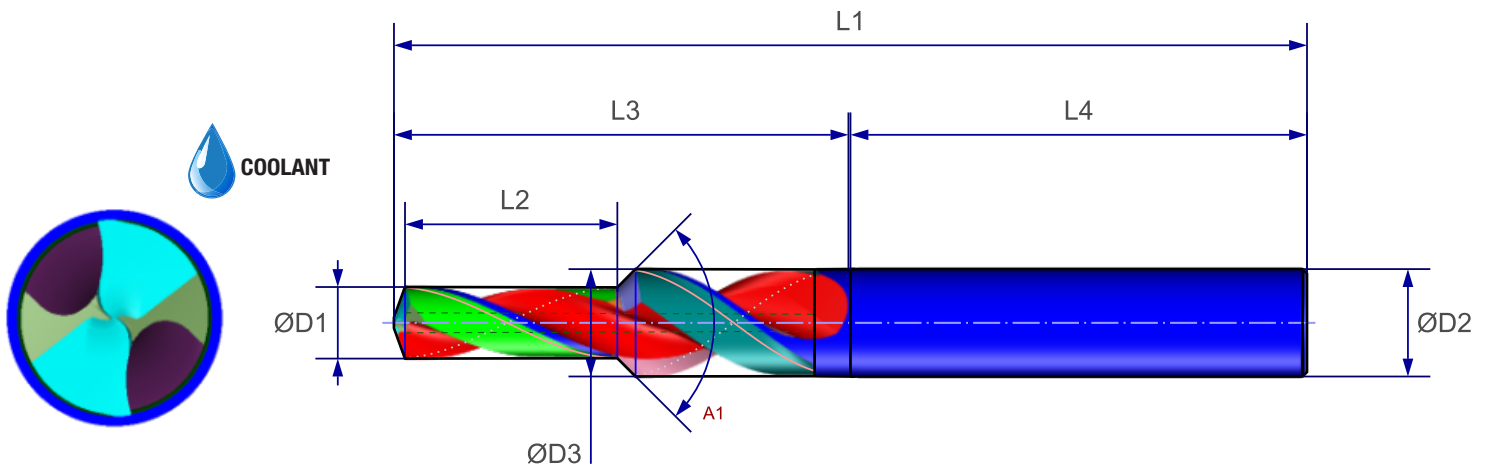


DESCRIPTION EXAMPLE...M=METRIC, GP= GENERAL PURPOSE, SD=STEP DRILL, C=COOLANT, 2=FLUTES 03734=METRIC DIA, 3XD=FLUTE LENGTH	DRILL DIAMETER D1		SHANK DIAMETER metric	OAL metric	STEP LENGTH metric	SHANK LENGTH L4 metric	POINT LENGTH metric
	metric	inch					
MGPSDC2-03734-3XD	3.734	0.147	6	66	10	36	0.7
MGPSDC2-04200-3XD	4.200	0.165	6	66	12	36	0.8
MGPSDC2-04496-3XD	4.496	0.177	8	79	13	36	0.9
MGPSDC2-05000-3XD	5.000	0.197	8	79	13	36	0.9
MGPSDC2-05106-3XD	5.106	0.201	8	79	15	36	1.0
MGPSDC2-05410-3XD	5.410	0.213	8	79	16	36	1.0
MGPSDC2-06528-3XD	6.528	0.257	10	89	17	40	1.2
MGPSDC2-06800-3XD	6.800	0.268	10	89	16	40	1.3
MGPSDC2-06909-3XD	6.909	0.272	10	89	18	40	1.3
MGPSDC2-07938-3XD	7.938	0.313	12	89	19	45	1.5
MGPSDC2-08433-3XD	8.433	0.332	12	102	21	45	1.6
MGPSDC2-08500-3XD	8.500	0.335	12	102	19	45	1.6
MGPSDC2-09921-3XD	9.921	0.391	14	107	23	45	1.9
MGPSDC2-10200-3XD	10.200	0.402	14	107	22	45	1.9
MGPSDC2-10500-3XD	10.500	0.413	14	107	22	45	2.0
MGPSDC2-10716-3XD	10.716	0.422	14	107	27	45	2.0
MGPSDC2-12000-3XD	12.000	0.472	16	115	27	48	2.2
MGPSDC2-12304-3XD	12.304	0.484	16	115	28	48	2.3
MGPSDC2-12500-3XD	12.500	0.492	16	115	27	48	2.3
MGPSDC2-13096-3XD	13.096	0.516	16	115	31	48	2.4
MGPSDC2-13495-3XD	13.495	0.531	18	123	32	48	2.5
MGPSDC2-14000-3XD	14.000	0.551	18	123	29	48	2.6
MGPSDC2-16670-3XD	16.670	0.656	20	131	38	50	3.1
MGPSDC2-17463-3XD	17.463	0.688	20	131	40	50	3.2
MGPSDC2-19446-3XD	19.446	0.766	25	153	43	56	3.6



DESCRIPTION EXAMPLE...M=METRIC, GP= GENERAL PURPOSE, SD=STEP DRILL, C=COOLANT, 2=FLUTES 03734=METRIC DIA, 4XD=FLUTE LENGTH	DRILL DIAMETER D1		SHANK DIAMETER metric	OAL metric	STEP LENGTH metric	SHANK LENGTH L4 metric	POINT LENGTH metric
	m7 metric	inch					
MGPSDC2-03734-4XD	3.734	0.147	6	66	16	36	0.7
MGPSDC2-04200-4XD	4.200	0.165	6	66	17	36	0.8
MGPSDC2-04496-4XD	4.496	0.177	8	79	17	36	0.9
MGPSDC2-05000-4XD	5.000	0.197	8	79	20	36	0.9
MGPSDC2-05106-4XD	5.106	0.201	8	79	20	36	1.0
MGPSDC2-05410-4XD	5.410	0.213	8	79	21	36	1.0
MGPSDC2-06528-4XD	6.528	0.257	10	89	24	40	1.2
MGPSDC2-06800-4XD	6.800	0.268	10	89	25	40	1.3
MGPSDC2-06909-4XD	6.909	0.272	10	89	25	40	1.3
MGPSDC2-07938-4XD	7.938	0.313	12	102	27	45	1.5
MGPSDC2-08433-4XD	8.433	0.332	12	102	29	45	1.6
MGPSDC2-08500-4XD	8.500	0.335	12	102	30	45	1.6
MGPSDC2-09921-4XD	9.921	0.391	14	107	33	45	1.9
MGPSDC2-10200-4XD	10.200	0.402	14	107	35	45	1.9
MGPSDC2-10500-4XD	10.500	0.413	14	107	35	45	2.0
MGPSDC2-10716-4XD	10.716	0.422	14	107	37	45	2.0
MGPSDC2-12000-4XD	12.000	0.472	16	115	40	48	2.2
MGPSDC2-12304-4XD	12.304	0.484	16	115	41	48	2.3
MGPSDC2-12500-4XD	12.500	0.492	16	115	40	48	2.3
MGPSDC2-13096-4XD	13.096	0.516	16	123	44	48	2.4
MGPSDC2-13495-4XD	13.495	0.531	18	123	45	48	2.5
MGPSDC2-14000-4XD	14.000	0.551	18	123	43	48	2.6
MGPSDC2-16670-4XD	16.670	0.656	20	141	55	50	3.1
MGPSDC2-17463-4XD	17.463	0.688	20	141	58	50	3.2
MGPSDC2-19446-4XD	19.446	0.766	25	184	76	56	3.6

Cutting Speed		Tool Diameter																			
Starting Value	sfm	49	98	164	262	328	394	492	656	820	984	1148	inch	0.125	0.188	0.25	0.313	0.375	0.5	0.625	0.75
	m/min	15	30	50	80	100	120	150	200	250	300	350	mm	3.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0
P1 Low Carbon Steels, Long Chipping		Content C <.25%				Tensile Strength RM (MPa): <530				Hardness (HB) or HRC: <125											
		Feed Rate by Diameter																			
720	sfm					460		790					ipr	.003-.007	.004-.008	.004-.009	.006-.012	.006-.014	.007-.015	.008-.018	.009-.020
220	m/min					140		240					mm/r	0.07-0.17	0.09-0.21	0.11-0.24	0.14-0.30	0.16-0.35	0.18-0.39	0.20-0.46	0.24-0.50
P2 Low Carbon Steels, Free Machining and Short Chipping		Content C <.25%				Tensile Strength RM (MPa): <650				Hardness (HB) or HRC: <220											
		Feed Rate by Diameter																			
690	sfm					590		790					ipr	.003-.006	.004-.007	.004-.008	.006-.009	.006-.011	.007-.013	.008-.015	.009-.017
210	m/min					180		240					mm/r	0.07-0.14	0.09-0.17	0.11-0.20	0.14-0.24	0.16-0.28	0.18-0.32	0.20-0.37	0.24-0.43
P3 Medium & High Plain-Carbon Steels, Low Alloyed		Content <.25%				Tensile Strength RM (MPa): 600-850				Hardness (HB) or HRC: <330											
		Feed Rate by Diameter																			
490	sfm					390		590					ipr	.004-.007	.005-.008	.006-.009	.007-.012	.008-.014	.009-.015	.010-.018	.011-.020
150	m/min					120		120					mm/r	0.09-0.17	0.12-0.21	0.14-0.24	0.17-0.30	0.20-0.35	0.22-0.39	0.26-0.46	0.29-0.50
P4 Alloyed and Tempered Carbon Steels, Tool Steels		Content C >.25%				Tensile Strength RM (MPa): 800-1100				Hardness (HB) or HRC: 350-450											
		Feed Rate by Diameter																			
460	sfm					330		590					ipr	.003-.007	.004-.008	.005-.009	.006-.011	.007-.013	.007-.015	.009-.017	.010-.018
140	m/min					100		180					mm/r	0.08-0.17	0.11-0.20	0.12-0.23	0.15-0.28	0.17-0.33	0.19-0.37	0.22-0.43	0.25-0.45
P6 High Strength Ferritic, Martensitic, and PH Stainless Steels		Content C .1%-6%				Tensile Strength RM (MPa): 900-1350				Hardness (HB) or HRC: 350-450											
		Feed Rate by Diameter																			
330	sfm					460		590					ipr	.003-.005	.004-.006	.004-.007	.005-.008	.006-.009	.007-.011	.007-.013	.008-.014
100	m/min					140		180					mm/r	0.07-0.13	0.09-0.15	0.11-0.17	0.13-0.21	0.15-0.24	0.17-0.27	0.19-0.33	0.21-0.36
K1 Malleable Cast Iron		Feed Rate by Diameter																			
520	sfm					460		590					ipr	.004-.007	.005-.009	.005-.010	.006-.013	.007-.015	.008-.016	.009-.019	.011-.020
160	m/min					140		180					mm/r	0.09-0.18	0.12-0.22	0.13-0.26	0.16-0.33	0.19-0.37	0.21-0.41	0.24-0.48	0.27-0.51
K2 Grey Cast Iron		Feed Rate by Diameter																			
490	sfm					330		660					ipr	.004-.006	.005-.007	.005-.009	.006-.011	.007-.013	.008-.014	.009-.016	.011-.018
150	m/min					100		200					mm/r	0.09-0.16	0.12-0.19	0.13-0.22	0.16-0.27	0.19-0.32	0.21-0.35	0.24-0.41	0.27-0.45
K3 Nodular Cast Iron		Feed Rate by Diameter																			
460	sfm					330		590					ipr	.003-.006	.004-.007	.005-.008	.006-.009	.006-.011	.007-.013	.008-.015	.009-.015
140	m/min					100		180					mm/r	0.07-0.14	0.09-0.17	0.12-0.20	0.14-0.24	0.16-0.28	0.18-0.32	0.21-0.37	0.24-0.39