



Recommended Cutting Data Series CXDCL - Inch 8xD, Coolant-Fed Drilling

Material Group	I S O	Hardness	Vc - SFM		Drill Diameter (inch)				
					1/8	3/16	1/4	5/16	
			Low	Mid	High	Feed (in/rev)			
Low Carbon Steels 12L14, 1018, A36	P	≤ 180 HB	400	500	600	.0031 - .0044	.0047 - .0066	.0063 - .0088	.0078 - .0109
Med Carbon / Alloy Steels 1045, 1050, 4140, 4340		≤ 38 HRC	290	360	430	.0031 - .0044	.0047 - .0066	.0063 - .0088	.0078 - .0109
Die / Tool Steels A2, D2, H13, P20		≤ 45 HRC	150	190	230	.0019 - .0031	.0028 - .0047	.0038 - .0063	.0047 - .0078
Ferritic / Martensitic Stainless 400 Series	M	≤ 28 HRC	280	350	420	.0025 - .0038	.0038 - .0056	.0050 - .0075	.0063 - .0094
Austenitic Stainless 300 Series			170	210	250	.0025 - .0038	.0038 - .0056	.0050 - .0075	.0063 - .0094
PH Stainless 15-5 PH, 17-4 PH, 17-7 PH		≤ 45 HRC	120	150	180	.0019 - .0031	.0028 - .0047	.0038 - .0063	.0047 - .0078
High Temp Alloys Inconel, Hastelloy, Monel	S	≤ 42 HRC	60	75	90	.0013 - .0019	.0019 - .0028	.0025 - .0038	.0031 - .0047
Titanium Alloys 6Al-4V			120	150	180	.0019 - .0025	.0028 - .0038	.0038 - .0050	.0047 - .0063
Cast Iron - Gray	K	≤ 240 HB	360	450	540	.0038 - .0050	.0056 - .0075	.0075 - .0100	.0094 - .0125
Cast Iron - Ductile & Malleable		> 240 HB	240	300	360	.0031 - .0044	.0047 - .0066	.0063 - .0088	.0078 - .0109

Material Group	I S O	Hardness	Vc - SFM		Drill Diameter (inch)			
					3/8	1/2	5/8	
			Low	Mid	High	Feed (in/rev)		
Low Carbon Steels 12L14, 1018, A36	P	≤ 180 HB	400	500	600	.0094 - .0131	.0125 - .0175	.0156 - .0219
Med Carbon / Alloy Steels 1045, 1050, 4140, 4340		≤ 38 HRC	290	360	430	.0094 - .0131	.0125 - .0175	.0156 - .0219
Die / Tool Steels A2, D2, H13, P20		≤ 45 HRC	150	190	230	.0056 - .0094	.0075 - .0125	.0094 - .0156
Ferritic / Martensitic Stainless 400 Series	M	≤ 28 HRC	280	350	420	.0075 - .0113	.0100 - .0150	.0125 - .0188
Austenitic Stainless 300 Series			170	210	250	.0075 - .0113	.0100 - .0150	.0125 - .0188
PH Stainless 15-5 PH, 17-4 PH, 17-7 PH		≤ 45 HRC	120	150	180	.0056 - .0094	.0075 - .0125	.0094 - .0156
High Temp Alloys Inconel, Hastelloy, Monel	S	≤ 42 HRC	60	75	90	.0038 - .0056	.0050 - .0075	.0063 - .0094
Titanium Alloys 6Al-4V			120	150	180	.0056 - .0075	.0075 - .0100	.0094 - .0125
Cast Iron - Gray	K	≤ 240 HB	360	450	540	.0113 - .0150	.0150 - .0200	.0118 - .0250
Cast Iron - Ductile & Malleable		> 240 HB	240	300	360	.0094 - .0131	.0125 - .0175	.0156 - .0219

Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.

For product information, call your local distributor.



Recommended Cutting Data Series CXDCL - Metric 8xD, Coolant-Fed Drilling

Material Group	I S O	Hardness	Vc - M/Min		Drill Diameter (mm)				
					3	5	6	8	
			Low	Mid	High	Feed (mm/rev)			
Low Carbon Steels 12L14, 1018, A36	P	≤ 180 HB	120	150	180	0.075 - 0.105	0.125 - 0.175	0.150 - 0.210	0.200 - 0.280
Med Carbon / Alloy Steels 1045, 1050, 4140, 4340		≤ 38 HRC	90	110	130	0.075 - 0.105	0.125 - 0.175	0.150 - 0.210	0.200 - 0.280
Die / Tool Steels A2, D2, H13, P20		≤ 45 HRC	50	60	70	0.045 - 0.075	0.075 - 0.125	0.090 - 0.150	0.120 - 0.200
Ferritic / Martensitic Stainless 400 Series	M	≤ 28 HRC	85	105	125	0.060 - 0.090	0.100 - 0.150	0.120 - 0.180	0.160 - 0.240
Austenitic Stainless 300 Series			50	65	80	0.060 - 0.090	0.100 - 0.150	0.120 - 0.180	0.160 - 0.240
PH Stainless 15-5 PH, 17-4 PH, 17-7 PH		≤ 45 HRC	35	45	55	0.045 - 0.075	0.075 - 0.125	0.090 - 0.150	0.120 - 0.200
High Temp Alloys Inconel, Hastelloy, Monel	S	≤ 42 HRC	20	25	30	0.030 - 0.045	0.050 - 0.075	0.060 - 0.090	0.080 - 0.120
Titanium Alloys 6Al-4V			35	45	55	0.045 - 0.060	0.075 - 0.100	0.090 - 0.120	0.120 - 0.160
Cast Iron - Gray	K	≤ 240 HB	110	135	160	0.090 - 0.120	0.150 - 0.200	0.180 - 0.240	0.240 - 0.320
Cast Iron - Ductile & Malleable		> 240 HB	70	90	110	0.075 - 0.105	0.125 - 0.175	0.150 - 0.210	0.200 - 0.280

Material Group	I S O	Hardness	Vc - M/Min		Drill Diameter (mm)			
					10	12	16	
			Low	Mid	High	Feed (mm/rev)		
Low Carbon Steels 12L14, 1018, A36	P	≤ 180 HB	120	150	180	0.250 - 0.350	0.300 - 0.420	0.400 - 0.560
Med Carbon / Alloy Steels 1045, 1050, 4140, 4340		≤ 38 HRC	90	110	130	0.250 - 0.350	0.300 - 0.420	0.400 - 0.560
Die / Tool Steels A2, D2, H13, P20		≤ 45 HRC	50	60	70	0.150 - 0.250	0.180 - 0.300	0.240 - 0.400
Ferritic /Martensitic Stainless 400 Series	M	≤ 28 HRC	85	105	125	0.200 - 0.300	0.240 - 0.360	0.320 - 0.480
Austenitic Stainless 300 Series			50	65	80	0.200 - 0.300	0.240 - 0.360	0.320 - 0.480
PH Stainless 15-5 PH, 17-4 PH, 17-7 PH		≤ 45 HRC	35	45	55	0.150 - 0.250	0.180 - 0.300	0.240 - 0.400
High Temp Alloys Inconel, Hastelloy, Monel	S	≤ 42 HRC	20	25	30	0.100 - 0.150	0.120 - 0.180	0.160 - 0.240
Titanium Alloys 6Al-4V			35	45	55	0.150 - 0.200	0.180 - 0.240	0.240 - 0.320
Cast Iron - Gray	K	≤ 240 HB	110	135	160	0.300 - 0.400	0.360 - 0.480	0.480 - 0.640
Cast Iron - Ductile & Malleable		> 240 HB	70	90	110	0.250 - 0.350	0.300 - 0.420	0.400 - 0.560

Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.