

# TOP DRILL S™ with Through Coolant • Stainless Steel

## ■ Dimensions for TDS451A • 3 x D/TDS452A • 5 x D/TDS453A • 8 x D • Metric

mm Ø				SHORT* ~3 x D			LONG* ~5 x D			EXTRA LONG** ~8 x D		
D1 min	D1 max	D	LS	L	L3	L4 max	L	L3	L4 max	L	L3	L4 max
3,000	3,734	6	36	62	20	14	66	28	23	78	40	33
3,800	4,700	6	36	66	24	17	74	36	29	87	49	41
4,763	6,000	6	36	66	28	20	82	44	35	94	56	48
6,100	7,000	8	36	79	34	24	91	53	43	105	67	57
7,100	8,000	8	36	79	41	29	91	53	43	113	74	64
8,100	10,000	10	40	89	47	35	103	61	49	135	92	80
10,100	12,000	12	45	102	55	40	118	71	56	158	110	96
12,100	14,000	14	45	107	60	43	124	77	60	176	128	112
14,100	16,000	16	48	115	65	45	133	83	63	197	146	128
16,100	18,000	18	48	123	73	51	143	93	71	214	163	144
18,100	20,000	20	50	131	79	55	153	101	77	234	181	160

\* D1 < 20mm to DIN 6537K

\* D1 > 20mm to factory standard

\*\* to factory standard

## ■ Dimensions for TDS451A • 3 x D/TDS452A • 5 x D/TDS453A • 8 x D • Inch

in Ø				SHORT* ~3 x D			LONG* ~5 x D			EXTRA LONG** ~8 x D		
D1 min	D1 max	D	LS	L	L3	L4 max	L	L3	L4 max	L	L3	L4 max
.1181	.1470	.2362	1.42	2.44	.79	.55	2.60	1.10	.91	3.07	1.57	1.30
.1496	.1850	.2362	1.42	2.60	.94	.67	2.91	1.42	1.14	3.43	1.93	1.61
.1875	.2362	.2362	1.42	2.60	1.10	.79	3.23	1.73	1.38	3.70	2.20	1.89
.2402	.2756	.3150	1.42	3.11	1.34	.94	3.58	2.09	1.69	4.13	2.64	2.24
.2795	.3150	.3150	1.42	3.11	1.61	1.14	3.58	2.09	1.69	4.45	2.91	2.52
.3189	.3937	.3937	1.57	3.50	1.85	1.38	4.06	2.40	1.93	5.32	3.62	3.15
.3976	.4724	.4724	1.77	4.02	2.17	1.57	4.65	2.80	2.20	6.22	4.33	3.78
.4764	.5512	.5512	1.77	4.21	2.36	1.69	4.88	3.03	2.36	6.93	5.04	4.41
.5551	.6299	.6299	1.89	4.53	2.56	1.77	5.24	3.27	2.48	7.76	5.75	5.04
.6339	.7087	.7087	1.89	4.84	2.87	2.01	5.63	3.66	2.80	8.43	6.42	5.67
.7126	.7874	.7874	1.97	5.16	3.11	2.17	6.02	3.98	3.03	9.21	7.13	6.30

\* D1 < 20mm to DIN 6537K

\* D1 > 20mm to factory standard

\*\* to factory standard

## ■ TDS451/TDS452/TDS453 Series • WM15PD • Through Coolant • Inch

Material Group		Cutting Speed – vc Range – SFM			Tool Diameter (inch)	Recommended Feed Rate (f) by Diameter							
		min	-	max		.125-1/8	.188-3/16	.250-1/4	.313-5/16	.375-3/8	.500-1/2	.625-5/8	.750-3/4
		<b>P</b>	0	260		-	520	IPR	.002-.004	.003-.005	.004-.007	.004-.009	.005-.010
	1	230	-	460	IPR	.002-.005	.003-.007	.004-.009	.006-.012	.006-.014	.007-.015	.008-.018	.009-.020
	2	300	-	460	IPR	.002-.005	.003-.007	.004-.008	.006-.009	.006-.011	.007-.013	.008-.015	.009-.016
	3	200	-	330	IPR	.003-.005	.005-.007	.006-.009	.007-.012	.008-.014	.009-.015	.010-.018	.011-.020
	4	160	-	330	IPR	.003-.005	.004-.007	.005-.009	.006-.011	.007-.013	.007-.015	.009-.017	.010-.019
	5	160	-	260	IPR	.001-.004	.002-.004	.002-.004	.002-.006	.003-.007	.004-.008	.006-.009	.006-.010
	6	130	-	230	IPR	.002-.004	.003-.006	.004-.007	.005-.008	.006-.009	.007-.011	.007-.013	.009-.014
<b>M</b>	1	160	-	300	IPR	.002-.005	.002-.006	.003-.006	.004-.007	.005-.008	.005-.008	.006-.009	.007-.010
	2	160	-	260	IPR	.002-.005	.002-.006	.003-.006	.004-.007	.005-.008	.005-.008	.006-.009	.007-.010
	3	160	-	230	IPR	.002-.005	.002-.006	.003-.006	.004-.007	.005-.008	.005-.008	.006-.009	.007-.010
<b>S</b>	1	70	-	100	IPR	.001-.002	.002-.003	.002-.004	.003-.005	.004-.005	.004-.006	.005-.006	.006-.007
	2	30	-	100	IPR	.001-.002	.001-.002	.002-.003	.003-.004	.003-.004	.004-.005	.004-.006	.004-.006
	3	30	-	130	IPR	.001-.002	.001-.002	.002-.003	.002-.004	.003-.004	.003-.004	.004-.005	.004-.006
	4	30	-	130	IPR	.001-.002	.001-.002	.002-.003	.003-.004	.003-.004	.004-.005	.004-.006	.004-.006