



PRAKASH DRILLING MACHINES

Product Catalogue

Ver 2024.06

(This catalog can be best viewed as Full Screen)

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Online Presence :



Radial Drill Machines



DC411



R40AA



R40G



R40BA

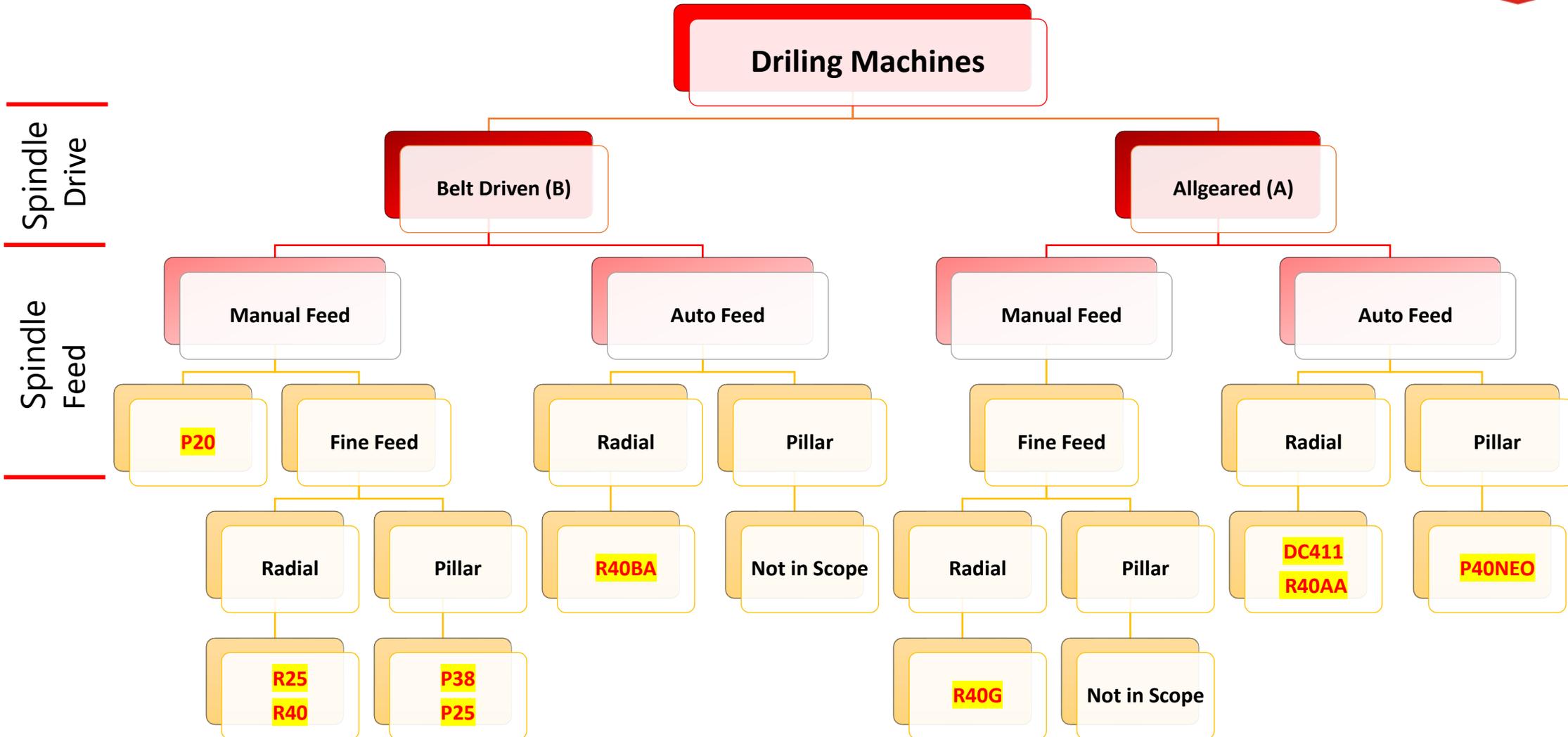


R40



R25

Types and model of machine as per drive and feed mechanisms :



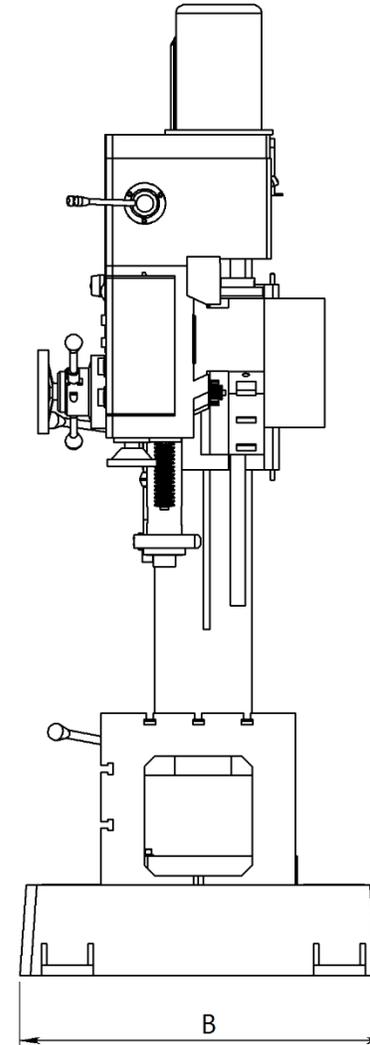
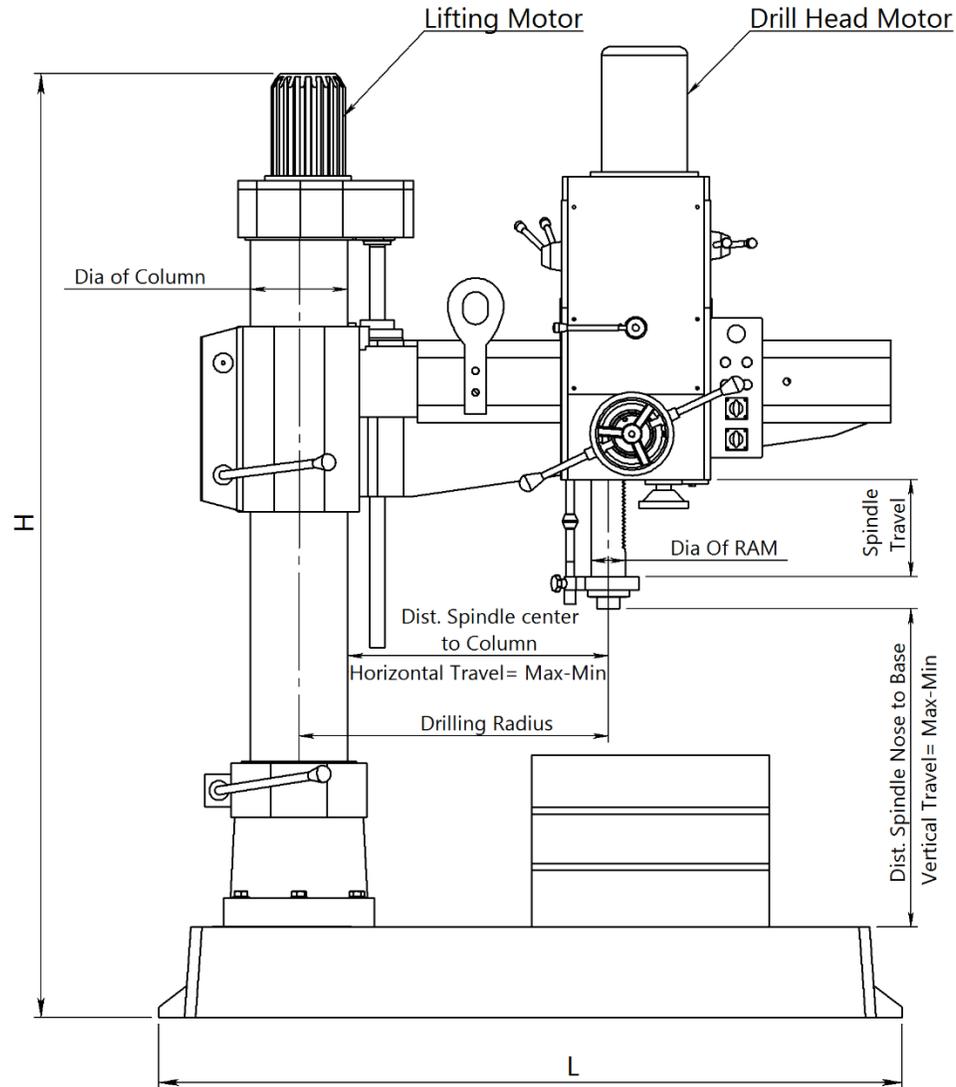
Machine selection chart as per application :



		Drilling Capacity	Workpiece Size	Production Batch Size	No. of sizes of Diff Holes in a Workpiece	Drilling	Tapping	Reaming	Boring
Radial	DC411	42	Large	Mass	More	●	●	●	●
	R40AA	40	Big	Mass	More	●	●	●	●
	R40G	40	Big	Mass	More	●	●	●	
	R40BA	40	Big	Medium	Moderate	●	●	●	●
	R40	40	Big	Medium	Moderate	●	●	●	
	R25	25	Small	Small	Moderate	●	●	●	
Pillar	P40NEO	40	Big	Mass	More	●	●	●	●
	P38	38	Big	Mass	Moderate	●	●	●	
	P25	25	Small	Mass	Moderate	●	●	●	
	P20	20	Small	Mass	Moderate	●	●	●	

This illustration is tentative only. Final selection may depend on actual applications. Please contact us for any technical information required.

How to read specifications of Radial and Pillar Drill Machines





PRAKASH DRILLING MACHINES

Radial Drill Machines



Model : **R40AA**

40 mm Cap. Single Column Allgeared
Autofeed Radial Drill Machine



Model : R40AA

40 mm Cap. Allgeared Autofeed
Radial Drill Machine



Oil bath Gear Box

The all new design of gear box in model PMW-R40AA, R40G and P40AA is having 9 speed with all 9 gears made up of hardened NiCr steel up to HRC 50-55. Oil bath gear box and hardened gears give very long life to the machine. Rotation and easy sliding of gears in bearings gives very high reliability. Gear are internally six splined and shaft are externally splined

All the gears in gearbox are machined on imported WMW Germany make gear shaper.

All the splines in the gear box are machined on imported PFAUTER Germany make spline milling machine.

Autofeed Gear Box

Autofeed gear box used in Machine R40AA, R40BA & P40AA is having gears made up of NiCr Steel with heavy 2.5 module. All gears are also hardened. Two worm gears are made up of heavy duty 2.82 module teeth. All the shafts in the Gear Box are supported through good quality bearings and not the Bushes. Engaging Of Autofeed through **TAPER CONE MECHANISM** as in the lathe machines enables maximum loading capacity leaving behind other machines.

	Description	R40AA
CAPACITY	Drilling in M.S.	40
	Drilling in C.I.	45
	Tapping in M.S.	25
	Rough Boring in M.S.	75
DRILL HEAD	Spindle Travel	250
	Spindle Hole taper	MT -4
	Spindle Speeds (RPM x steps)	70-1225 x 9
	Diameter of RAM	78
	Spindle Auto feed Ranges	0.05 & 0.09
WORKING RANGE	Max/Min Dist. Spindle nose to base	950/250
	Max/Min Dist. Spindle centre to column	930/400
	Max. Drilling Radius	1020
	Machine Measurement (LxBxH)	1510x850x2100
	Diameter of Column	180
	Work Table	300x300x385 All for sides useful
	Coolant Tank in-built in Base	440x430x10 26 Ltr.
POWER	Working Range	960 x 810
	Drill Head Motor	1.5 HP/960 RPM
	Lifting Motor	0.5 HP / 1440 RPM
	Lifting Motor V- belt	B-23 / B-24

Model : **R40AA**

40 mm Cap. Allgeared Autofeed
Radial Drill Machine



Key Features

- 900 mm Centre Distance
- 9 Spindle speeds with single speed motor
- Hardened Gears
- Hardened & Ground Spindle, RAM, Pinion
- Single Piece Arm
- 180 mm Column Diameter
- Taper Wedge
- Longer Gun Metal Nut for Lifting of Arm

Extra Accessories

- Drill Chuck & Arbour
- Keyless Drill Chuck & Arbour
- Work Table
- Extra Long Column
- Tapping Attachment (Mechanical)
- Drill Vice

Standard Accessories

- Electrical Panel Board & Switches
- Electrical Motors
- Coolant pump with Spout Assembly in Model R40AA

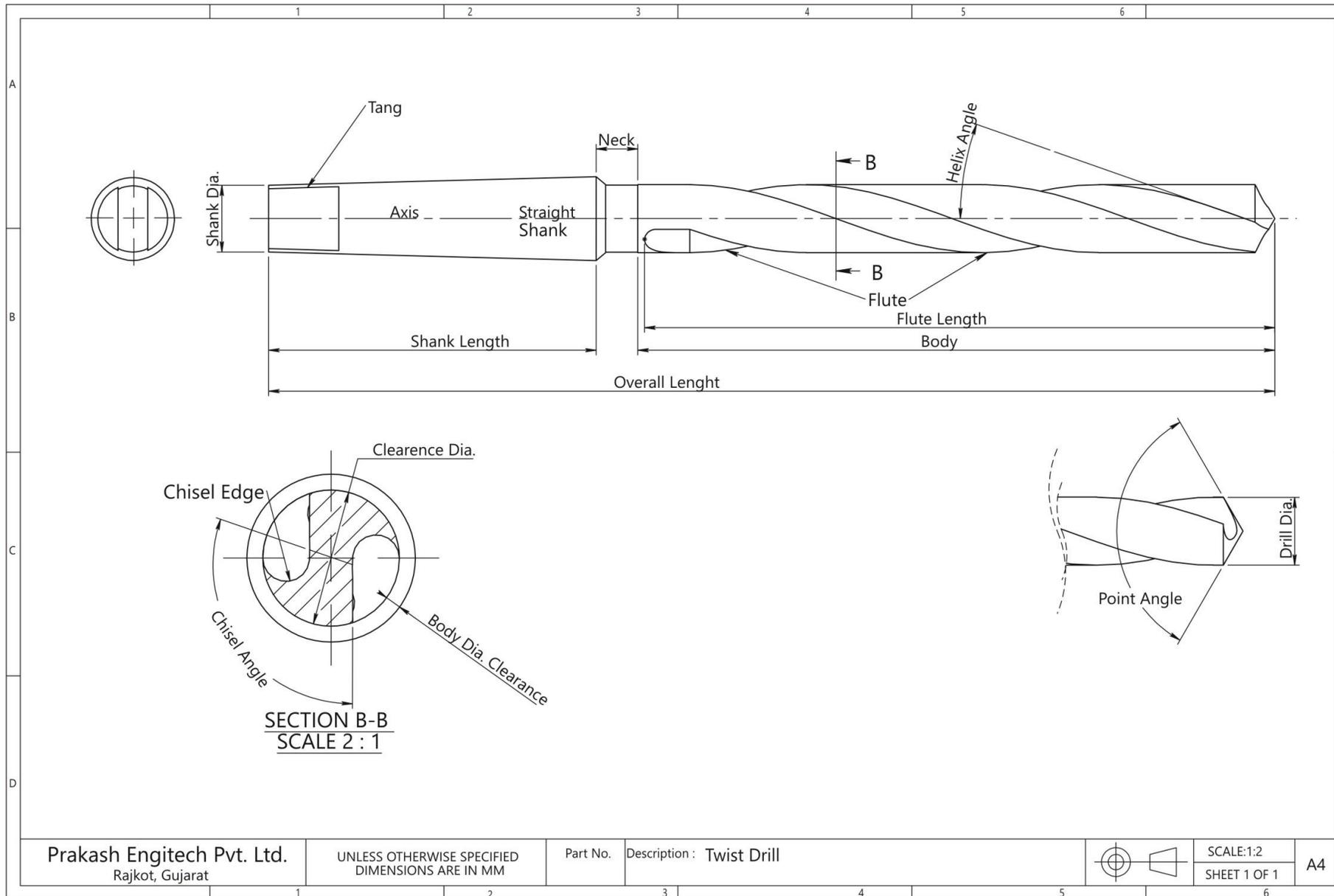


PRAKASH DRILLING MACHINES

General Drilling Data



Twist Drill Nomenclature





Nominal Dia		B.S.W.		B.S.P. & B.S.P.T.		
Fractional	Major Min Dia Inch	TPI	Drill Size	Major Min Dia	TPI	Drill Size
1/16"	0.0635	60	no.55	-	-	-
3/32"	0.095	48	no.48	-	-	-
1/8"	0.1262	40	2.55m	0.383	28	8.75m
5/32"	0.1576	32	3.10m	-	-	-
3/16"	0.1891	24	3.7m	-	-	-
7/32"	0.2204	24	11/64"	-	-	-
1/4"	0.2518	20	5.1m	0.518	19	11.8m
9/32"	0.283	20	no.1	-	-	-
5/16"	0.3143	18	6.5m	-	-	-
3/8"	0.377	16	5/16"	0.656	19	15.25m
7/16"	0.4397	14	9.25m	-	-	-
1/2"	0.5024	12	10.5m	0.825	14	3/4"
9/16"	0.5649	12	12.1m	-	-	-
5/8"	0.6274	11	13.5m	0.902	14	53/64"
11/16"	0.6899	11	19/32"	-	-	-
3/4"	0.7526	10	41/64"	1.041	14	24.5m
13/16"	0.8151	10	18.25m	-	-	-
7/8"	0.8776	9	19.25m	1.189	14	28.25m
15/16"	0.9401	9	21m	-	-	-
1"	1.0028	8	22m	1.309	11	30.75m
1.1/8"	1.128	7	24.75m	-	-	-
1.1/4"	1.253	7	1.3/32"	1.65	11	39.5m
1.3/8"	1.3782	6	1.3/16"	-	-	-
1.1/2"	1.5032	6	33.5m	1.882	11	1.25/32"
1.5/8"	1.6286	5	1.27/64"	-	-	-
1.3/4"	1.7536	5	39m	2.116	11	51.5m
1.7/8"	1.8788	4.5	1.21/32"	-	-	-
2"	1.0038	4.5	44.5m	2.343	11	2.1/4"

Drilling Size For Tapping

British Standard Whitworth
Form Threads 55° Inc.
Angle





Drilling Size For Tapping

Metric Form Threads

Nominal Dia. M.M.	SYSTEM INTERNATIONAL		
	Major Min. Dia.	Pitch	Drill Size
6	0.2378	1	5m
7	0.2772	1	6m
8	0.3168	1.25	17/64"
9	0.3561	1.25	7.7m
10	0.3957	1.5	8.4m
11	0.4351	1.5	9.5m
12	0.4746	1.75	10.25m
13	-	1.75	11.25m
14	0.5534	2	12m
16	0.6321	2	35/64"
18	0.7113	2.5	39/64"
20	0.79	2.5	11/16"
22	0.8687	2.5	49/64"
24	0.9477	3	21m
27	1.0658	3	24m
30	1.1841	3.5	26.5m
33	1.3022	3.5	29.5m
36	1.4205	4	32m
39	1.5386	4	35m
42	1.6566	4.5	37.5m
45	1.775	4.5	40.5m
48	1.8935	5	43m
52	2.0508	5	47m
56	2.2085	5.5	50.5m
60	2.366	5.5	54.5m