



OSG GROUP COMPANY

# Drill Sizes for Tapping

## for 75% thread depth

shaping your dreams

### METRIC (60° INCLUDED ANGLE) (Fluteless\*)

Size	Metric Coarse		Metric Fine		Size	Metric Coarse		Metric Fine		Size	Metric Coarse		Metric Fine	
	Pitch	Drill Size in mm	Pitch	Drill Size in mm		Pitch	Drill Size in mm	Pitch	Drill Size in mm		Pitch	Drill Size in mm	Pitch	Drill Size in mm
1	0.25	0.75	-	-	15	-	-	1.50	13.50	36	4.00	32.00	1.50	34.50
1.1	0.25	0.85	-	-	16	2.00	14.00	1.00	15.00	36	-	-	2.00	34.00
1.2	0.25	0.95	-	-	16	-	-	1.50	14.50	36	-	-	3.00	33.00
1.4	0.30	1.10	-	-	17	-	-	1.50	15.50	38	-	-	1.50	36.50
1.6	0.35	1.25	-	-	18	2.50	15.50	1.00	17.00	38	-	-	2.00	36.00
1.8	0.35	1.45	-	-	18	-	-	1.25	16.80	39	4.00	35.00	1.50	37.50
2	0.40	1.60 (1.80*)	0.25	1.75	18	-	-	1.50	16.50	39	-	-	2.00	37.00
2.2	0.45	1.75	0.25	1.95	18	-	-	2.00	16.00	39	-	-	3.00	36.00
2.5	0.45	2.05	0.35	2.15	20	2.50	17.50	1.00	19.00	40	-	-	1.50	38.50
3	0.50	2.50 (2.80*)	0.35	2.65	20	-	-	1.50	18.50	40	-	-	2.00	38.00
3.5	0.60	2.90 (3.20*)	0.35	3.15	20	-	-	2.00	18.00	40	-	-	3.00	37.00
4	0.70	3.30 (3.70*)	0.50	3.50	22	2.50	19.50	1.00	21.00	42	4.50	37.50	1.50	40.50
4.5	0.75	3.70 (4.20*)	0.50	4.00	22	-	-	1.50	20.50	42	-	-	2.00	40.00
5	0.80	4.20 (4.70*)	0.50	4.50	22	-	-	2.00	20.00	42	-	-	3.00	39.00
5	-	-	0.75	4.30	24	3.00	21.00	1.00	23.00	42	-	-	4.00	38.00
5.5	-	-	0.50	5.00	24	-	-	1.50	22.50	45	4.50	40.50	1.50	43.50
6	1.00	5.00 (5.60*)	0.75	5.25	24	-	-	2.00	22.00	45	-	-	2.00	43.00
7	1.00	6.00	0.75	6.25	25	-	-	1.00	24.00	45	-	-	3.00	42.00
8	1.25	6.80 (7.40*)	0.75	7.30	25	-	-	1.50	23.50	45	-	-	4.00	41.00
8	-	-	1.00	7.00	25	-	-	2.00	23.00	48	5.00	43.00	1.50	46.50
9	1.25	7.80	0.75	8.30	27	3.00	24.00	1.50	25.50	48	-	-	2.00	46.00
9	-	-	1.00	8.00	27	-	-	2.00	25.00	48	-	-	3.00	45.00
10	1.50	8.50 (9.30*)	0.75	9.30	28	-	-	1.50	26.50	48	-	-	4.00	44.00
10	-	-	1.00	9.00	28	-	-	2.00	26.00	50	-	-	1.50	48.50
10	-	-	1.25	8.75	30	3.50	26.50	1.00	29.00	50	-	-	2.00	48.00
11	1.50	9.50	1.00	10.00	30	-	-	1.50	28.50	50	-	-	3.00	47.00
11	-	-	1.25	9.80	30	-	-	2.00	28.00	52	5.00	47.00	1.50	50.50
12	1.75	10.20 (11.20*)	1.00	11.00	30	-	-	3.00	27.00	52	-	-	2.00	50.00
12	-	-	1.25	10.80	32	-	-	1.50	30.50	52	-	-	3.00	49.00
12	-	-	1.50	10.50	32	-	-	2.00	30.00	52	-	-	4.00	48.00
14	2.00	12.00	1.00	13.00	33	3.50	29.50	1.50	31.50	56	5.50	50.50	-	-
14	-	-	1.25	12.75	33	-	-	2.00	31.00	60	5.50	54.50	-	-
14	-	-	1.50	12.50	33	-	-	3.00	30.00	64	6.00	58.00	-	-
15	-	-	1.00	14.00	35	-	-	1.50	33.50	68	6.00	62.00	-	-

### BRITISH STANDARD WHITWORTH THREADS (55° INCLUDED ANGLE)

Size	BSW		BSF		BSB		BSP		BSPT	
	TPI	Drill Size in mm	TPI	Drill Size in mm	TPI	Drill Size in mm	TPI	Drill Size in mm	TPI	Drill Size in mm
1/16"	60	1.20	-	-	-	-	-	-	-	-
3/32"	48	1.90	-	-	-	-	-	-	-	-
1/8"	40	2.55	-	-	-	-	28	8.80	28	8.60
5/32"	32	3.20	-	-	-	-	-	-	-	-
3/16"	24	3.70	32	4.00	-	-	-	-	-	-
7/32"	24	4.50	28	4.70	-	-	-	-	-	-
1/4"	20	5.10	26	5.40	26	5.30	19	11.80	19	11.50
9/32"	-	-	26	6.20	-	-	-	-	-	-
5/16"	18	6.50	22	6.80	26	6.90	-	-	-	-
3/8"	16	8.00	20	8.30	26	8.40	19	15.50	19	15.00
7/16"	14	9.30	18	9.80	26	10.00	-	-	-	-
1/2"	12	10.50	16	11.00	26	11.70	14	19.00	14	18.50
9/16"	12	12.20	16	12.70	-	-	-	-	-	-
5/8"	11	13.50	14	14.00	26	15.00	14	21.00	-	-
11/16"	11	15.20	14	15.50	-	-	-	-	-	-
3/4"	10	16.50	12	16.50	26	18.00	14	24.50	14	24.00
7/8"	9	19.50	11	19.50	-	-	14	28.50	-	-
1"	8	22.00	10	22.50	26	24.50	11	31.00	11	30.25
1.1/8"	7	25.00	9	25.50	-	-	-	-	-	-
1.1/4"	7	28.00	9	29.00	-	-	11	40.00	11	39.00
1.3/8"	-	-	8	31.80	-	-	-	-	-	-
1.1/2"	6	34.00	8	34.50	-	-	11	45.50	11	45.00
1.5/8"	-	-	8	38.00	-	-	-	-	-	-
1.3/4"	5	39.00	7	41.00	-	-	11	51.50	-	-
2"	4.5	45.00	7	47.00	-	-	11	57.00	11	56.50
2.1/4"	4	51.00	6	53.00	-	-	11	63.30	-	-
2.1/2"	4	57.00	6	59.00	-	-	11	72.80	-	-
2.3/4"	3.5	63.00	6	66.00	-	-	-	-	-	-
3"	3.5	69.00	5	71.00	-	-	11	85.50	-	-
3.1/4"	3.25	75.00	5	77.00	-	-	-	-	-	-
3.1/2"	3.25	81.00	4.5	83.00	-	-	-	-	-	-
3.3/4"	3	87.00	4.5	90.00	-	-	-	-	-	-
4"	3	93.00	4.5	96.00	-	-	-	-	-	-

### UNIFIED NATIONAL THREADS (60° INCLUDED ANGLE)

Size	Nominal Diameter	UNC		UNF		NPS		NPT	
		TPI	Drill Size in mm	TPI	Drill Size in mm	TPI	Drill Size in mm	TPI	Drill Size in mm
No.1	1.85	64	1.55	72	1.55	-	-	-	-
No.2	2.18	56	1.85	64	1.90	-	-	-	-
No.3	2.51	48	2.00	56	2.10	-	-	-	-
No.4	2.84	40	2.25	48	2.35	-	-	-	-
No.5	3.18	40	2.60	44	2.65	-	-	-	-
No.6	3.51	32	2.75	40	2.90	-	-	-	-
No.8	4.17	32	3.40	36	3.50	-	-	-	-
No.10	4.83	24	3.80	32	4.10	-	-	-	-
No.12	5.49	24	4.40	28	4.60	-	-	-	-
1/8"	-	-	-	-	-	27	9.10	27	8.40
1/4"	-	20	5.10	28	5.50	18	12.00	18	11.00
5/16"	-	18	6.60	24	6.90	-	-	-	-
3/8"	-	16	8.00	24	8.50	18	15.50	18	14.25
7/16"	-	14	9.40	20	9.80	-	-	-	-
1/2"	-	13	10.80	20	11.50	14	19.00	14	17.50
9/16"	-	12	12.20	18	12.80	-	-	-	-
5/8"	-	11	13.50	18	14.50	-	-	-	-
3/4"	-	10	16.50	16	17.50	14	24.50	14	23.00
7/8"	-	9	19.50	14	20.50	-	-	-	-
1"	-	8	22.00	12	23.50	11.5	30.50	11.5	29.00
1.1/8"	-	7	25.00	12	26.50	-	-	-	-
1.1/4"	-	7	28.00	12	29.50	11.5	39.40	11.5	37.50
1.3/8"	-	6	31.00	12	32.50	-	-	-	-
1.1/2"	-	6	34.00	12	36.00	11.5	45.50	11.5	43.50
1.3/4"	-	5	39.00	-	-	-	-	-	-
2"	-	4.5	45.00	-	-	11.5	57.50	11.5	55.50

### BRITISH ASSOCIATION (47 1/2° INCLUDED ANGLE)

Size	Nominal Diameter	TPI	Drill Size in mm	Size	Nominal Diameter	TPI	Drill Size in mm
No.12	1.3	90.1	1.05	No.5	3.2	43.1	2.65
No.10	1.7	72.6	1.40	No.4	3.6	38.3	3.00
No.9	1.9	65.1	1.55	No.3	4.1	34.8	3.40
No.8	2.2	59.1	1.80	No.2	4.7	31.3	3.90
No.7	2.5	52.9	2.05	No.1	5.3	28.2	4.50
No.6	2.8	47.9	2.30	No.0	6.0	25.4	5.10