use corner radius Decrease feed rate Check all holders and fixturing Check spindle bearings Reduce tool length Reduce clearance angle</p>
<p>Flank wear</p> 	<p>Heat build up Chip load too light Not enough clearance Insufficient coolant</p>	<p>Reduce RPM Increase feed rate Increase clearance angle Improve coolant application/ Concentration Choose a proper coating</p>
<p>Chipping of cutting edge</p> 	<p>Tool runout Poor rigidity Excessive vibration Excessive feed rate Material inclusions</p>	<p>Check fixturing and set-up Check tool set-up for run-out Check tool length Check geometry to reduce vibration Decrease feed rate Check workpiece material</p>

TROUBLESHOOTING

	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
Cutting edge cratering 	Feed rate too high Relief too large Improper or no coating Spindle too slow Build-up-edge	Decrease feed rate Decrease clearance angle Select proper coating Increase RPM Improve coolant application
Chiesel edge wear 	Feed rate too high Poor shearing properties Spindle speed too low Wrong point angle	Decrease feed rate Decrease hone width Increase RPM Choose appropriate point angle
Land and body wear 	Check Spindle run-out Interrupted cut Non-rigid conditions Abrasive workpiece Insufficient coolant	Check spindle set-up Decrease feed through interruption Change machining conditions Increase coolant lubricity Choose a proper coating
Poor surface finish 	Poor rigidity Excessive vibration Excessive feed rate Excessive tool wear Incorrect tool geometry Chip packing	Check fixturing and set-up Check tool length Chose geometry to reduce vibration Decrease feed rate Choose a more appropriate geometry for material Check workpiece material Monitor tool wear
Poor dimensional accuracy 	Feed rate too high Poor rigidity Tool overhang Tool runout Programming Excessive tool wear	Decrease feed rate Check fixturing and set-up Secure shortest tool length possible Indicate tool in spindle Adjust parameters or approach Monitor tool wear
Chattering 	Speed too high Tool is pushing not cutting Poor rigidity Tool diameter Tool overhang	Decrease RPM Increase tool shearing properties Check fixturing and set-up Choose largest diameter possible Secure shortest tool length
Catastrophic failure 	Chip packing Excessive wear Insufficient coolant Feed too high Non-rigid conditions Insufficient power	Reduce depth of cut Monitor tool wear Improve coolant pressure or concentration Decrease feed rate Check fixturing and set-up Change coating Adjust parameters

HARDNESS SCALE COMPARISON CHART

Brinell-Hardness 3.000 kgf (HB)	Rockwell Hardness				Vickers hard- ness 50 kgf	Traverse rupture strength (kg/mm)
	"A" Scale 60 kgf (Brale)	"B" Scale 100 kgf (VorBrale)	"C" Scale 150 kgf (Brale)	"D" Scale 100 kgf (VorBrale)		
	85.6	---	68.0	76.9	940	---
	85.3	---	67.5	76.5	920	---
	85.0	---	67.0	76.1	900	---
767	84.7	---	68.4	75.7	880	---
757	84.4	---	65.9	75.3	860	---
745	84.1	---	65.3	74.8	840	---
733	83.8	---	64.7	74.3	820	---
722	83.4	---	64.0	73.8	800	---
712	---	---	---	---	---	---
710	83.0	---	63.3	73.3	780	---
698	82.6	---	62.5	72.6	760	---
684	82.2	---	61.8	72.1	740	---
682	82.2	---	61.7	72.0	737	---
670	81.8	---	61.0	71.5	720	---
656	81.3	---	60.1	70.8	700	---
653	81.2	---	60.0	70.7	697	---
647	81.1	---	59.7	70.5	690	---
638	80.8	---	59.2	70.1	680	---
630	80.6	---	58.8	69.8	670	---
627	80.5	---	58.7	69.7	667	---
601	79.8	---	57.3	68.7	640	---
578	79.1	---	56.0	67.7	615	---
555	78.4	---	54.7	66.7	591	210
534	77.8	---	53.5	65.8	569	202
514	76.9	---	52.1	64.7	547	193
495	76.3	---	51.0	63.8	528	186
477	75.6	---	49.6	62.7	508	177
461	74.9	---	48.5	61.7	491	170
444	74.2	---	47.1	60.8	472	162
429	73.4	---	45.7	59.7	455	154
415	72.8	---	44.5	58.8	440	149
401	72.0	---	43.1	57.8	425	142
388	71.4	---	41.8	56.6	410	136
375	70.6	---	40.4	55.7	396	129
363	70.0	---	39.1	54.6	383	124
352	69.3	(100.0)	37.9	53.6	372	120
341	68.7	(109.0)	36.6	52.8	360	115
331	68.1	(108.5)	35.5	51.9	350	112

Brinell-Hardness 3.000 kgf (HB)	Rockwell Hardness				Vickers hard- ness 50 kgf	Traverse rupture strength (kg/mm)
	"A" Scale 60 kgf (Brale)	"B" Scale 100 kgf (VorBrale)	"C" Scale 150 kgf (Brale)	"D" Scale 100 kgf (VorBrale)		
321	67.5	(108.0)	34.3	50.1	339	108
311	66.9	(107.5)	33.1	50.0	328	105
302	66.3	(107.0)	32.1	49.3	319	103
293	65.7	(106.0)	30.9	48.3	309	99
285	65.3	(105.5)	29.9	47.6	301	97
277	64.8	(104.5)	28.8	46.7	292	94
2698	64.1	(104.0)	27.6	45.9	284	91
262	63.6	(103.0)	26.6	45.0	276	89
255	63.0	(102.0)	25.4	44.2	269	86
248	62.5	(101.0)	24.2	43.2	261	84
241	61.8	100.0	22.8	42.0	253	82
235	61.4	99.0	21.7	41.4	247	80
229	60.8	92.8	20.5	40.5	241	78
223	---	97.3	(18.8)	---	234	---
217	---	96.4	(17.5)	---	228	74
212	---	95.5	(16.0)	---	222	72
207	---	94.6	(15.2)	---	218	70
201	---	93.8	(13.8)	---	212	69
197	---	92.8	(12.7)	---	207	67
192	---	91.9	(11.5)	---	202	65
187	---	90.7	(10.0)	---	196	63
183	---	90.0	(9.0)	---	192	63
179	---	89.0	(8.0)	---	188	61
174	---	87.8	(6.4)	---	182	60
170	---	86.8	(5.4)	---	178	58
167	---	86.0	(4.4)	---	175	57
163	---	85.0	(3.3)	---	171	56
156	---	82.9	(0.9)	---	163	53
149	---	80.8	---	---	156	51
143	---	78.7	---	---	150	50
137	---	76.4	---	---	143	47
131	---	74.0	---	---	137	46
126	---	72.0	---	---	132	44
121	---	69.8	---	---	127	42
116	---	67.6	---	---	122	41
111	---	65.7	---	---	117	39

The Rockwell scale of hardness A, C and D uses a conical diamond
Values in () are commonly use

FORMULAS

Coolant formulas

Pressure

$$1 \text{ (Bar)} = 14.5 \text{ Pounds per Sq. In (PSI)}$$

Gallons

$$1 \text{ Liter} = 0.254 \text{ (Gallons)}$$

Calculation of Pressure

$$\text{PSI} = \frac{(\text{Horsepower of pump} \times 1.460)}{\text{Gallons per minute (GPM)}}$$

Feed and speed formulas

$$\text{Inches per minute (IPM)} = \text{Inches per revolution (IPR)} \times \text{Revolution per minute (RPM)}$$

$$\text{Inches per rev. (IPR)} = \frac{(\text{Drill-dia.} \times \text{inches per min. (IPM)} \times 3.1416)}{(\text{Surface Feet per Minute (SFM)}) \times 12}$$

$$\text{Inches per revolution (IPR)} = \frac{\text{Inches per min.}}{\text{Revolution per minute (RPM)}}$$

$$\text{Surface feet per minute (SFM)} = 0.26 \times \text{Revolution per min. (RPM)} \times \text{Drill-dia (in)}$$

$$\text{Drilling time (Min.)} = \frac{\text{Travel distance (In)}}{(\text{Rev. per Min. (RPM)} \times \text{Inches per revolution (IPR)})}$$

$$\text{Revolution per minute (RPM)} = \frac{(\text{Surface Feet per min. (SFM)} / \text{Diam. (in)} \times 0.262)}$$

$$\text{Revolution per minute (RPM)} = \frac{(\text{Surface Feet per min. (SFM)} \times 0.3.82 / \text{Diam. (in)})}$$

FORMULAS

Drill size on forming taps

Drill size on cutting taps

$$\text{Tap drill size} = \text{Major dia. of top (mm)} - \frac{0.1299 \times \% \text{ of full thread}}{\# \text{ of threads per In.}}$$

$$\text{Tap drill size} = \text{Basic major dia. (mm)} - \frac{\% \text{ of thread} \times \text{pitch (mm)}}{76.98}$$

Drill size on forming taps

$$\begin{aligned} \text{Max. drill size} &= \text{Basic major diameter} - (3/8N) \\ \text{Min. drill size} &= \text{Basic major diameter} - (1/2N) \\ N &= \text{Number of thread per inch} \end{aligned}$$

ou

$$\begin{aligned} \text{Max. drill size} &= \text{Basic major diameter} - 0.375Pt - 0.375P \\ \text{Min. drill size} &= \text{Basic major diameter} - 0.5P \\ P &= \text{Pitch} \end{aligned}$$

Other useful conversation formulas

$$\text{Inch} = \text{Milimeters} / 25.4 \quad \text{mm} = \text{Inch} \times 25.4$$

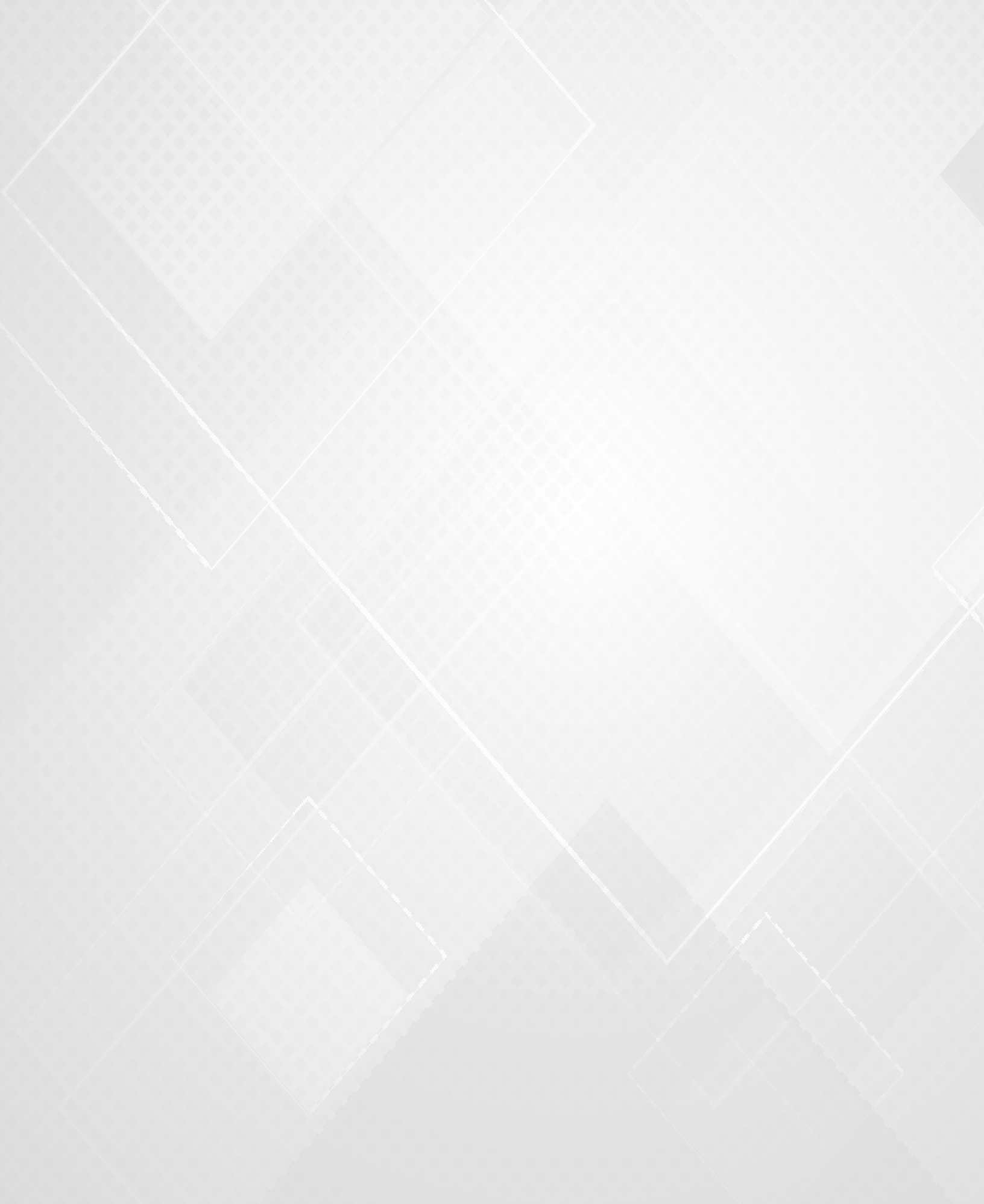
$$\text{KW} = \text{Horsepower} / 1.341022$$

$$\text{KN} = \text{Lbs} \times 225$$

$$\text{Nm} = \text{ft.-lbs.} / 0.7375621$$

$$\begin{aligned} \text{Meter per minute} &= \text{Surface feet per minute} / 3.28 \\ &= \text{Meter per minute} \times 3.28 \end{aligned}$$

$$\text{Milimeters per revolution} = \text{Inches per revolution} \times 25.4$$





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