

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



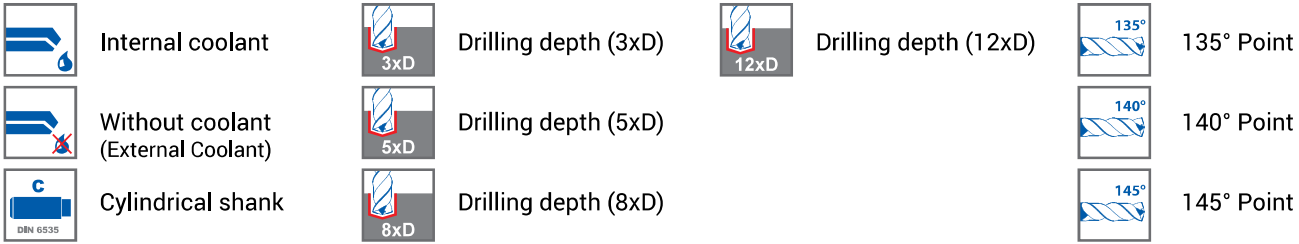
Suitable for some applications



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)

# 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	
<b>Non-alloy steel, cast steel</b> 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	
<b>Alloyed steel</b> 5132, 4130, 8620, 4340, 5140, 6150 <b>Stainless steel</b> 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	
<b>Cast iron, grey cast iron alloy</b> 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	
<b>Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron</b> GGG40, GGG80	up to 8 over 8	up to 178 over 178	up to 600 over 650	
<b>Hardened steel</b> 50-60 HRc	50-55 56-60 61-65		1614-1870	



Highly recommended



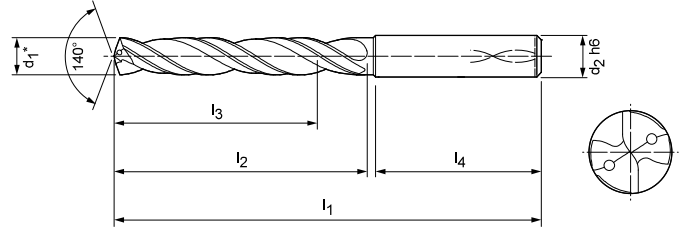
Suitable for some applications.

CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7874 in  
3.00-20.00 mm

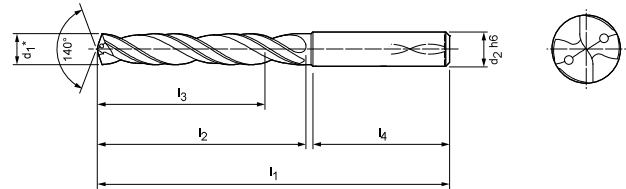
Bore tolerance IT9 (achievable)  
Shank form Cyl. (DIN 6535)  
Number of flutes 2  
Number of margins 2  
Point geometry Special point  
Point angle 140°  
Helix angle 30°  
Coolant Internal



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	<b>1/8</b>	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	<b>9/64</b>	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	<b>5/32</b>	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	<b>11/64</b>	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	<b>3/16</b>	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	<b>13/64</b>	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	<b>7/32</b>	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	<b>15/64</b>	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	<b>1/4</b>	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>9/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	16	83	133	48	Cr85	2
75103760	CRDR-AC-C5105-1550 Cr85	15.500	0.6102	16	83	133	48	Cr85	2

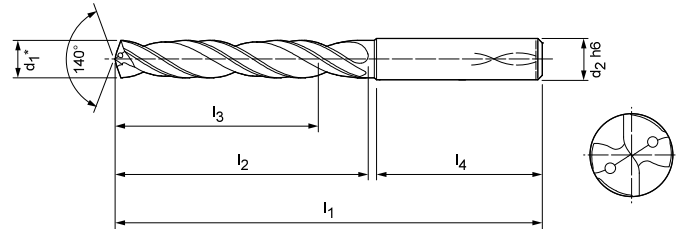


## CARBIDE DRILL

### TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7874 in  
3.00-20.00 mm

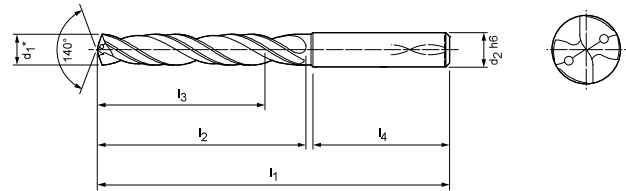
Bore tolerance IT9 (achievable)  
Shank form Cyl. (DIN 6535)  
Number of flutes 2  
Number of margins 2  
Point geometry Special point  
Point angle 140°  
Helix angle 30°  
Coolant Internal



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	<b>7/32</b>	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	<b>15/64</b>	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	<b>1/4</b>	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>9/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	16	152	203	48	Cr85	2

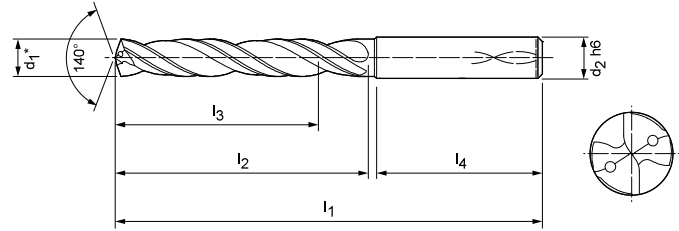


CARBIDE DRILL

TECHNICAL DETAILS

Tool Diameter Range 0.1181-0.7874 in  
3.00-20.00 mm

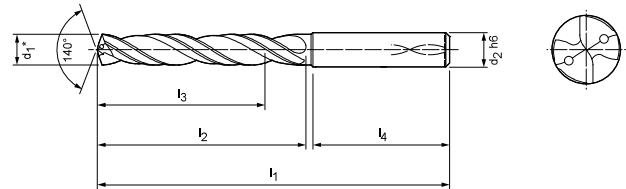
Bore tolerance IT9 (achievable)  
Shank form Cyl. (DIN 6535)  
Number of flutes 2  
Number of margins 2  
Point geometry Special point  
Point angle 140°  
Helix angle 30°  
Coolant Internal



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	<b>7/32</b>	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	<b>15/64</b>	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	<b>1/4</b>	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>9/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	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	SFM	m/min	SFM	m/min	SFM	m/min	SFM	m/min	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev	IPR	mm/rev
Non-alloy steel, cast steel 1018, 1108, 1161, 12L14, 1522, 1572	up to 8	up to 178	up to 600	80-100	262-328	80-100	262-328	80-100	262-328	80-100	262-328	80-100	262-328	.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		
	up to 15 over 15	up to 205 over 205	up to 700 over 700	70-90 60-80	230-295 197-262	70-90 60-80	230-295 197-262	70-90 60-80	230-295 197-262	70-90 60-80	230-295 197-262	70-90 60-80	230-295 197-262	.004-.007 .004-.008	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-.017	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 266	up to 900	60-70	197-230	60-70	197-230	60-70	197-230	60-70	197-230	60-70	197-230	.004-.008	0,10-0,20	.006-.011	0,15-0,28	.007-.014	0,18-0,35	.008-.015	0,20-0,38	0,10-.017	0,25-0,42		
	up to 31 over 31	up to 297 over 297	up to 1000 over 1000	40-60 40-50	131-197 131-164	40-60 40-50	131-197 131-164	40-60 40-50	131-197 131-164	40-60 40-50	131-197 131-164	40-60 40-50	131-197 131-164	.004-.006 .004-.006	0,10-0,15 0,10-0,15	.005-.008 .005-.008	0,12-0,20 0,12-0,20	.005-.010 .005-.010	0,14-0,25 0,14-0,25	.006-.012 .006-.012	0,16-0,30 0,16-0,30	.007-.013 .007-.013	0,18-0,32 0,18-0,32		
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 200	up to 680	70-90	230-295	70-90	230-295	70-90	230-295	70-90	230-295	70-90	230-295	.006-.010	0,15-0,25	.008-.014	0,20-0,35	.010-.018	0,25-0,45	.012-.020	0,30-0,50	.014-.022	0,35-0,55		
	up to 24 over 24	up to 250 over 2050	up to 850 over 850	60-80 60-70	197-262 197-230	60-80 60-70	197-262 197-230	60-80 60-70	197-262 197-230	60-80 60-70	197-262 197-230	60-80 60-70	197-262 197-230	.006-.010 .005-.008	0,15-0,25 0,12-0,20	.008-.014 .006-.010	0,20-0,35 0,15-0,25	.010-.018 .008-.014	0,25-0,45 0,20-0,35	.012-.020 .010-.016	0,30-0,50 0,25-0,40	.014-.022 .012-.018	0,35-0,55 0,30-0,45		
Spheroidal graphite cast iron, cast iron with vermicular graphite, malleable iron GGG40, GGG80	up to 8	up to 178	up to 600	75-90	246-295	75-90	246-295	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	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		
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 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 < 3.0mm reduce cutting speed by 20-30%