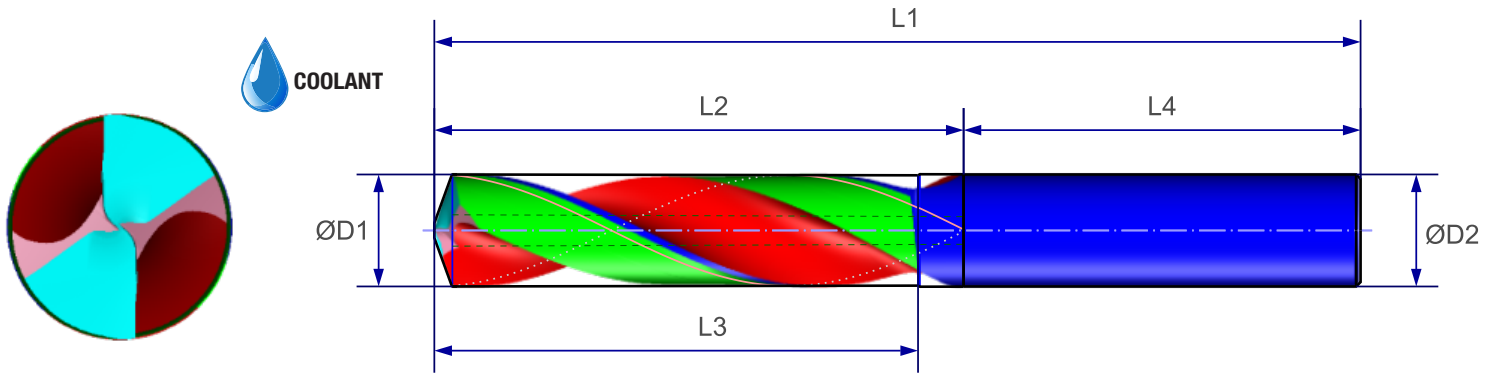
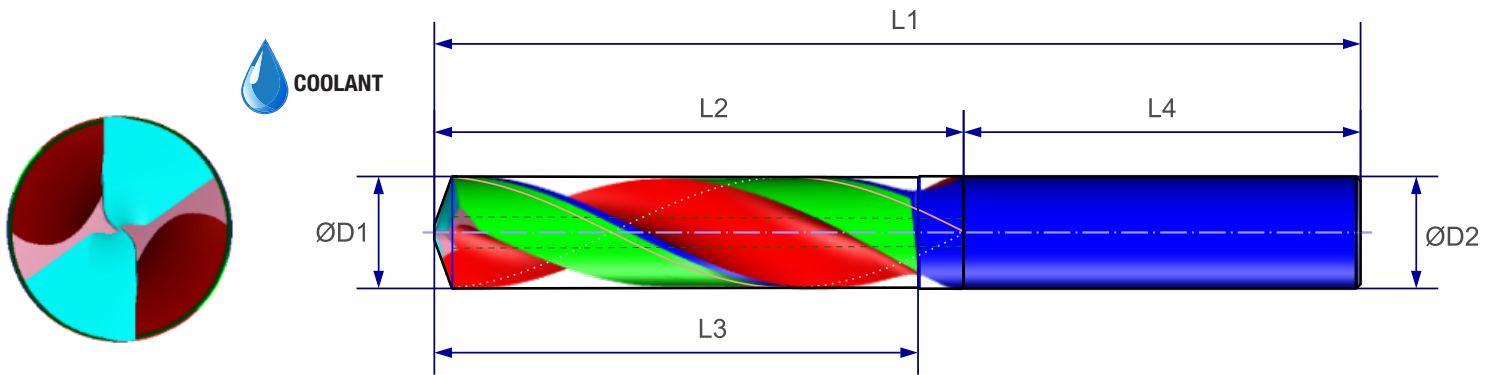


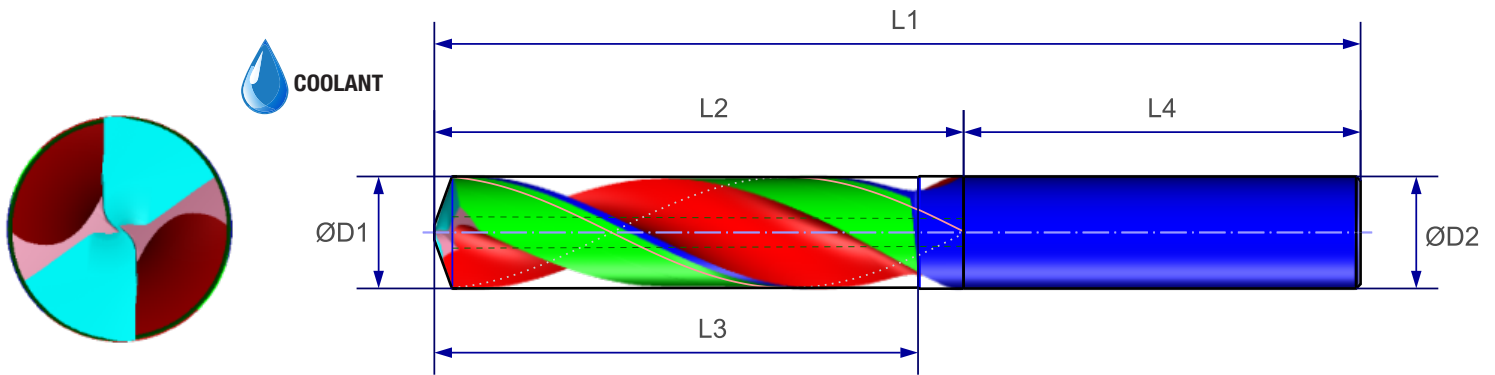
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 125=DIA, 3XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC2-1250-3XD	.125	1/8	6	2.441	0.787	0.600	1.417
ISC2-1406-3XD	.141	9/64	6	2.441	0.787	0.577	1.417
ISC2-1540-3XD	.154	10-24 UNC	6	2.598	0.945	0.714	1.417
ISC2-1562-3XD	.156	5/32	6	2.598	0.945	0.711	1.417
ISC2-1610-3XD	.161	10-32 UNF	6	2.598	0.945	0.703	1.417
ISC2-1690-3XD	.169	M5	6	2.598	0.945	0.691	1.417
ISC2-1719-3XD	.172	11/64	6	2.598	0.945	0.687	1.417
ISC2-1875-3XD	.188	3/16	6	2.598	0.945	0.664	1.417
ISC2-1890-3XD	.189	12-32 UNF	6	2.598	1.102	0.819	1.417
ISC2-2010-3XD	.201	M6	6	2.598	1.102	0.801	1.417
ISC2-2031-3XD	.203	13/64	6	2.598	1.102	0.798	1.417
ISC2-2188-3XD	.219	7/32	6	2.598	1.102	0.774	1.417
ISC2-2344-3XD	.234	15/64	6	2.598	1.102	0.751	1.417
ISC2-2500-3XD	.250	1/4	8	3.110	1.339	0.964	1.417
ISC2-2640-3XD	.264	5/18-18UNF	8	3.110	1.339	0.943	1.417
ISC2-2656-3XD	.266	17/64	8	3.110	1.339	0.940	1.417
ISC2-2800-3XD	.280	MF8x1	8	3.110	1.614	1.194	1.417
ISC2-2813-3XD	.281	9/32	8	3.110	1.614	1.192	1.417
ISC2-2969-3XD	.297	19/64	8	3.110	1.614	1.169	1.417
ISC2-3125-3XD	.313	5/16	8	3.110	1.614	1.145	1.417
ISC2-3281-3XD	.328	21/64	10	3.504	1.850	1.358	1.575
ISC2-3438-3XD	.344	11/32	10	3.504	1.850	1.335	1.575
ISC2-3594-3XD	.359	23/64	10	3.504	1.850	1.311	1.575
ISC2-3750-3XD	.375	3/8	10	3.504	1.850	1.288	1.575
ISC2-3906-3XD	.391	25/64	10	3.504	1.850	1.264	1.575



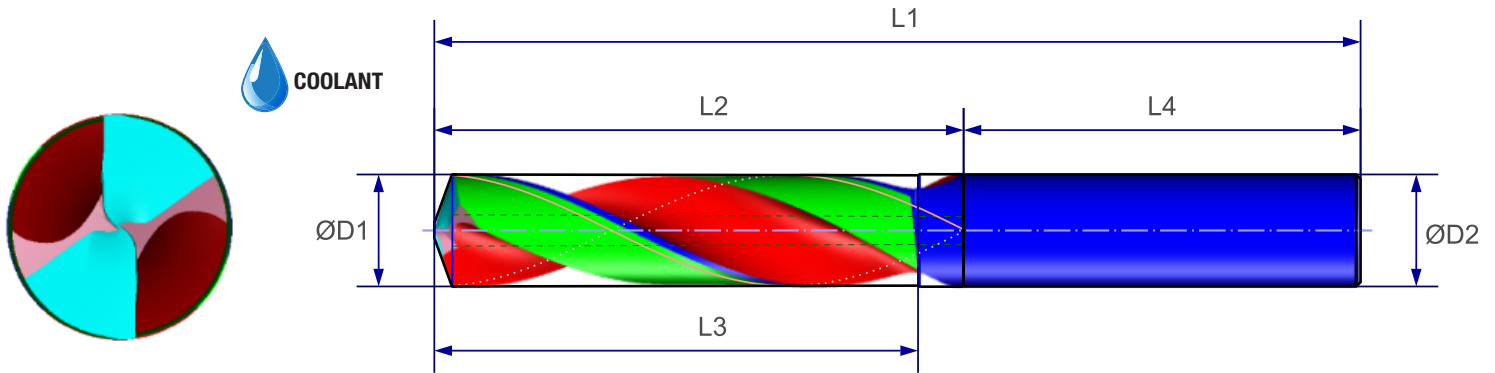
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 125=DIA, 3XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC2-3940-3XD	.394	7/16-20 UNF	12	3.504	2.165	1.574	1.772
ISC2-4063-3XD	.406	13/32	12	4.016	2.165	1.556	1.772
ISC2-4210-3XD	.421	MF12x1.5	12	4.016	2.165	1.534	1.772
ISC2-4375-3XD	.438	7/16	12	4.016	2.165	1.509	1.772
ISC2-4531-3XD	.453	29/64	12	4.213	2.165	1.486	1.772
ISC2-4570-3XD	.457	1/2-20 UNF	12	4.213	2.165	1.480	1.772
ISC2-4690-3XD	.469	15/32	12	4.213	2.165	1.462	1.772
ISC2-4844-3XD	.484	31/64	14	4.213	2.362	1.636	1.772
ISC2-5000-3XD	.500	1/2	14	4.213	2.362	1.612	1.772
ISC2-5469-3XD	.547	35/64	14	4.528	2.362	1.542	1.772
ISC2-5625-3XD	.563	9/16	16	4.528	2.559	1.715	1.890
ISC2-5781-3XD	.578	37/64	16	4.528	2.559	1.692	1.890
ISC2-5938-3XD	.594	19/32	16	4.528	2.559	1.668	1.890
ISC2-6094-3XD	.609	39/64	16	4.528	2.559	1.645	1.910
ISC2-6250-3XD	.625	5/8	16	4.528	2.559	1.622	1.890
ISC2-6875-3XD	.688	11/16	18	4.84	2.874	1.843	1.890
ISC2-7500-3XD	.750	3/4	20	5.08	3.110	1.985	1.969



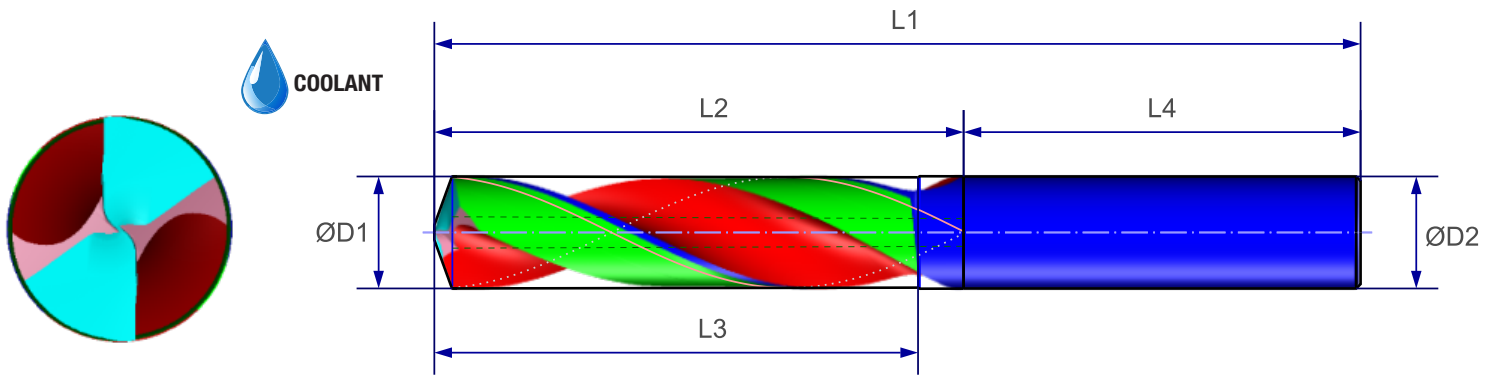
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT 2=FLUTES, 125=DIA, 5XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC2-1250-5XD	.125	1/8	6	2.441	1.102	0.915	1.417
ISC2-1406-5XD	.141	9/64	6	2.441	1.102	0.891	1.417
ISC2-1540-5XD	.154	10-24 UNC	6	2.598	1.417	1.186	1.417
ISC2-1562-5XD	.156	5/32	6	2.598	1.417	1.183	1.417
ISC2-1610-5XD	.161	10-32 UNF	6	2.598	1.417	1.176	1.417
ISC2-1690-5XD	.169	M5	6	2.598	1.417	1.164	1.417
ISC2-1719-5XD	.172	11/64	6	2.598	1.417	1.159	1.417
ISC2-1875-5XD	.188	3/16	6	2.598	1.417	1.136	1.417
ISC2-1890-5XD	.189	12-32 UNF	6	2.598	1.732	1.449	1.417
ISC2-2010-5XD	.201	M6	6	2.598	1.732	1.431	1.417
ISC2-2031-5XD	.203	13/64	6	2.598	1.732	1.428	1.417
ISC2-2188-5XD	.219	7/32	6	2.598	1.732	1.404	1.417
ISC2-2344-5XD	.234	15/64	6	2.598	1.732	1.381	1.417
ISC2-2500-5XD	.250	1/4	8	3.110	2.087	1.712	1.417
ISC2-2640-5XD	.264	5/18-18UNF	8	3.110	2.087	1.691	1.417
ISC2-2656-5XD	.266	17/64	8	3.110	2.087	1.688	1.417
ISC2-2800-5XD	.280	MF8x1	8	3.110	2.087	1.667	1.417
ISC2-2813-5XD	.281	9/32	8	3.110	2.087	1.665	1.417
ISC2-2969-5XD	.297	19/64	8	3.110	2.087	1.641	1.417
ISC2-3125-5XD	.313	5/16	8	3.110	2.087	1.618	1.417
ISC2-3281-5XD	.328	21/64	10	3.504	2.402	1.909	1.575
ISC2-3438-5XD	.344	11/32	10	3.504	2.402	1.886	1.575
ISC2-3594-5XD	.359	23/64	10	3.504	2.402	1.863	1.575
ISC2-3750-5XD	.375	3/8	10	3.504	2.402	1.839	1.575
ISC2-3906-5XD	.391	25/64	10	3.504	2.402	1.816	1.575
ISC2-3940-5XD	.394	7/16-20 UNF	12	3.504	2.795	2.204	1.772



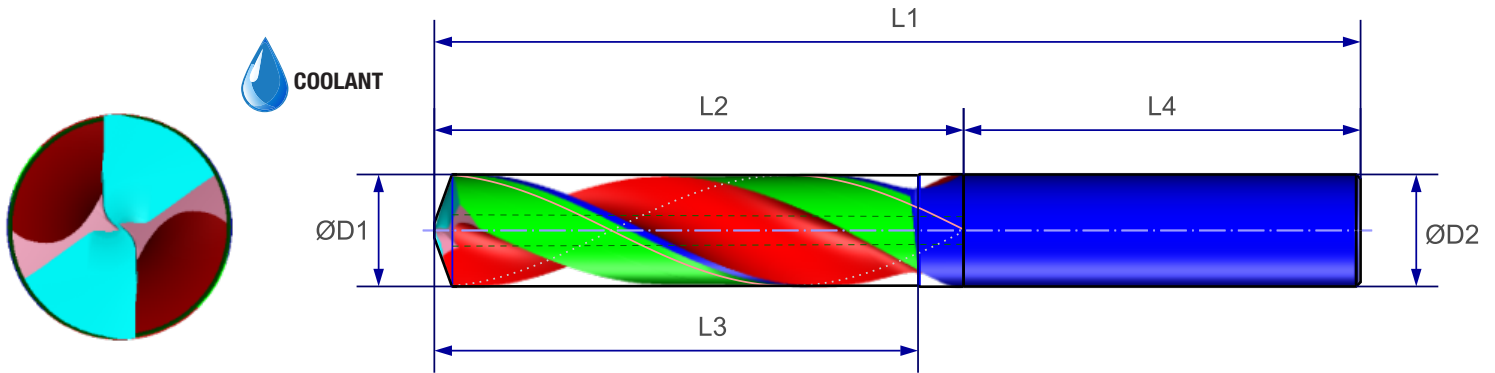
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT 2=FLUTES, 125=DIA, 5XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC2-4063-5XD	.406	13/32	12	4.016	2.795	2.186	1.772
ISC2-4210-5XD	.421	MF12x1.5	12	4.016	2.795	2.164	1.772
ISC2-4375-5XD	.438	7/16	12	4.016	2.795	2.139	1.772
ISC2-4531-5XD	.453	29/64	12	4.213	2.795	2.116	1.772
ISC2-4570-5XD	.457	1/2-20 UNF	12	4.213	2.795	2.110	1.772
ISC2-4690-5XD	.469	15/32	12	4.213	2.795	2.092	1.772
ISC2-4844-5XD	.484	31/64	14	4.213	3.031	2.305	1.772
ISC2-5000-5XD	.500	1/2	14	4.213	3.031	2.281	1.772
ISC2-5469-5XD	.547	35/64	14	4.528	3.031	2.211	1.772
ISC2-5625-5XD	.563	9/16	16	4.528	3.268	2.424	1.890
ISC2-5781-5XD	.578	37/64	16	4.528	3.268	2.401	1.890
ISC2-5938-5XD	.594	19/32	16	4.528	3.268	2.377	1.890
ISC2-6094-5XD	.609	39/64	16	4.528	3.268	2.354	1.910
ISC2-6250-5XD	.625	5/8	16	4.528	3.268	2.330	1.890
ISC2-6875-5XD	.688	11/16	18	4.84	3.661	2.630	1.890
ISC2-7500-5XD	.750	3/4	20	5.08	3.976	2.851	1.969



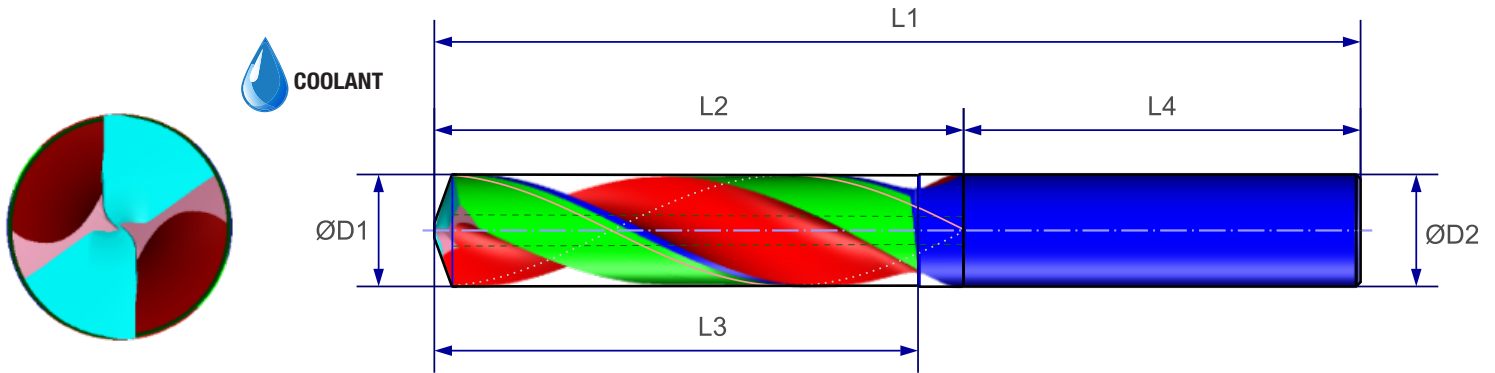
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-0300-3XD	3.00		6	62	20	15	36
MSC2-0310-3XD	3.10		6	62	20	15	36
MSC2-0320-3XD	3.20		6	62	20	15	36
MSC2-0330-3XD	3.30		6	62	20	15	36
MSC2-0340-3XD	3.40		6	62	20	14	36
MSC2-0350-3XD	3.50		6	62	20	14	36
MSC2-0360-3XD	3.60		6	62	20	14	36
MSC2-0370-3XD	3.70		6	62	20	14	36
MSC2-0380-3XD	3.80		6	66	24	18	36
MSC2-0390-3XD	3.90	10-24 UNC	6	66	24	18	36
MSC2-0400-3XD	4.00		6	66	24	18	36
MSC2-0410-3XD	4.10	10-32 UNF	6	66	24	17	36
MSC2-0420-3XD	4.20		6	66	24	17	36
MSC2-0430-3XD	4.30	M5	6	66	24	17	36
MSC2-0440-3XD	4.40		6	66	24	17	36
MSC2-0450-3XD	4.50		6	66	24	17	36
MSC2-0470-3XD	4.70		6	66	24	16	36
MSC2-0480-3XD	4.80	12-32 UNF	6	66	28	20	36
MSC2-0490-3XD	4.90		6	66	28	20	36
MSC2-0500-3XD	5.00		6	66	28	20	36
MSC2-0510-3XD	5.10	M6	6	66	28	20	36
MSC2-0520-3XD	5.20		6	66	28	20	36
MSC2-0530-3XD	5.30		6	66	28	20	36
MSC2-0540-3XD	5.40		6	66	28	19	36
MSC2-0550-3XD	5.50		6	66	28	19	36



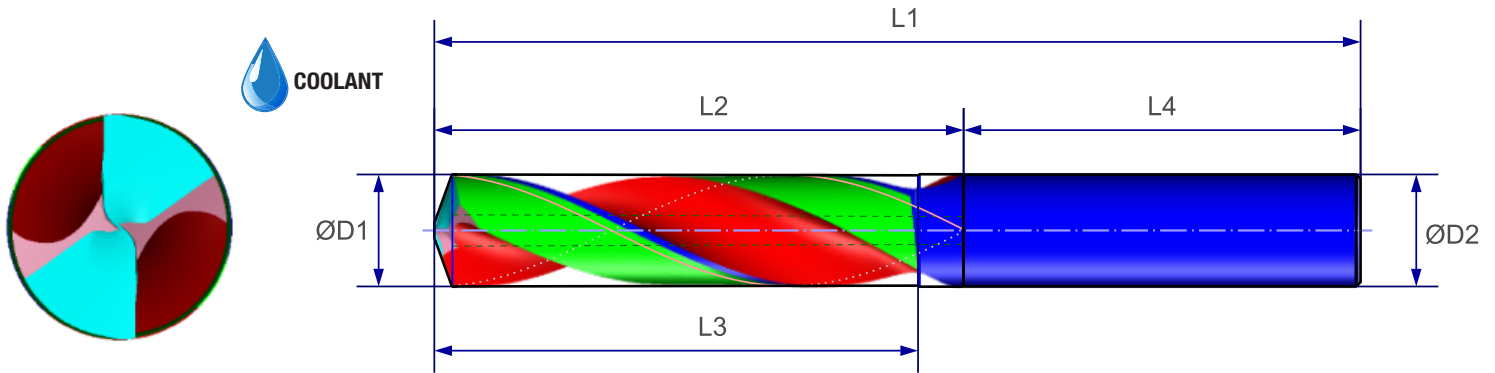
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-0560-3XD	5.60		6	66	28	19	36
MSC2-0570-3XD	5.70		6	66	28	19	36
MSC2-0580-3XD	5.80		6	66	28	19	36
MSC2-0590-3XD	5.90		6	66	28	19	36
MSC2-0600-3XD	6.00		8	79	34	25	36
MSC2-0610-3XD	6.10		8	79	34	24	36
MSC2-0620-3XD	6.20		8	79	34	24	36
MSC2-0630-3XD	6.30		8	79	34	24	36
MSC2-0640-3XD	6.40		8	79	34	24	36
MSC2-0650-3XD	6.50		8	79	34	24	36
MSC2-0660-3XD	6.60		8	79	34	24	36
MSC2-0670-3XD	6.70	5/18-18UNF	8	79	34	23	36
MSC2-0675-3XD	6.75		8	79	34	23	36
MSC2-0680-3XD	6.80		8	79	34	23	36
MSC2-0690-3XD	6.90		8	79	34	23	36
MSC2-0700-3XD	7.00		8	79	34	23	36
MSC2-0710-3XD	7.10	MF8x1	8	79	41	30	36
MSC2-0720-3XD	7.20		8	79	41	30	36
MSC2-0730-3XD	7.30		8	79	41	30	36
MSC2-0740-3XD	7.40		8	79	41	29	36
MSC2-0750-3XD	7.50		8	79	41	29	36
MSC2-0760-3XD	7.60		8	79	41	29	36
MSC2-0770-3XD	7.70		8	79	41	29	36
MSC2-0780-3XD	7.80		8	79	41	29	36
MSC2-0790-3XD	7.90		8	79	41	29	36



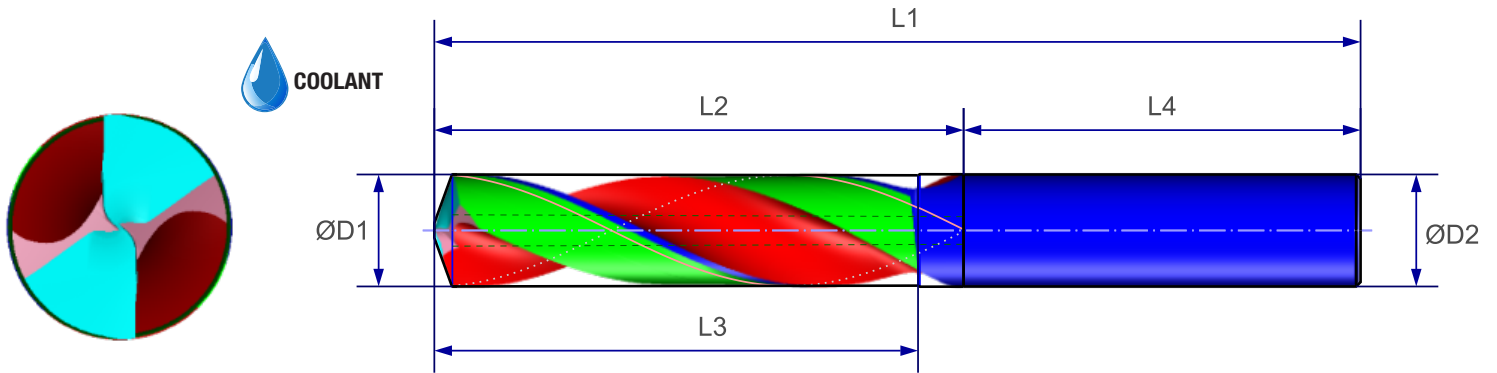
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-0800-3XD	8.00		10	89	47	35	40
MSC2-0810-3XD	8.10		10	89	47	34	40
MSC2-0820-3XD	8.20		10	89	47	34	40
MSC2-0830-3XD	8.30		10	89	47	34	40
MSC2-0840-3XD	8.40		10	89	47	34	40
MSC2-0850-3XD	8.50		10	89	47	34	40
MSC2-0860-3XD	8.60	3/8-24 UNF	10	89	47	34	40
MSC2-0870-3XD	8.70	M10	10	89	47	33	40
MSC2-0880-3XD	8.80		10	89	47	33	40
MSC2-0890-3XD	8.90	MF10x1.25	10	89	47	33	40
MSC2-0900-3XD	9.00		10	89	47	33	40
MSC2-0910-3XD	9.10		10	89	47	33	40
MSC2-0920-3XD	9.20		10	89	47	33	40
MSC2-0930-3XD	9.30		10	89	47	33	40
MSC2-0940-3XD	9.40		10	89	47	32	40
MSC2-0950-3XD	9.50		10	89	47	32	40
MSC2-0960-3XD	9.60		10	89	47	32	40
MSC2-0970-3XD	9.70		10	89	47	32	40
MSC2-0980-3XD	9.80		10	89	47	32	40
MSC2-0990-3XD	9.90		10	89	47	32	40
MSC2-1000-3XD	10.00	7/16-20 UNF	12	102	55	40	45
MSC2-1010-3XD	10.10		12	102	55	39	45
MSC2-1020-3XD	10.20		12	102	55	39	45
MSC2-1030-3XD	10.30		12	102	55	39	45
MSC2-1040-3XD	10.40		12	102	55	39	45



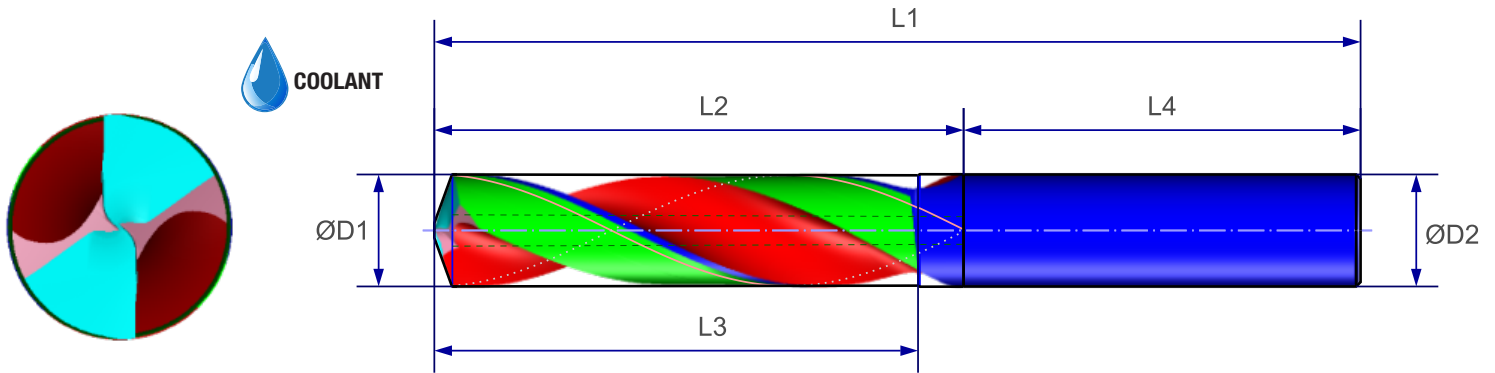
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-1050-3XD	10.50		12	102	55	39	45
MSC2-1060-3XD	10.60		12	102	55	39	45
MSC2-1070-3XD	10.70	MF12x1.5	12	102	55	38	45
MSC2-1080-3XD	10.80		12	102	55	38	45
MSC2-1090-3XD	10.90		12	102	55	38	45
MSC2-1100-3XD	11.00		12	102	55	38	45
MSC2-1110-3XD	11.10		12	102	55	38	45
MSC2-1120-3XD	11.20		12	102	55	38	45
MSC2-1140-3XD	11.40		12	102	55	37	45
MSC2-1150-3XD	11.50		12	102	55	37	45
MSC2-1160-3XD	11.60	1/2-20 UNF	12	102	55	37	45
MSC2-1170-3XD	11.70		12	102	55	37	45
MSC2-1180-3XD	11.80		12	102	55	37	45
MSC2-1190-3XD	11.90		12	102	55	37	45
MSC2-1200-3XD	12.00		14	107	60	42	45
MSC2-1210-3XD	12.10		14	107	60	41	45
MSC2-1220-3XD	12.20		14	107	60	41	45
MSC2-1230-3XD	12.30		14	107	60	41	45
MSC2-1250-3XD	12.50		14	107	60	41	45
MSC2-1260-3XD	12.60		14	107	60	41	45
MSC2-1270-3XD	12.70		14	107	60	40	45
MSC2-1280-3XD	12.80		14	107	60	40	45
MSC2-1290-3XD	12.90		14	107	60	40	45
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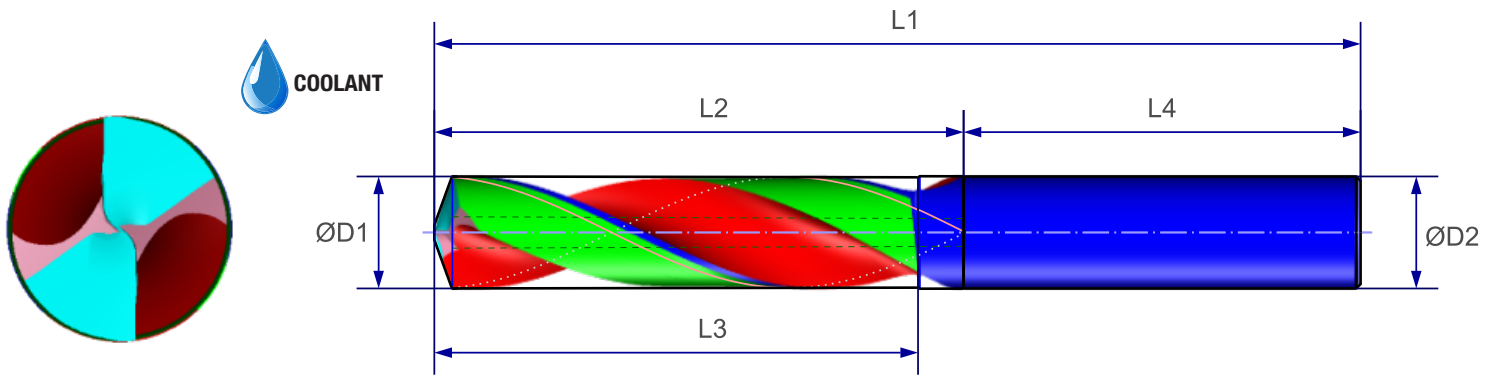
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-1320-3XD	13.20		14	107	60	40	45
MSC2-1330-3XD	13.30		14	107	60	40	45
MSC2-1350-3XD	13.50		14	107	60	39	45
MSC2-1380-3XD	13.80		14	107	60	39	45
MSC2-1400-3XD	14.00		16	115	65	44	48
MSC2-1410-3XD	14.10		16	115	65	43	48
MSC2-1420-3XD	14.20		16	115	65	43	48
MSC2-1430-3XD	14.30		16	115	65	43	48
MSC2-1440-3XD	14.40		16	115	65	43	48
MSC2-1450-3XD	14.50		16	115	65	43	48
MSC2-1460-3XD	14.60		16	115	65	43	48
MSC2-1480-3XD	14.80		16	115	65	42	48
MSC2-1500-3XD	15.00		16	115	65	42	48
MSC2-1510-3XD	15.10		16	115	65	42	48
MSC2-1520-3XD	15.20		16	115	65	42	48
MSC2-1530-3XD	15.30		16	115	65	42	48
MSC2-1540-3XD	15.40		16	115	65	41	48
MSC2-1550-3XD	15.50		16	115	65	41	48
MSC2-1560-3XD	15.60		16	115	65	41	48
MSC2-1570-3XD	15.70		16	115	65	41	48
MSC2-1580-3XD	15.80		16	115	65	41	48
MSC2-1590-3XD	15.90		16	115	65	41	48
MSC2-1600-3XD	16.00		18	123	73	49	48
MSC2-1610-3XD	16.10		18	123	73	48	48
MSC2-1650-3XD	16.50		18	123	73	48	48



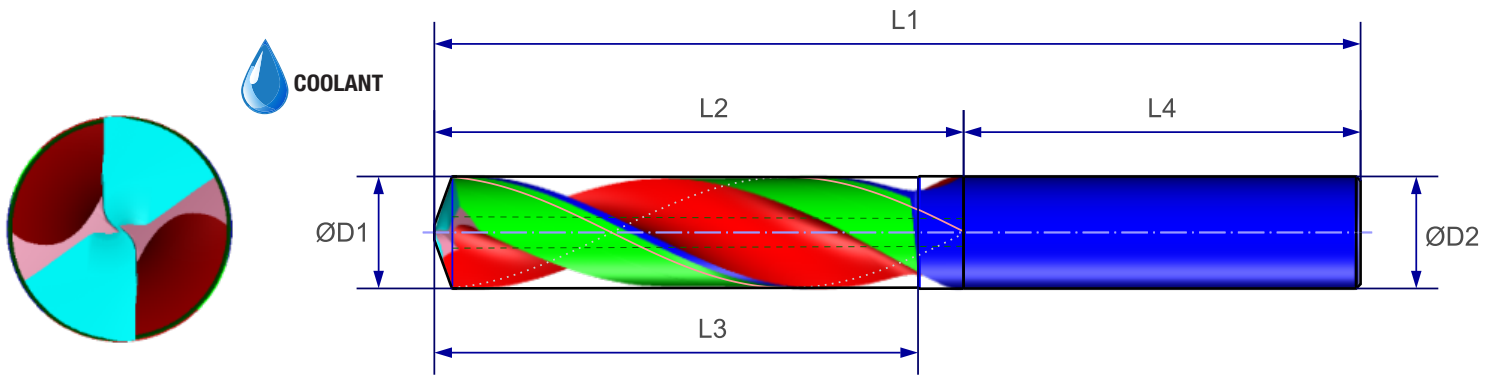
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-1700-3XD	17.00		18	123	73	47	48
MSC2-1750-3XD	17.50		18	123	73	46	48
MSC2-1770-3XD	17.70		18	123	73	46	48
MSC2-1800-3XD	18.00		20	131	79	52	50
MSC2-1840-3XD	18.40		20	131	79	51	50
MSC2-1850-3XD	18.50		20	131	79	51	50
MSC2-1900-3XD	19.00		20	131	79	50	50
MSC2-1910-3XD	19.10		20	131	79	50	50
MSC2-1920-3XD	19.20		20	131	79	50	50
MSC2-1930-3XD	19.30		20	131	79	50	50
MSC2-1950-3XD	19.50		20	131	79	49	50
MSC2-2000-3XD	20.00		20	131	79	49	50



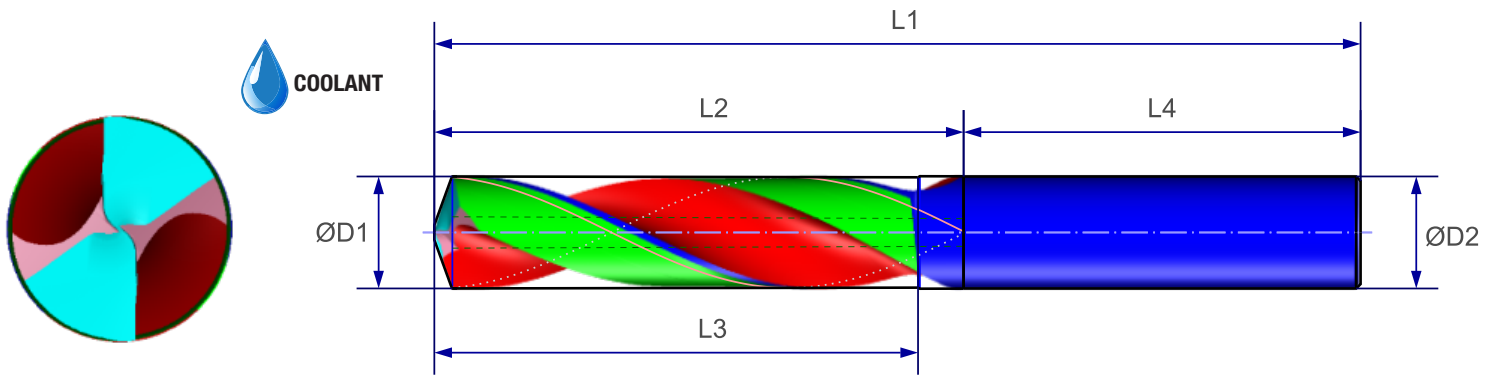
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAM- ETER D2	OAL mm L1	FLUTE LENGTH L2 mm	DRILLING DEPTH mm L3	SHANK LENGTH L4 mm
MSC2-0300-5XD	3.00		6	66	28	23	36
MSC2-0310-5XD	3.10		6	66	28	23	36
MSC2-0320-5XD	3.20		6	66	28	23	36
MSC2-0330-5XD	3.30		6	66	28	23	36
MSC2-0340-5XD	3.40	M4	6	66	28	22	36
MSC2-0350-5XD	3.50		6	66	28	22	36
MSC2-0360-5XD	3.60		6	66	28	22	36
MSC2-0370-5XD	3.70		6	66	28	22	36
MSC2-0380-5XD	3.80		6	74	36	30	36
MSC2-0390-5XD	3.90	10-24 UNC	6	74	36	30	36
MSC2-0400-5XD	4.00		6	74	36	30	36
MSC2-0410-5XD	4.10	10-32 UNC	6	74	36	29	36
MSC2-0420-5XD	4.20		6	74	36	29	36
MSC2-0430-5XD	4.30	M5	6	74	36	29	36
MSC2-0440-5XD	4.40		6	74	36	29	36
MSC2-0450-5XD	4.50		6	74	36	29	36
MSC2-0470-5XD	4.70		6	74	36	28	36
MSC2-0480-5XD	4.80	12-32 UNC	6	82	44	36	36
MSC2-0490-5XD	4.90		6	82	44	36	36
MSC2-0500-5XD	5.00		6	82	44	36	36
MSC2-0510-5XD	5.10	M6	6	82	44	36	36
MSC2-0520-5XD	5.20		6	82	44	36	36
MSC2-0530-5XD	5.30	1/4-20 UNC	6	82	44	36	36
MSC2-0540-5XD	5.40		6	82	44	35	36
MSC2-0550-5XD	5.50		6	82	44	35	36



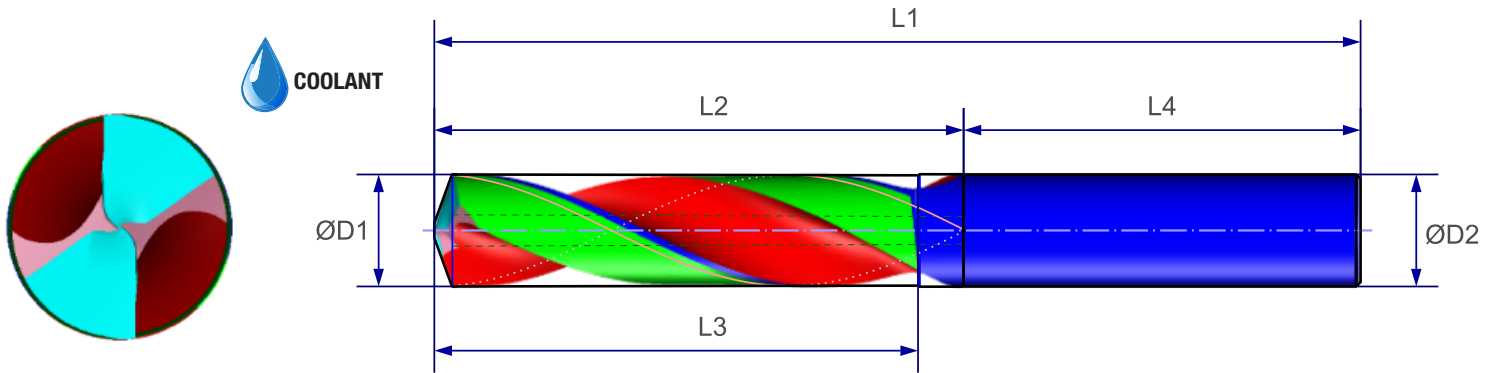
DESCRIPTION EXAMPLE...	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAM- ETER D2	OAL mm L1	FLUTE LENGTH L2 mm	DRILLING DEPTH mm L3	SHANK LENGTH L4 mm
MSC2-0560-5XD	5.60		6	82	44	35	36
MSC2-0570-5XD	5.70		6	82	44	35	36
MSC2-0580-5XD	5.80		6	82	44	35	36
MSC2-0590-5XD	5.90		6	82	44	35	36
MSC2-0600-5XD	6.00		8	91	53	44	36
MSC2-0610-5XD	6.10		8	91	53	43	36
MSC2-0620-5XD	6.20		8	91	53	43	36
MSC2-0630-5XD	6.30		8	91	53	43	36
MSC2-0640-5XD	6.40		8	91	53	43	36
MSC2-0650-5XD	6.50		8	91	53	43	36
MSC2-0660-5XD	6.60		8	91	53	43	36
MSC2-0670-5XD	6.70	5/18-18UNF	8	91	53	42	36
MSC2-0675-5XD	6.75		8	91	53	42	36
MSC2-0680-5XD	6.80		8	91	53	42	36
MSC2-0690-5XD	6.90	M8	8	91	53	42	36
MSC2-0700-5XD	7.00		8	91	53	42	36
MSC2-0710-5XD	7.10	MF8x1	8	91	53	42	36
MSC2-0720-5XD	7.20		8	91	53	42	36
MSC2-0730-5XD	7.30		8	91	53	42	36
MSC2-0740-5XD	7.40		8	91	53	41	36
MSC2-0750-5XD	7.50		8	91	53	41	36
MSC2-0760-5XD	7.60		8	91	53	41	36
MSC2-0770-5XD	7.70		8	91	53	41	36
MSC2-0780-5XD	7.80		8	91	53	41	36
MSC2-0790-5XD	7.90		8	91	53	41	36



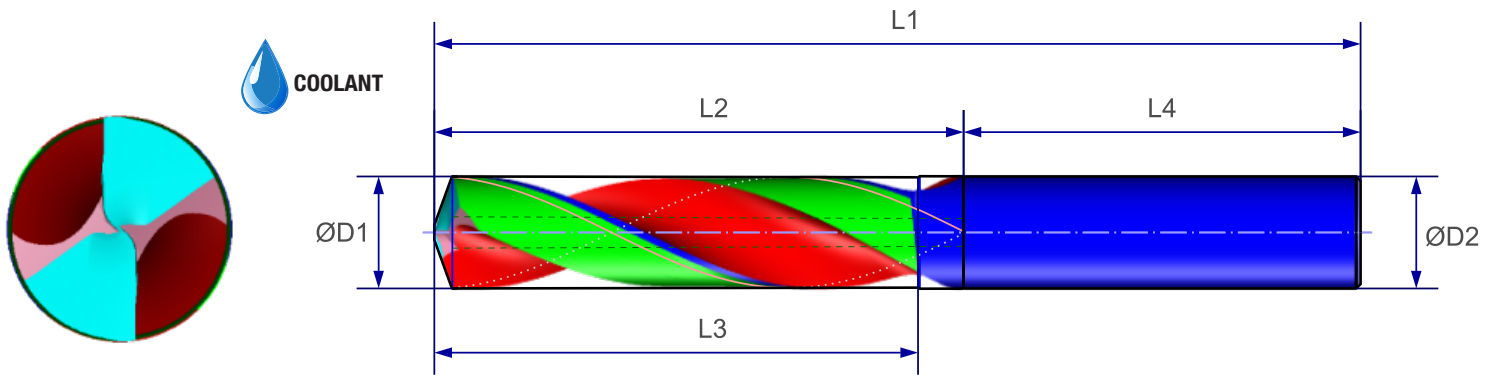
DESCRIPTION EXAMPLE...	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAM- ETER D2	OAL mm	L1	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-0800-5XD	8.00		10	103		61	49	40
MSC2-0810-5XD	8.10		10	103		61	48	40
MSC2-0820-5XD	8.20	3/8-16 UNC	10	103		61	48	40
MSC2-0830-5XD	8.30		10	103		61	48	40
MSC2-0840-5XD	8.40		10	103		61	48	40
MSC2-0850-5XD	8.50		10	103		61	48	40
MSC2-0860-5XD	8.60	3/8-24 UNF	10	103		61	48	40
MSC2-0870-5XD	8.70	M10	10	103		61	47	40
MSC2-0880-5XD	8.80		10	103		61	47	40
MSC2-0890-5XD	8.90	MF10x1.25	10	103		61	47	40
MSC2-0900-5XD	9.00		10	103		61	47	40
MSC2-0910-5XD	9.10		10	103		61	47	40
MSC2-0920-5XD	9.20		10	103		61	47	40
MSC2-0930-5XD	9.30		10	103		61	47	40
MSC2-0940-5XD	9.40		10	103		61	46	40
MSC2-0950-5XD	9.50		10	103		61	46	40
MSC2-0960-5XD	9.60		10	103		61	46	40
MSC2-0970-5XD	9.70		10	103		61	46	40
MSC2-0980-5XD	9.70		10	103		61	46	40
MSC2-0990-5XD	9.90		10	103		61	46	40
MSC2-1000-5XD	10.00	7/16-20 UNF	12	118		71	56	45
MSC2-1010-5XD	10.10		12	118		71	55	45
MSC2-1020-5XD	10.20		12	118		71	55	45
MSC2-1030-5XD	10.30		12	118		71	55	45
MSC2-1040-5XD	10.40	M12	12	118		71	55	45



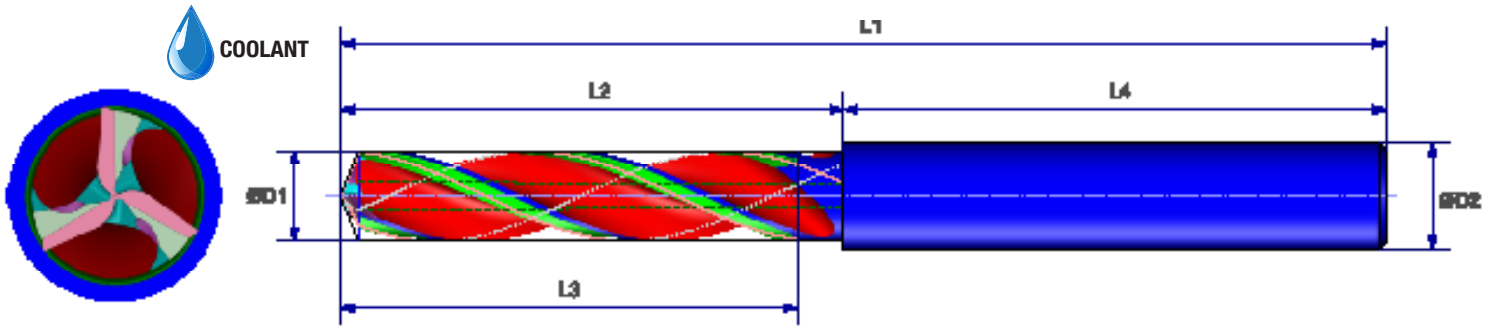
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAM- ETER D2	OAL mm L1	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC2-1050-5XD	10.50		12	118	71	55	45
MSC2-1060-5XD	10.60		12	118	71	55	45
MSC2-1070-5XD	10.70	MF12x1.5	12	118	71	54	45
MSC2-1080-5XD	10.80		12	118	71	54	45
MSC2-1090-5XD	10.90		12	118	71	54	45
MSC2-1100-5XD	11.00	1/2-13 UNC	12	118	71	54	45
MSC2-1110-5XD	11.10		12	118	71	54	45
MSC2-1120-5XD	11.20		12	118	71	54	45
MSC2-1140-5XD	11.40		12	118	71	53	45
MSC2-1150-5XD	11.50		12	118	71	53	45
MSC2-1160-5XD	11.60	1/2-20 UNF	12	118	71	53	45
MSC2-1170-5XD	11.70		12	118	71	53	45
MSC2-1180-5XD	11.80		12	118	71	53	45
MSC2-1190-5XD	11.90		12	118	71	53	45
MSC2-1200-5XD	12.00		14	124	77	59	45
MSC2-1210-5XD	12.10		14	124	77	58	45
MSC2-1220-5XD	12.20		14	124	77	58	45
MSC2-1230-5XD	12.30		14	124	77	58	45
MSC2-1250-5XD	12.50		14	124	77	58	45
MSC2-1260-5XD	12.60		14	124	77	58	45
MSC2-1270-5XD	12.70		14	124	77	57	45
MSC2-1280-5XD	12.80		14	124	77	57	45
MSC2-1290-5XD	12.90		14	124	77	57	45
MSC2-1300-5XD	13.00		14	124	77	57	45
MSC2-1310-5XD	13.10		14	124	77	57	45



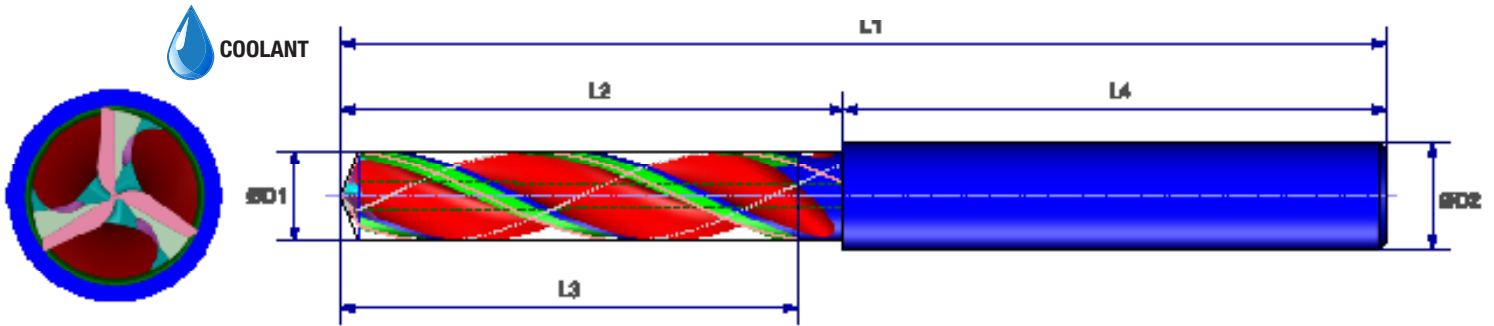
DESCRIPTION EXAMPLE...	DRILL DIAMETER	DRILLS FOR	SHANK DIAM-	OAL	FLUTE LENGTH	DRILLING	SHANK
M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -5XD=FLUTE LENGTH	D1 mm m7	THREADS	ETER D2	mm L1	L2 mm	DEPTH L3 mm	LENGTH L4 mm
MSC2-1320-5XD	13.20		14	124	77	57	45
MSC2-1330-5XD	13.30		14	124	77	57	45
MSC2-1350-5XD	13.50		14	124	77	56	45
MSC2-1380-5XD	13.80		14	124	77	56	45
MSC2-1400-5XD	14.00		16	133	83	62	48
MSC2-1410-5XD	14.10		16	133	83	61	48
MSC2-1420-5XD	14.20		16	133	83	61	48
MSC2-1430-5XD	14.30		16	133	83	61	48
MSC2-1440-5XD	14.40		16	133	83	61	48
MSC2-1450-5XD	14.50		16	133	83	61	48
MSC2-1460-5XD	14.60		16	133	83	61	48
MSC2-1480-5XD	14.80		16	133	83	60	48
MSC2-1500-5XD	15.00		16	133	83	60	48
MSC2-1510-5XD	15.10		16	133	83	60	48
MSC2-1520-5XD	15.20		16	133	83	60	48
MSC2-1530-5XD	15.30		16	133	83	60	48
MSC2-1540-5XD	15.40		16	133	83	59	48
MSC2-1550-5XD	15.50		16	133	83	59	48
MSC2-1560-5XD	15.60		16	133	83	59	48
MSC2-1570-5XD	15.70		16	133	83	59	48
MSC2-1580-5XD	15.80		16	133	83	59	48
MSC2-1590-5XD	15.90		16	133	83	59	48
MSC2-1600-5XD	16.00		18	143	93	69	48
MSC2-1610-5XD	16.10		18	143	93	68	48
MSC2-1650-5XD	16.50		18	143	93	68	48



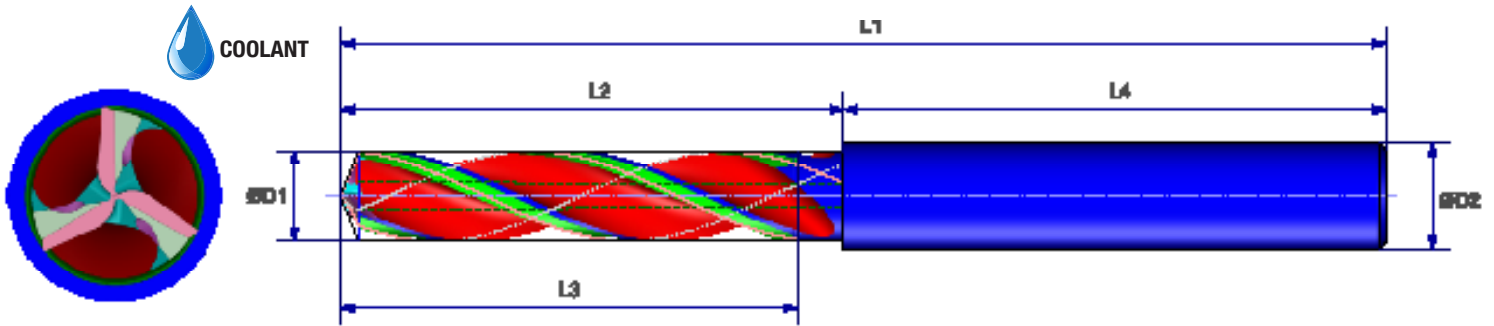
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 2=FLUTES, 125=DIA, -5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAM- ETER D2	OAL mm L1	FLUTE LENGTH L2 mm	DRILLING DEPTH mm L3	SHANK LENGTH L4 mm
MSC2-1700-5XD	17.00		18	143	93	67	48
MSC2-1750-5XD	17.50		18	143	93	66	48
MSC2-1770-5XD	17.70		18	143	93	66	48
MSC2-1800-5XD	18.00		20	153	101	74	50
MSC2-1840-5XD	18.40		20	153	101	73	50
MSC2-1850-5XD	18.50		20	153	101	73	50
MSC2-1900-5XD	19.00		20	153	101	72	50
MSC2-1910-5XD	19.10		20	153	101	72	50
MSC2-1920-5XD	19.20		20	153	101	72	50
MSC2-1930-5XD	19.30		20	153	101	72	50
MSC2-1950-5XD	19.50		20	153	101	71	50
MSC2-2000-5XD	20.00		20	153	101	71	50



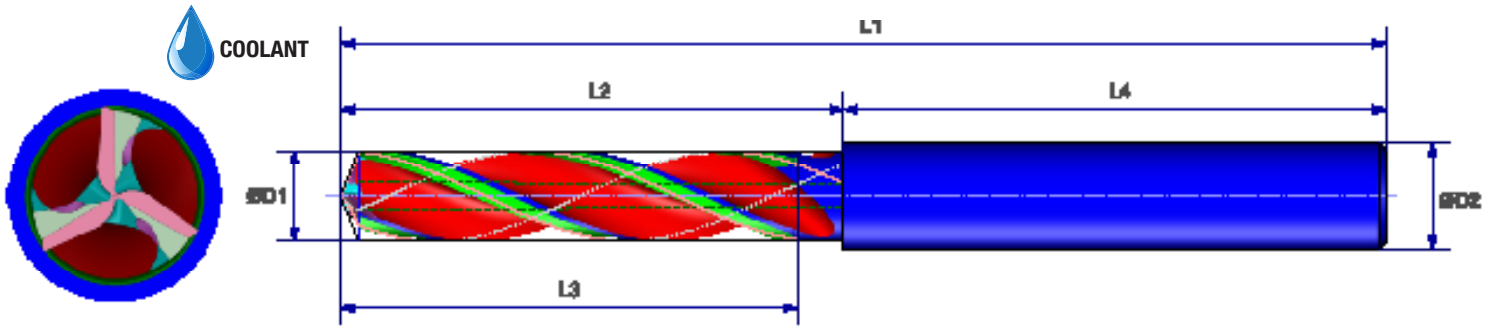
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, 3XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC3-1250-3XD	.125	1/8	6	2.441	0.896	0.709	1.417
ISC3-1406-3XD	.141	9/64	6	2.441	0.959	0.748	1.417
ISC3-1540-3XD	.154	10-24 UNC	6	2.598	1.097	0.866	1.417
ISC3-1562-3XD	.156	5/32	6	2.598	1.100	0.866	1.417
ISC3-1610-3XD	.161	10-32 UNF	6	2.598	1.147	0.906	1.417
ISC3-1690-3XD	.169	M5	6	2.598	1.159	0.906	1.417
ISC3-1719-3XD	.172	11/64	6	2.598	1.163	0.906	1.417
ISC3-1875-3XD	.188	3/16	6	2.598	1.226	0.945	1.417
ISC3-1890-3XD	.189	12-32 UNF	6	2.598	1.346	1.063	1.417
ISC3-2010-3XD	.201	M6	6	2.598	1.364	1.063	1.417
ISC3-2031-3XD	.203	13/64	6	2.598	1.368	1.063	1.417
ISC3-2188-3XD	.219	7/32	6	2.598	1.430	1.102	1.417
ISC3-2344-3XD	.234	15/64	6	2.598	1.454	1.102	1.417
ISC3-2500-3XD	.250	1/4	8	3.110	1.674	1.299	1.417
ISC3-2640-3XD	.264	5/18-18UNF	8	3.110	1.735	1.339	1.417
ISC3-2656-3XD	.266	17/64	8	3.110	1.737	1.339	1.417
ISC3-2800-3XD	.280	MF8x1	8	3.110	1.955	1.535	1.417
ISC3-2813-3XD	.281	9/32	8	3.110	1.957	1.535	1.417
ISC3-2969-3XD	.297	19/64	8	3.110	2.020	1.575	1.417
ISC3-3125-3XD	.313	5/16	8	3.110	2.044	1.575	1.417
ISC3-3281-3XD	.328	21/64	10	3.504	2.343	1.850	1.575
ISC3-3438-3XD	.344	11/32	10	3.504	2.405	1.890	1.575
ISC3-3594-3XD	.359	23/64	10	3.504	2.429	1.890	1.575
ISC3-3750-3XD	.375	3/8	10	3.504	2.492	1.929	1.575
ISC3-3906-3XD	.391	25/64	10	3.504	2.515	1.929	1.575



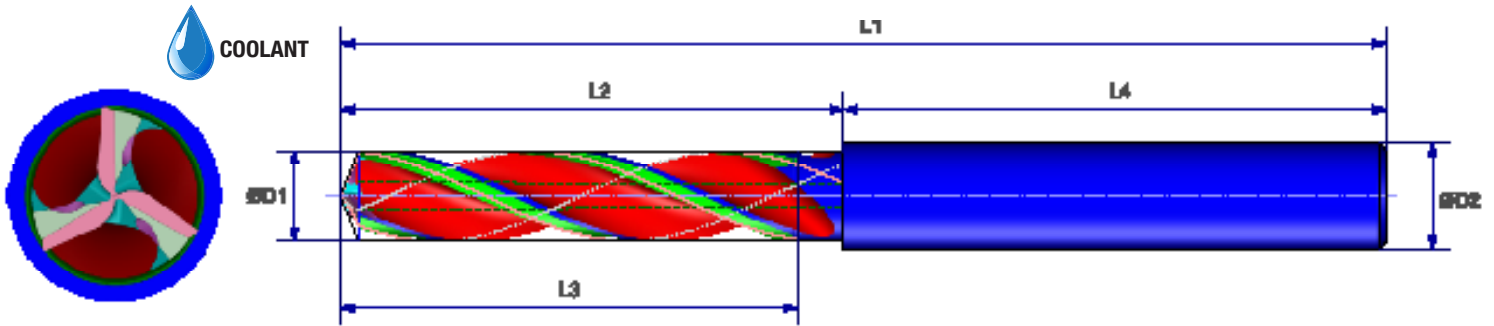
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, 3XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 metric	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC3-3940-3XD	.394	7/16-20 UNF	12	4.016	2.756	2.165	1.772
ISC3-4063-3XD	.406	13/32	12	4.016	2.775	2.165	1.772
ISC3-4210-3XD	.421	MF12x1.5	12	4.016	2.797	2.165	1.772
ISC3-4375-3XD	.438	7/16	12	4.016	2.861	2.205	1.772
ISC3-4531-3XD	.453	29/64	12	4.016	2.924	2.244	1.772
ISC3-4570-3XD	.457	1/2-20 UNF	12	4.016	2.930	2.244	1.772
ISC3-4690-3XD	.469	15/32	12	4.016	2.948	2.244	1.772
ISC3-4844-3XD	.484	31/64	14	4.213	3.128	2.402	1.772
ISC3-5000-3XD	.500	1/2	14	4.213	3.191	2.441	1.772
ISC3-5469-3XD	.547	35/64	14	4.213	3.301	2.480	1.772
ISC3-5625-3XD	.563	9/16	16	4.528	3.442	2.598	1.890
ISC3-5781-3XD	.578	37/64	16	4.528	3.466	2.598	1.890
ISC3-5938-3XD	.594	19/32	16	4.528	3.528	2.638	1.890
ISC3-6094-3XD	.609	39/64	16	4.528	3.591	2.677	1.910
ISC3-6250-3XD	.625	5/8	16	4.528	3.615	2.677	1.890
ISC3-6875-3XD	.688	11/16	18	4.843	4.023	2.992	1.890
ISC3-7500-3XD	.750	3/4	20	5.157	4.393	3.268	1.969



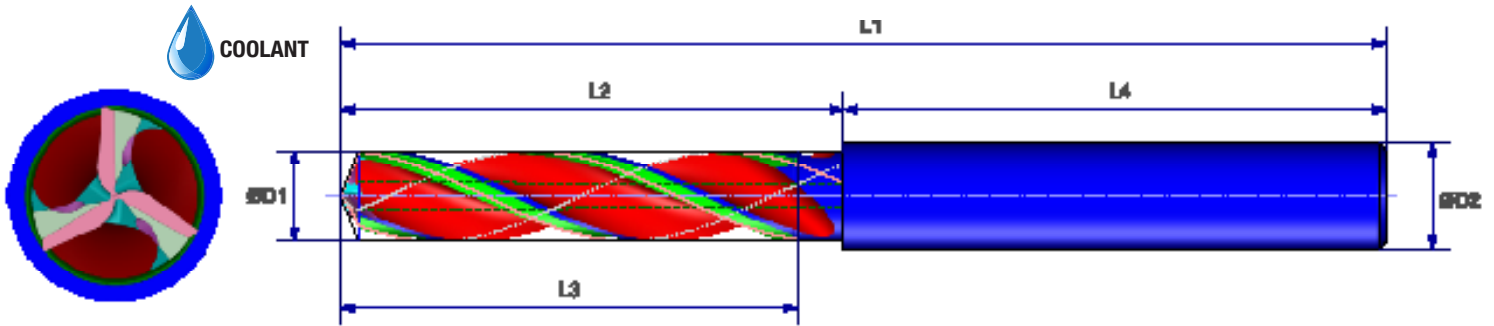
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 125=DIA, 5XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 inch	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC3-1250-5XD	.125	1/8	6	2.598	1.250	1.063	1.417
ISC3-1406-5XD	.141	9/64	6	2.598	1.313	1.102	1.417
ISC3-1540-5XD	.154	10-24 UNC	6	2.913	1.570	1.339	1.417
ISC3-1562-5XD	.156	5/32	6	2.913	1.573	1.339	1.417
ISC3-1610-5XD	.161	10-32 UNF	6	2.913	1.619	1.378	1.417
ISC3-1690-5XD	.169	M5	6	2.913	1.631	1.378	1.417
ISC3-1719-5XD	.172	11/64	6	2.913	1.636	1.378	1.417
ISC3-1875-5XD	.188	3/16	6	2.913	1.699	1.417	1.417
ISC3-1890-5XD	.189	12-32 UNF	6	3.228	1.937	1.654	1.417
ISC3-2010-5XD	.201	M6	6	3.228	1.955	1.654	1.417
ISC3-2031-5XD	.203	13/64	6	3.228	1.958	1.654	1.417
ISC3-2188-5XD	.219	7/32	6	3.228	2.021	1.693	1.417
ISC3-2344-5XD	.234	15/64	6	3.228	2.044	1.693	1.417
ISC3-2500-5XD	.250	1/4	8	3.583	2.422	2.047	1.417
ISC3-2640-5XD	.264	5/18-18UNF	8	3.583	2.483	2.087	1.417
ISC3-2656-5XD	.266	17/64	8	3.583	2.485	2.087	1.417
ISC3-2800-5XD	.280	MF8x1	8	3.583	2.507	2.087	1.417
ISC3-2813-5XD	.281	9/32	8	3.583	2.508	2.087	1.417
ISC3-2969-5XD	.297	19/64	8	3.583	2.571	2.126	1.417
ISC3-3125-5XD	.313	5/16	8	3.583	2.595	2.126	1.417
ISC3-3281-5XD	.328	21/64	10	4.055	2.894	2.402	1.575
ISC3-3438-5XD	.344	11/32	10	4.055	2.957	2.441	1.575
ISC3-3594-5XD	.359	23/64	10	4.055	2.980	2.441	1.575
ISC3-3750-5XD	.375	3/8	10	4.055	3.043	2.480	1.575
ISC3-3906-5XD	.391	25/64	10	4.055	3.066	2.480	1.575



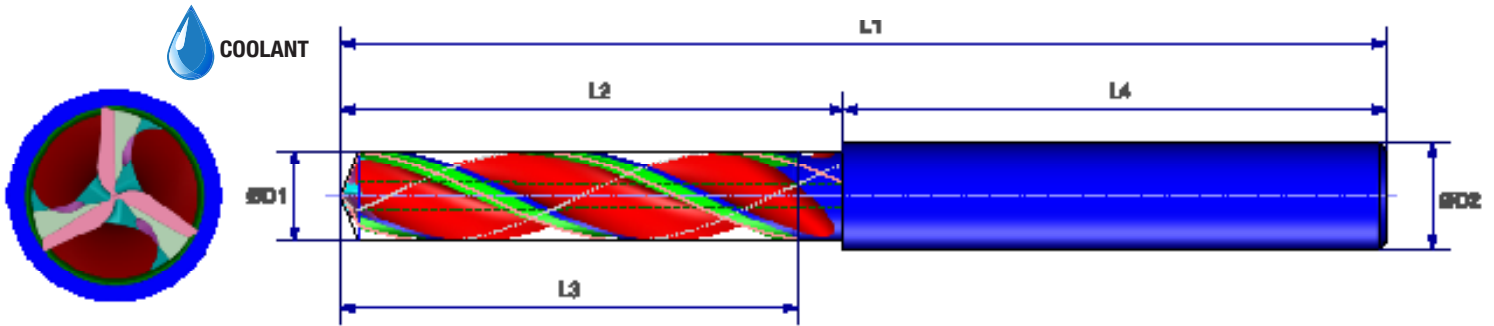
DESCRIPTION EXAMPLE... I=INCH, S=HIGH TEMP ALLOYS, C=COOLANT, 125=DIA, 5XD=FLUTE LENGTH	DRILL DIAMETER D1 inch m7	DRILLS FRACTIONAL & FOR THREADS	SHANK DIAMETER D2 inch	OAL L1 inch	FLUTE LENGTH L2 inch	DRILLING DEPTH L3 inch	SHANK LENGTH L4 inch
ISC3-3940-5XD	.394	7/16-20 UNF	12	4.646	3.386	2.795	1.772
ISC3-4063-5XD	.406	13/32	12	4.646	3.405	2.795	1.772
ISC3-4210-5XD	.421	MF12x1.5	12	4.646	3.427	2.795	1.772
ISC3-4375-5XD	.438	7/16	12	4.646	3.491	2.835	1.772
ISC3-4531-5XD	.453	29/64	12	4.646	3.554	2.874	1.772
ISC3-4570-5XD	.457	1/2-20 UNF	12	4.646	3.560	2.874	1.772
ISC3-4690-5XD	.469	15/32	12	4.646	3.578	2.874	1.772
ISC3-4844-5XD	.484	31/64	14	4.882	3.797	3.071	1.772
ISC3-5000-5XD	.500	1/2	14	4.882	3.860	3.110	1.772
ISC3-5469-5XD	.547	35/64	14	4.882	3.970	3.150	1.772
ISC3-5625-5XD	.563	9/16	16	5.236	4.151	3.307	1.890
ISC3-5781-5XD	.578	37/64	16	5.236	4.174	3.307	1.890
ISC3-5938-5XD	.594	19/32	16	5.236	4.237	3.346	1.890
ISC3-6094-5XD	.609	39/64	16	5.236	4.300	3.386	1.910
ISC3-6250-5XD	.625	5/8	16	5.236	4.323	3.386	1.890
ISC3-6875-5XD	.688	11/16	18	5.630	6.464	5.433	1.890
ISC3-7500-5XD	.750	3/4	20	6.024	7.109	5.984	1.969



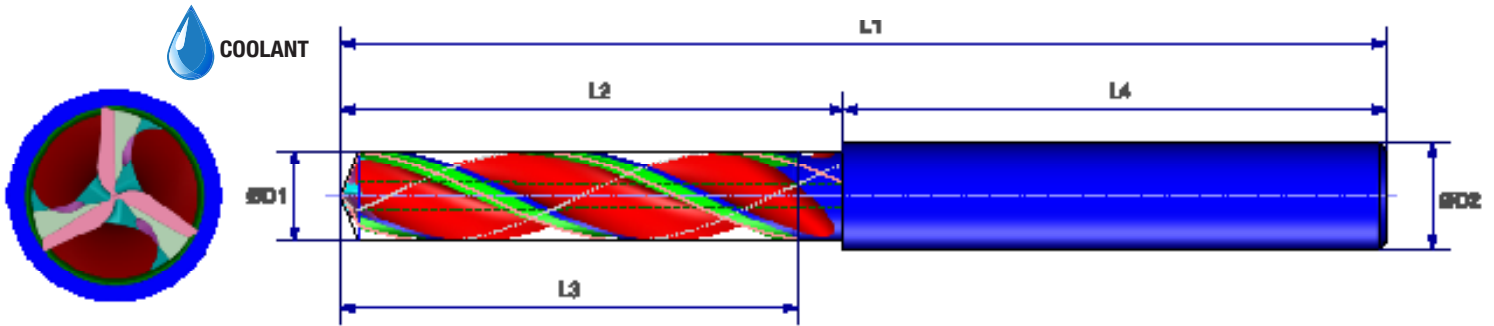
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0300-3XD	3.00		6	62	18	14	36
MSC3-0310-3XD	3.10		6	62	18	14	36
MSC3-0320-3XD	3.20		6	62	18	14	36
MSC3-0330-3XD	3.30		6	62	18	14	36
MSC3-0340-3XD	3.40		6	62	19	14	36
MSC3-0350-3XD	3.50		6	62	19	14	36
MSC3-0360-3XD	3.60		6	62	19	14	36
MSC3-0370-3XD	3.70		6	62	19	14	36
MSC3-0380-3XD	3.80		6	66	22	17	36
MSC3-0390-3XD	3.90	10-24 UNC	6	66	22	17	36
MSC3-0400-3XD	4.00		6	66	23	17	36
MSC3-0410-3XD	4.10	10-32 UNF	6	66	23	17	36
MSC3-0420-3XD	4.20		6	66	23	17	36
MSC3-0430-3XD	4.30	M5	6	66	23	17	36
MSC3-0440-3XD	4.40		6	66	23	17	36
MSC3-0450-3XD	4.50		6	66	23	17	36
MSC3-0470-3XD	4.70		6	66	24	17	36
MSC3-0480-3XD	4.80	12-32 UNF	6	66	27	20	36
MSC3-0490-3XD	4.90		6	66	27	20	36
MSC3-0500-3XD	5.00		6	66	27	20	36
MSC3-0510-3XD	5.10	M6	6	66	27	20	36
MSC3-0520-3XD	5.20		6	66	27	20	36
MSC3-0530-3XD	5.30		6	66	27	20	36
MSC3-0540-3XD	5.40		6	66	28	20	36
MSC3-0550-3XD	5.50		6	66	28	20	36



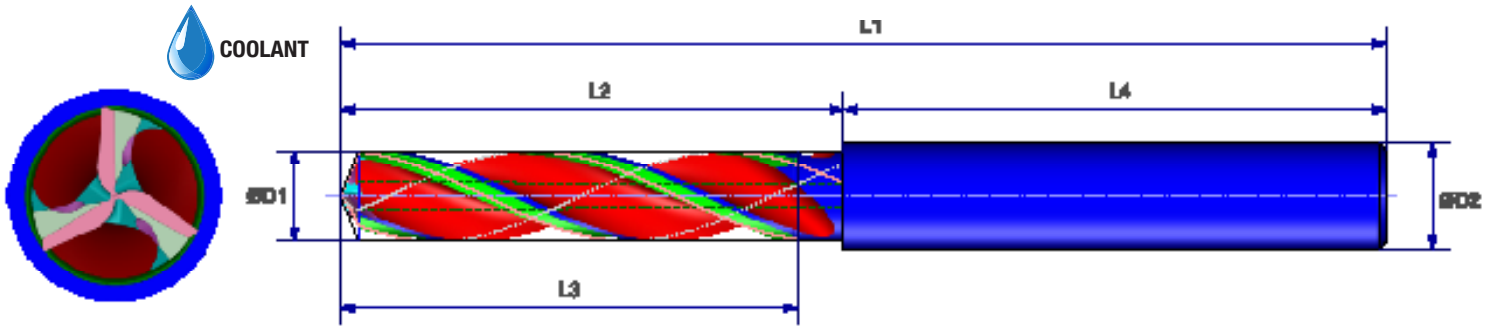
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0560-3XD	5.60		6	66	28	20	36
MSC3-0570-3XD	5.70		6	66	28	20	36
MSC3-0580-3XD	5.80		6	66	28	20	36
MSC3-0590-3XD	5.90		6	66	28	20	36
MSC3-0600-3XD	6.00		8	79	33	24	36
MSC3-0610-3XD	6.10		8	79	33	24	36
MSC3-0620-3XD	6.20		8	79	33	24	36
MSC3-0630-3XD	6.30		8	79	33	24	36
MSC3-0640-3XD	6.40		8	79	33	24	36
MSC3-0650-3XD	6.50		8	79	33	24	36
MSC3-0660-3XD	6.60		8	79	33	24	36
MSC3-0670-3XD	6.70	5/18-18UNF	8	79	34	24	36
MSC3-0675-3XD	6.75		8	79	34	24	36
MSC3-0680-3XD	6.80		8	79	34	24	36
MSC3-0690-3XD	6.90		8	79	34	24	36
MSC3-0700-3XD	7.00		8	79	34	24	36
MSC3-0710-3XD	7.10	MF8x1	8	79	39	29	36
MSC3-0720-3XD	7.20		8	79	39	29	36
MSC3-0730-3XD	7.30		8	79	39	29	36
MSC3-0740-3XD	7.40		8	79	40	29	36
MSC3-0750-3XD	7.50		8	79	40	29	36
MSC3-0760-3XD	7.60		8	79	40	29	36
MSC3-0770-3XD	7.70		8	79	40	29	36
MSC3-0780-3XD	7.80		8	79	40	29	36
MSC3-0790-3XD	7.90		8	79	40	29	36



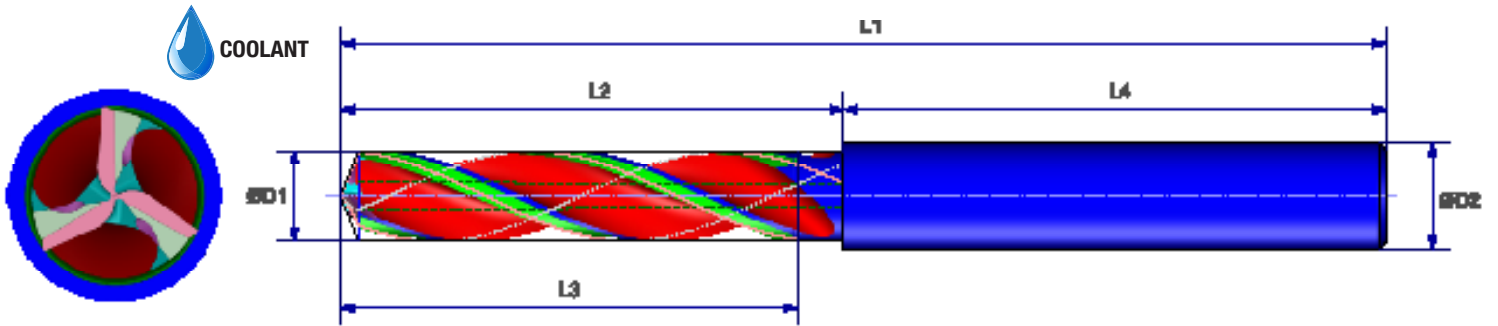
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0800-3XD	8.00		10	89	47	35	40
MSC3-0810-3XD	8.10		10	89	47	35	40
MSC3-0820-3XD	8.20		10	89	47	35	40
MSC3-0830-3XD	8.30		10	89	47	35	40
MSC3-0840-3XD	8.40		10	89	47	35	40
MSC3-0850-3XD	8.50		10	89	47	35	40
MSC3-0860-3XD	8.60	3/8-24 UNF	10	89	47	35	40
MSC3-0870-3XD	8.70	M10	10	89	48	35	40
MSC3-0880-3XD	8.80		10	89	48	35	40
MSC3-0890-3XD	8.90	MF10x1.25	10	89	48	35	40
MSC3-0900-3XD	9.00		10	89	48	35	40
MSC3-0910-3XD	9.10		10	89	48	35	40
MSC3-0920-3XD	9.20		10	89	48	35	40
MSC3-0930-3XD	9.30		10	89	48	35	40
MSC3-0940-3XD	9.40		10	89	49	35	40
MSC3-0950-3XD	9.50		10	89	49	35	40
MSC3-0960-3XD	9.60		10	89	49	35	40
MSC3-0970-3XD	9.70		10	89	49	35	40
MSC3-0980-3XD	9.80		10	89	49	35	40
MSC3-0990-3XD	9.90		10	89	49	35	40
MSC3-1000-3XD	10.00	7/16-20 UNF	12	102	55	40	45
MSC3-1010-3XD	10.10		12	102	55	40	45
MSC3-1020-3XD	10.20		12	102	55	40	45
MSC3-1030-3XD	10.30		12	102	55	40	45
MSC3-1040-3XD	10.40		12	102	55	40	45



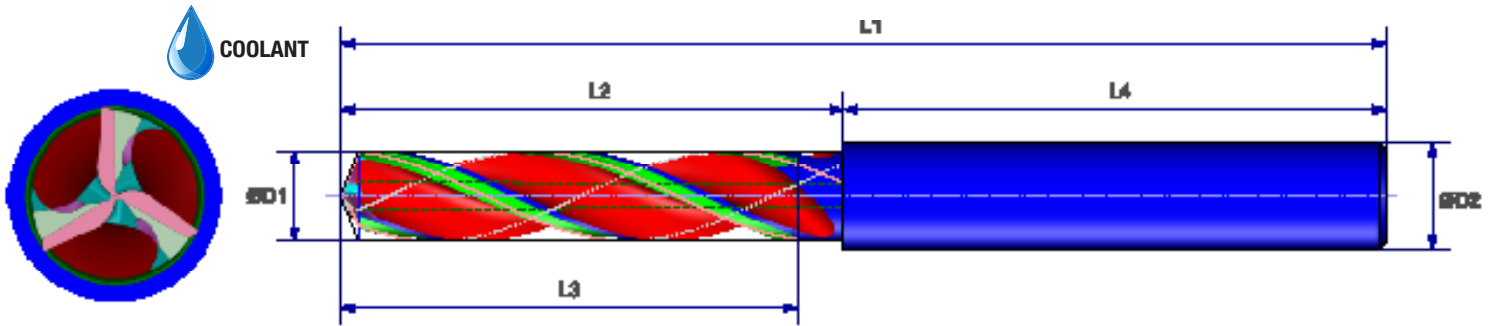
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1050-3XD	10.50		12	102	55	40	45
MSC3-1060-3XD	10.60		12	102	55	40	45
MSC3-1070-3XD	10.70	MF12x1.5	12	102	56	40	45
MSC3-1080-3XD	10.80		12	102	56	40	45
MSC3-1090-3XD	10.90		12	102	56	40	45
MSC3-1100-3XD	11.00		12	102	56	40	45
MSC3-1110-3XD	11.10		12	102	56	40	45
MSC3-1120-3XD	11.20		12	102	56	40	45
MSC3-1140-3XD	11.40		12	102	57	40	45
MSC3-1150-3XD	11.50		12	102	57	40	45
MSC3-1160-3XD	11.60	1/2-20 UNF	12	102	57	40	45
MSC3-1170-3XD	11.70		12	102	57	40	45
MSC3-1180-3XD	11.80		12	102	57	40	45
MSC3-1190-3XD	11.90		12	102	57	40	45
MSC3-1200-3XD	12.00		14	107	61	43	45
MSC3-1210-3XD	12.10		14	107	61	43	45
MSC3-1220-3XD	12.20		14	107	61	43	45
MSC3-1230-3XD	12.30		14	107	61	43	45
MSC3-1250-3XD	12.50		14	107	61	43	45
MSC3-1260-3XD	12.60		14	107	61	43	45
MSC3-1270-3XD	12.70		14	107	62	43	45
MSC3-1280-3XD	12.80		14	107	62	43	45
MSC3-1290-3XD	12.90		14	107	62	43	45
MSC3-1300-3XD	13.00		14	107	62	43	45
MSC3-1310-3XD	13.10		14	107	62	43	45



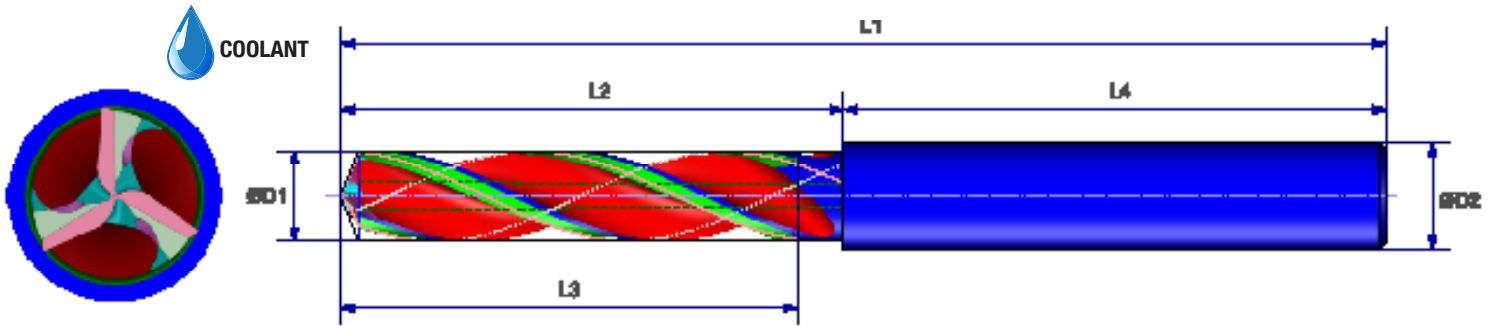
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1320-3XD	13.20		14	107	62	43	45
MSC3-1330-3XD	13.30		14	107	62	43	45
MSC3-1350-3XD	13.50		14	107	63	43	45
MSC3-1380-3XD	13.80		14	107	63	43	45
MSC3-1400-3XD	14.00		16	115	66	45	48
MSC3-1410-3XD	14.10		16	115	66	45	48
MSC3-1420-3XD	14.20		16	115	66	45	48
MSC3-1430-3XD	14.30		16	115	66	45	48
MSC3-1440-3XD	14.40		16	115	66	45	48
MSC3-1450-3XD	14.50		16	115	66	45	48
MSC3-1460-3XD	14.60		16	115	66	45	48
MSC3-1480-3XD	14.80		16	115	67	45	48
MSC3-1500-3XD	15.00		16	115	67	45	48
MSC3-1510-3XD	15.10		16	115	67	45	48
MSC3-1520-3XD	15.20		16	115	67	45	48
MSC3-1530-3XD	15.30		16	115	67	45	48
MSC3-1540-3XD	15.40		16	115	68	45	48
MSC3-1550-3XD	15.50		16	115	68	45	48
MSC3-1560-3XD	15.60		16	115	68	45	48
MSC3-1570-3XD	15.70		16	115	68	45	48
MSC3-1580-3XD	15.80		16	115	68	45	48
MSC3-1590-3XD	15.90		16	115	68	45	48
MSC3-1600-3XD	16.00		18	123	75	51	48
MSC3-1610-3XD	16.10		18	123	75	51	48
MSC3-1650-3XD	16.50		18	123	75	51	48



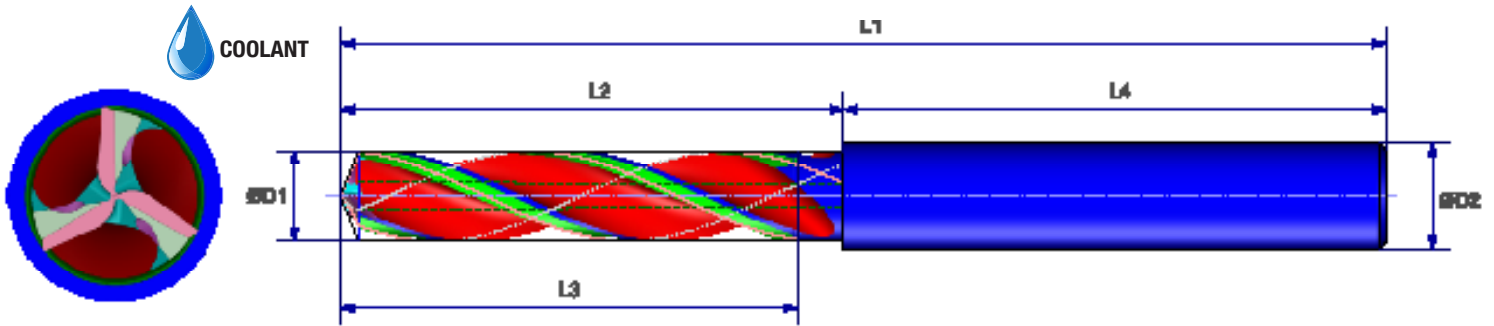
DESCRIPTION EXAMPLE... M=METRIC, S=HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 125=DIA, -3XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1700-3XD	17.00		18	123	76	51	48
MSC3-1750-3XD	17.50		18	123	77	51	48
MSC3-1770-3XD	17.70		18	123	77	51	48
MSC3-1800-3XD	18.00		20	131	82	55	50
MSC3-1840-3XD	18.40		20	131	82	55	50
MSC3-1850-3XD	18.50		20	131	82	55	50
MSC3-1900-3XD	19.00		20	131	83	55	50
MSC3-1910-3XD	19.10		20	131	83	55	50
MSC3-1920-3XD	19.20		20	131	83	55	50
MSC3-1930-3XD	19.30		20	131	83	55	50
MSC3-1950-3XD	19.50		20	131	84	55	50
MSC3-2000-3XD	20.00		20	131	85	55	50



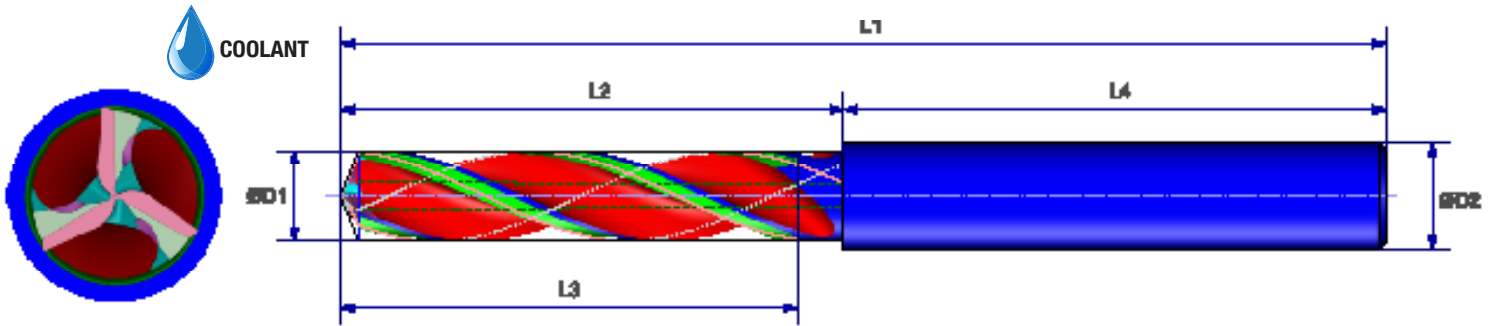
DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0300-5XD	3.00		6	66	27	23	36
MSC3-0310-5XD	3.10		6	66	27	23	36
MSC3-0320-5XD	3.20		6	66	27	23	36
MSC3-0330-5XD	3.30		6	66	27	23	36
MSC3-0340-5XD	3.40		6	66	28	23	36
MSC3-0350-5XD	3.50		6	66	28	23	36
MSC3-0360-5XD	3.60		6	66	28	23	36
MSC3-0370-5XD	3.70		6	66	28	23	36
MSC3-0380-5XD	3.80		6	74	34	29	36
MSC3-0390-5XD	3.90	10-24 UNC	6	74	34	29	36
MSC3-0400-5XD	4.00		6	74	35	29	36
MSC3-0410-5XD	4.10	10-32 UNC	6	74	35	29	36
MSC3-0420-5XD	4.20		6	74	35	29	36
MSC3-0430-5XD	4.30	M5	6	74	35	29	36
MSC3-0440-5XD	4.40		6	74	35	29	36
MSC3-0450-5XD	4.50		6	74	35	29	36
MSC3-0470-5XD	4.70		6	74	36	29	36
MSC3-0480-5XD	4.80	12-32 UNC	6	82	42	35	36
MSC3-0490-5XD	4.90		6	82	42	35	36
MSC3-0500-5XD	5.00		6	82	42	35	36
MSC3-0510-5XD	5.10	M6	6	82	42	35	36
MSC3-0520-5XD	5.20		6	82	42	35	36
MSC3-0530-5XD	5.30	1/4-20 UNC	6	82	42	35	36
MSC3-0540-5XD	5.40		6	82	43	35	36
MSC3-0550-5XD	5.50		6	82	43	35	36



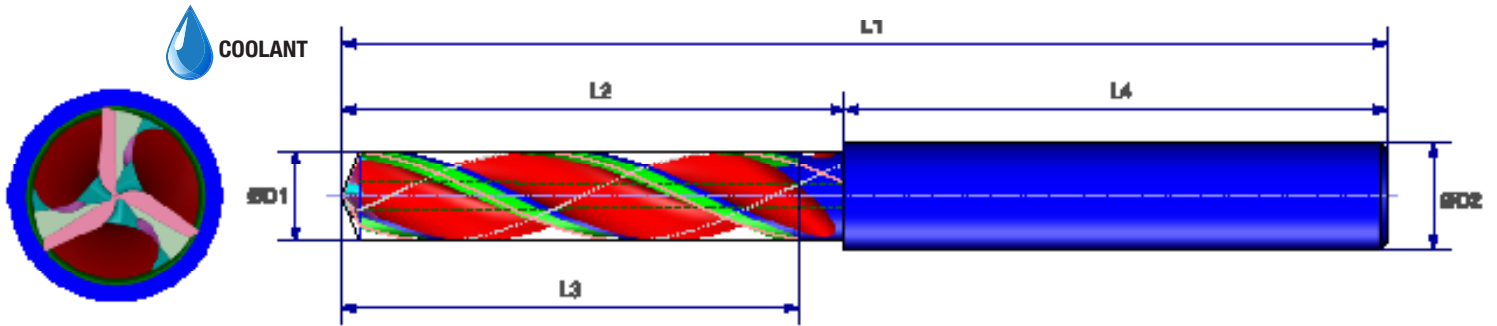
DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0560-5XD	5.60		6	82	43	35	36
MSC3-0570-5XD	5.70		6	82	43	35	36
MSC3-0580-5XD	5.80		6	82	43	35	36
MSC3-0590-5XD	5.90		6	82	43	35	36
MSC3-0600-5XD	6.00		8	91	52	43	36
MSC3-0610-5XD	6.10		8	91	52	43	36
MSC3-0620-5XD	6.20		8	91	52	43	36
MSC3-0630-5XD	6.30		8	91	52	43	36
MSC3-0640-5XD	6.40		8	91	52	43	36
MSC3-0650-5XD	6.50		8	91	52	43	36
MSC3-0660-5XD	6.60		8	91	52	43	36
MSC3-0670-5XD	6.70	5/18-18UNF	8	91	53	43	36
MSC3-0675-5XD	6.75		8	91	53	43	36
MSC3-0680-5XD	6.80		8	91	53	43	36
MSC3-0690-5XD	6.90	M8	8	91	53	43	36
MSC3-0700-5XD	7.00		8	91	53	43	36
MSC3-0710-5XD	7.10	MF8x1	8	91	53	43	36
MSC3-0720-5XD	7.20		8	91	53	43	36
MSC3-0730-5XD	7.30		8	91	53	43	36
MSC3-0740-5XD	7.40		8	91	54	43	36
MSC3-0750-5XD	7.50		8	91	54	43	36
MSC3-0760-5XD	7.60		8	91	54	43	36
MSC3-0770-5XD	7.70		8	91	54	43	36
MSC3-0780-5XD	7.80		8	91	54	43	36
MSC3-0790-5XD	7.90		8	91	54	43	36



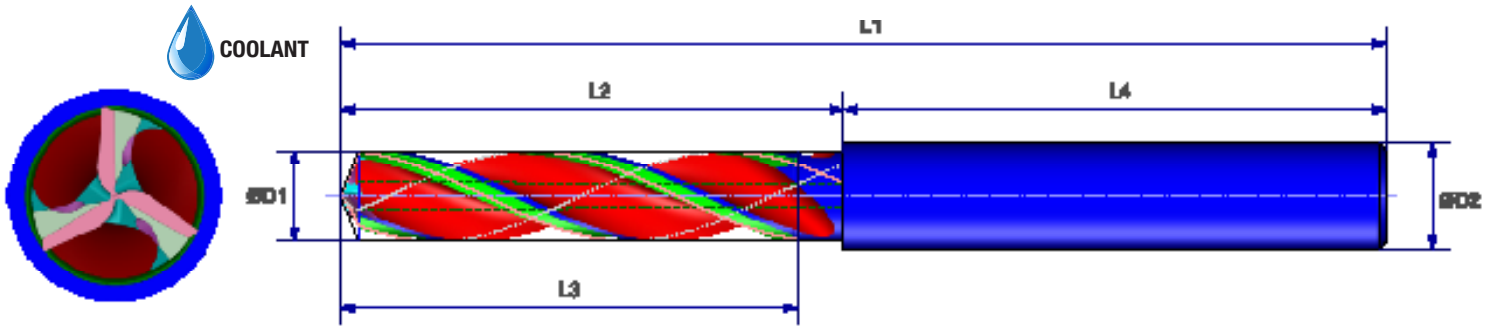
DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-0800-5XD	8.00		10	103	61	49	40
MSC3-0810-5XD	8.10		10	103	61	49	40
MSC3-0820-5XD	8.20	3/8-16 UNC	10	103	61	49	40
MSC3-0830-5XD	8.30		10	103	61	49	40
MSC3-0840-5XD	8.40		10	103	61	49	40
MSC3-0850-5XD	8.50		10	103	61	49	40
MSC3-0860-5XD	8.60	3/8-24 UNF	10	103	61	49	40
MSC3-0870-5XD	8.70	M10	10	103	62	49	40
MSC3-0880-5XD	8.80		10	103	62	49	40
MSC3-0890-5XD	8.90	MF10x1.25	10	103	62	49	40
MSC3-0900-5XD	9.00		10	103	62	49	40
MSC3-0910-5XD	9.10		10	103	62	49	40
MSC3-0920-5XD	9.20		10	103	62	49	40
MSC3-0930-5XD	9.30		10	103	62	49	40
MSC3-0940-5XD	9.40		10	103	63	49	40
MSC3-0950-5XD	9.50		10	103	63	49	40
MSC3-0960-5XD	9.60		10	103	63	49	40
MSC3-0970-5XD	9.70		10	103	63	49	40
MSC3-0980-5XD	9.70		10	103	63	49	40
MSC3-0990-5XD	9.90		10	103	63	49	40
MSC3-1000-5XD	10.00	7/16-20 UNF	12	118	71	56	45
MSC3-1010-5XD	10.10		12	118	71	56	45
MSC3-1020-5XD	10.20		12	118	71	56	45
MSC3-1030-5XD	10.30		12	118	71	56	45
MSC3-1040-5XD	10.40	M12	12	118	71	56	45



DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1050-5XD	10.50		12	118	71	56	45
MSC3-1060-5XD	10.60		12	118	71	56	45
MSC3-1070-5XD	10.70	MF12x1.5	12	118	72	56	45
MSC3-1080-5XD	10.80		12	118	72	56	45
MSC3-1090-5XD	10.90		12	118	72	56	45
MSC3-1100-5XD	11.00	1/2-13 UNC	12	118	72	56	45
MSC3-1110-5XD	11.10		12	118	72	56	45
MSC3-1120-5XD	11.20		12	118	72	56	45
MSC3-1140-5XD	11.40		12	118	73	56	45
MSC3-1150-5XD	11.50		12	118	73	56	45
MSC3-1160-5XD	11.60	1/2-20 UNF	12	118	73	56	45
MSC3-1170-5XD	11.70		12	118	73	56	45
MSC3-1180-5XD	11.80		12	118	73	56	45
MSC3-1190-5XD	11.90		12	118	73	56	45
MSC3-1200-5XD	12.00		14	124	78	60	45
MSC3-1210-5XD	12.10		14	124	78	60	45
MSC3-1220-5XD	12.20		14	124	78	60	45
MSC3-1230-5XD	12.30		14	124	78	60	45
MSC3-1250-5XD	12.50		14	124	78	60	45
MSC3-1260-5XD	12.60		14	124	78	60	45
MSC3-1270-5XD	12.70		14	124	79	60	45
MSC3-1280-5XD	12.80		14	124	79	60	45
MSC3-1290-5XD	12.90		14	124	79	60	45
MSC3-1300-5XD	13.00		14	124	79	60	45
MSC3-1310-5XD	13.10		14	124	79	60	45



DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1320-5XD	13.20		14	124	79	60	45
MSC3-1330-5XD	13.30		14	124	79	60	45
MSC3-1350-5XD	13.50		14	124	80	60	45
MSC3-1380-5XD	13.80		14	124	80	60	45
MSC3-1400-5XD	14.00		16	133	84	63	48
MSC3-1410-5XD	14.10		16	133	84	63	48
MSC3-1420-5XD	14.20		16	133	84	63	48
MSC3-1430-5XD	14.30		16	133	84	63	48
MSC3-1440-5XD	14.40		16	133	84	63	48
MSC3-1450-5XD	14.50		16	133	84	63	48
MSC3-1460-5XD	14.60		16	133	84	63	48
MSC3-1480-5XD	14.80		16	133	85	63	48
MSC3-1500-5XD	15.00		16	133	85	63	48
MSC3-1510-5XD	15.10		16	133	85	63	48
MSC3-1520-5XD	15.20		16	133	85	63	48
MSC3-1530-5XD	15.30		16	133	85	63	48
MSC3-1540-5XD	15.40		16	133	86	63	48
MSC3-1550-5XD	15.50		16	133	86	63	48
MSC3-1560-5XD	15.60		16	133	86	63	48
MSC3-1570-5XD	15.70		16	133	86	63	48
MSC3-1580-5XD	15.80		16	133	86	63	48
MSC3-1590-5XD	15.90		16	133	86	63	48
MSC3-1600-5XD	16.00		18	143	137	113	48
MSC3-1610-5XD	16.10		18	143	137	113	48
MSC3-1650-5XD	16.50		18	143	137	113	48



DESCRIPTION EXAMPLE... M=METRIC, S= HIGH TEMP ALLOYS, C=COOLANT, 3=FLUTES, 3=Metric DIA 5XD=FLUTE LENGTH	DRILL DIAMETER D1 mm m7	DRILLS FOR THREADS	SHANK DIAMETER D2	OAL L1 mm	FLUTE LENGTH L2 mm	DRILLING DEPTH L3 mm	SHANK LENGTH L4 mm
MSC3-1700-5XD	17.00		18	143	138	113	48
MSC3-1750-5XD	17.50		18	143	139	113	48
MSC3-1770-5XD	17.70		18	143	139	113	48
MSC3-1800-5XD	18.00		20	153	151	124	50
MSC3-1840-5XD	18.40		20	153	151	124	50
MSC3-1850-5XD	18.50		20	153	151	124	50
MSC3-1900-5XD	19.00		20	153	152	124	50
MSC3-1910-5XD	19.10		20	153	152	124	50
MSC3-1920-5XD	19.20		20	153	152	124	50
MSC3-1930-5XD	19.30		20	153	152	124	50
MSC3-1950-5XD	19.50		20	153	153	124	50
MSC3-2000-5XD	20.00		20	153	154	124	50

SPEED & FEED

		Tool Diameter							
		.125	.188	.25	.313	.375	.5	.625	.75
Inch									
mm		3.0	4.8	6.0	8.0	10.0	12.0	16.0	20.0

2-Flute		Iron-Based, Heat-Resistant Alloys			Tensile Strength RM (MPa)*: 500-1200				Hardness (Hb) or HRC: 160-260				
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	60	75	100	IPM	.001-.003	.002-.004	.002-.004	.002-.004	.003-.005	.004-.006	.005-.007	.006-.008
Nickel-Based or Cobalt-Based, Heat-Resistant Alloys		Tensile Strength RM (MPa)§: 1000-1450			Hardness (Hb) or HRC: 250-450								
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	30	50	70	IPM	.001-.003	.002-.004	.002-.004	.002-.004	.003-.005	.004-.006	.005-.007	.006-.008
Titanium Alloys		Tensile Strength RM (MPa): 600-850			Hardness (HB) or HRC: 180-350								
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	70	100	150	IPM	.001-.002	.001-.002	.002-.003	.002-.003	.003-.004	.003-.004	.004-.005	.004-.005

3-Flute		Iron-Based, Heat-Resistant Alloys			Tensile Strength RM (MPa)*: 500-1200				Hardness (Hb) or HRC: 160-260				
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	60	75	100	IPM	.001-.003	.002-.004	.002-.004	.002-.004	.003-.005	.004-.006	.005-.007	.006-.008
Nickel-Based or Cobalt-Based, Heat-Resistant Alloys		Tensile Strength RM (MPa)§: 1000-1450			Hardness (Hb) or HRC: 250-450								
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	30	50	70	IPM	.001-.003	.002-.004	.002-.004	.002-.004	.003-.005	.004-.006	.005-.007	.006-.008
Titanium Alloys		Tensile Strength RM (MPa)*: 900-1600			Hardness (Hb) or HRC: 300-400								
Cutting Speed		Min. Start Max			Feed Rate by Diameter								
SFM	Thru-Coolant	70	100	150	IPM	.001-.002	.001-.002	.002-.003	.002-.003	.003-.004	.003-.004	.004-.005	.004-.005