

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*



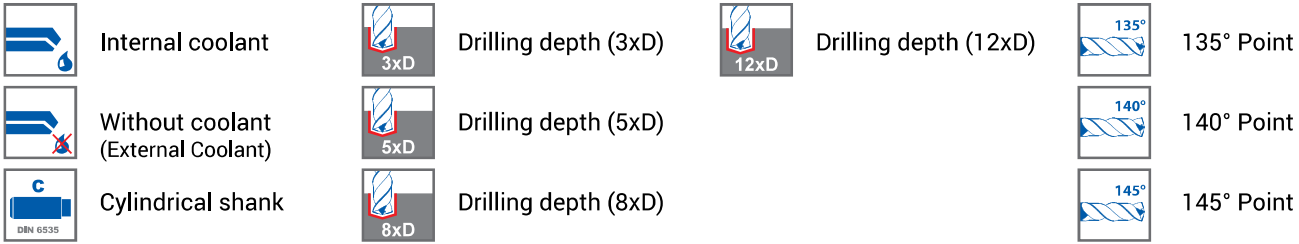
*Suitable for some applications*



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



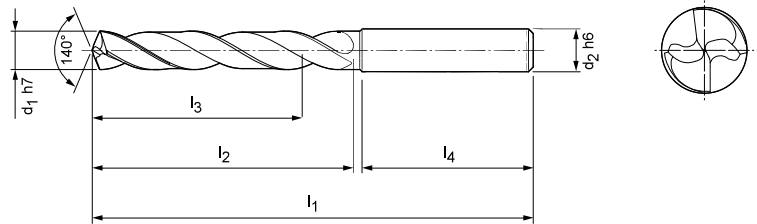
Suitable for some applications.

## 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

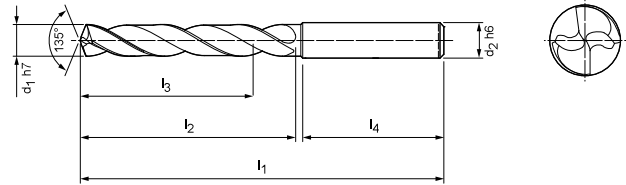


EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74000000	CRDR-G-C1003-01000 Cr15	1.000	0.0394	4	5	58	28	Cr15	2
74000005	CRDR-G-C1003-01016 Cr15	1.016	0.0400	4	5	58	28	Cr15	2
74000010	CRDR-G-C1003-01041 Cr15	1.041	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	<b>3/64</b>	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	<b>1/16</b>	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	<b>5/64</b>	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	<b>3/32</b>	4	12	58	28	Cr15	2
74000120	CRDR-G-C1003-02400 Cr15	2.400	<b>3/32</b>	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 (l2)	OAL (l1)	Shank length (l4)	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	<b>7/64</b>	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	<b>1/8</b>	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	<b>9/64</b>	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	<b>5/32</b>	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	<b>11/64</b>	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	<b>3/16</b>	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	<b>13/64</b>	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

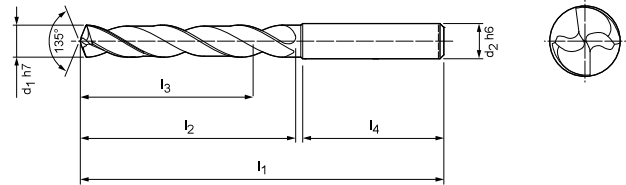


EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74000400	CRDR-G-C1003-05400 Cr15	5.400	0.2126	6	20	66	36	Cr15	2
74000405	CRDR-G-C1003-05410 Cr15	5.410	0.2130	6	20	66	36	Cr15	2
74000410	CRDR-G-C1003-05500 Cr15	5.500	0.2165	6	20	66	36	Cr15	2
74000415	CRDR-G-C1003-05558 Cr15	5.558	<b>7/32</b>	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	<b>15/64</b>	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	<b>1/4</b>	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	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	<b>5/8</b>	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	<b>21/32</b>	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	<b>11/16</b>	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	<b>45/64</b>	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	<b>23/32</b>	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	<b>3/4</b>	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



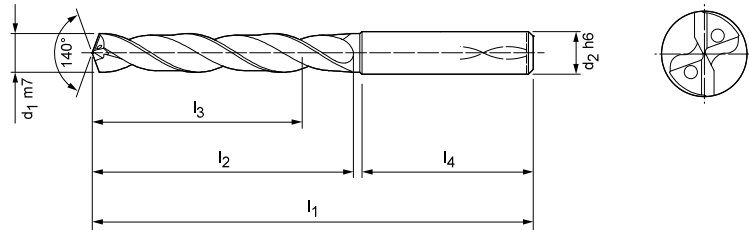
## CARBIDE DRILL

### TECHNICAL DETAILS



Tool Diameter Range 0.0591-0.7874 in  
1.50-20.00 mm

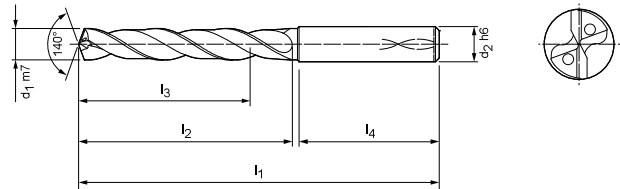
Bore tolerance IT9 (achievable)  
Shank form Cyl. (DIN 6535)  
Number of flutes 2  
Number of margins 1  
Point geometry Standard point  
Point angle 140°  
Helix angle 30°  
Coolant Internal



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	<b>1/16</b>	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	<b>5/64</b>	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	<b>3/32</b>	4	12	58	28	Cr15	2
74001380	CRDR-G-C1103-02400 Cr15	2.400	<b>3/32</b>	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	<b>7/64</b>	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	<b>1/8</b>	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	<b>9/64</b>	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	<b>5/32</b>	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	<b>11/64</b>	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	<b>3/16</b>	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	<b>13/64</b>	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	<b>7/32</b>	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	<b>15/64</b>	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

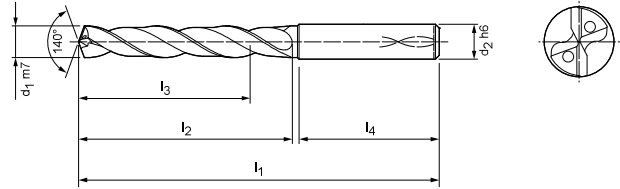
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74001725	CRDR-G-C1103-06300 Cr15	6.300	0.2480	8	24	79	36	Cr15	2
74001730	CRDR-G-C1103-06350 Cr15	6.350	<b>1/4</b>	8	24	79	36	Cr15	2
74001735	CRDR-G-C1103-06400 Cr15	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	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	<b>5/8</b>	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	<b>21/32</b>	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	<b>11/16</b>	18	51	123	48	Cr15	2



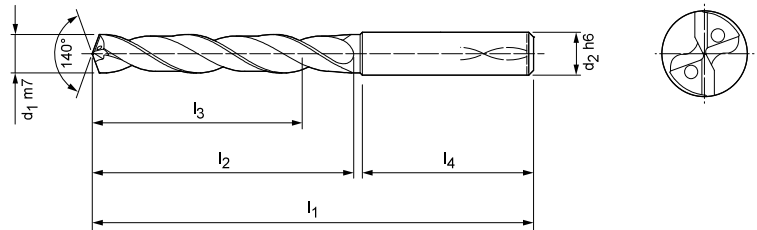
EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002435	CRDR-G-C1103-17500 Cr15	17.500	0.6890	18	51	123	48	Cr15	2
74002440	CRDR-G-C1103-17600 Cr15	17.600	0.6929	18	51	123	48	Cr15	2
74002445	CRDR-G-C1103-17700 Cr15	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	<b>45/64</b>	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	<b>23/32</b>	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	<b>3/4</b>	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

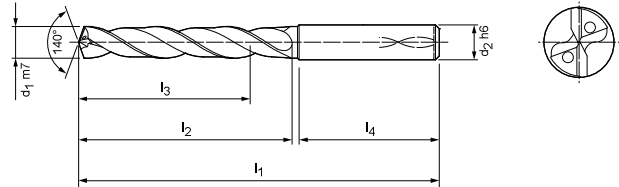


EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002585	CRDR-G-C1105-01500 Cr15	1.500	0.0591	4	9	58	28	Cr15	2
74002590	CRDR-G-C1105-01600 Cr15	1.600	<b>1/16</b>	4	9	58	28	Cr15	2
74002595	CRDR-G-C1105-01700 Cr15	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	<b>5/64</b>	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	<b>3/32</b>	4	17	58	28	Cr15	2
74002640	CRDR-G-C1105-02400 Cr15	2.400	<b>3/32</b>	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	<b>7/64</b>	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	<b>1/8</b>	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	<b>9/64</b>	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	<b>5/32</b>	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	<b>11/64</b>	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	<b>3/16</b>	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	<b>13/64</b>	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	<b>7/32</b>	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	<b>15/64</b>	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

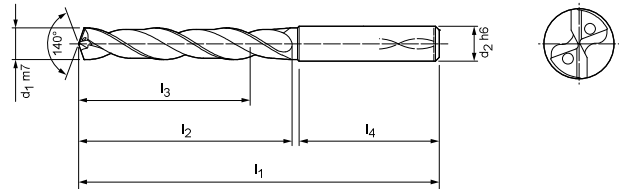


EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2)	Margin length (l2)	OAL (l1)	Shank length (l4)	Cromson Grade	# Flutes
74002985	CRDR-G-C1105-06300 Cr15	6.300	0.2480	8	43	91	36	Cr15	2
74002990	CRDR-G-C1105-06350 Cr15	6.350	<b>1/4</b>	8	43	91	36	Cr15	2
74002995	CRDR-G-C1105-06400 Cr15	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	<b>17/64</b>	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	<b>9/32</b>	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	<b>19/64</b>	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	<b>5/16</b>	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	<b>21/64</b>	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	<b>11/32</b>	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	<b>23/64</b>	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	<b>3/8</b>	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	<b>25/64</b>	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	<b>13/32</b>	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	<b>27/64</b>	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	<b>7/16</b>	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	<b>37/64</b>	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	<b>19/32</b>	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	<b>5/8</b>	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	<b>21/32</b>	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	<b>11/16</b>	18	71	143	48	Cr15	2



EDP Cromson	Cromson Description	Diam (d1) mm	Diam (d1) in	Diam (d2) mm	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	<b>45/64</b>	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	<b>23/32</b>	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	<b>3/4</b>	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-.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	0.10-.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	