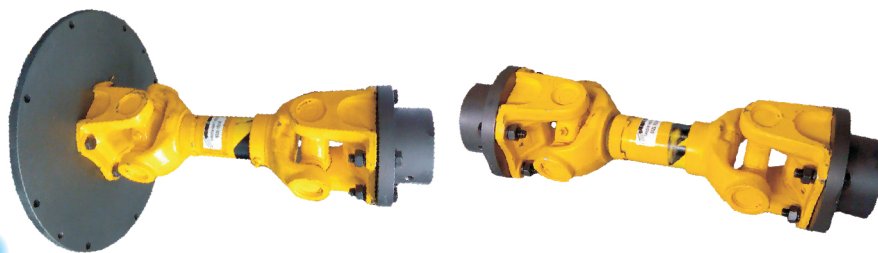


#### FEATURES:

- High torsional strength
- Polyamide coated spline shafts for longer life
- Ground fillet radii to avoid stress concentration
- Vibration free performance
- Low Maintenance

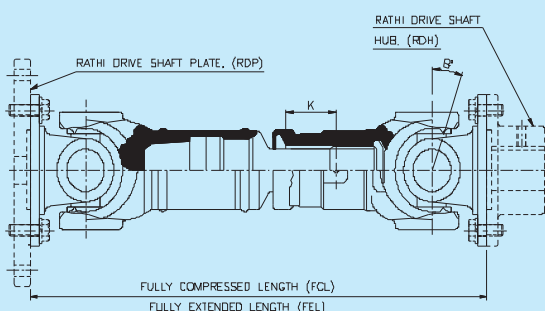


#### APPLICATIONS :-

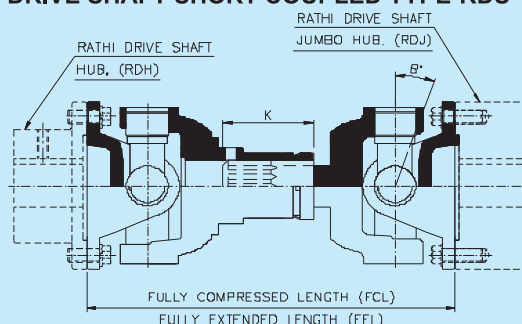
Steel Plants & Rolling Mills, Textile, Paper & Printing Machinery, Cranes & Fire Fighting Pump drive, Vibrating screens, Cement Industries, Earth Moving Equipments, etc.

#### TECHNICAL DATA

##### RATHI DRIVE SHAFT ASSEMBLY (TUBE) TYPE-RDT



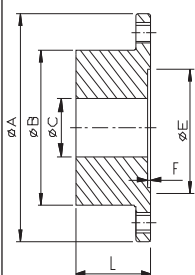
##### RATHI DRIVE SHAFT SHORT COUPLED TYPE-RDS



Size	Short Duration Torque Nm	Flange Hole Dia	Flange PCD	Angle B° (Max.)	MODEL-RDT		MODEL-RDS	
					SLIP Movement K	FCL-FEL	SLIP Movement K	FCL-FEL
1130	550	8.20	69.8	17	42.8	315-358	23.8	208-232
1310 ■	1085	10.50	79.3	25	50.8	335-385	49.2	281-330
1410 ■	2034	12.50	95.2	20	58	471-529	30	300-330
1480 ■	2712	12.85	120.6	20	63.5	418-481	50	270-320
1550 ■	3255	12.75	120.6	20	63.5	445-508	33	308-341
1610	4950	10.50	155.4	20	70	500-570	45	377-422
1710	6511	10.50	184	15	133	650-783	104	632-736

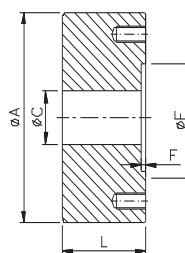
■ Rectangular Flange

##### RATHI DRIVE SHAFT HUB (RDH)#



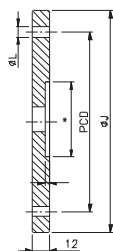
RDH Size	ØA	ØB	Max. Bore ØC	ØE	F	L
1130	86	51	32	57.2	2.8	40
1310	102	57	40	60.4	1.7	45
1410	128	72	48	69.9	1.7	45
1480	146	94	65	95.3	2	60
1550	146	94	65	95.3	1.8	60
1610	176	115	80	168.3	1.8	70
1710	210	142	90	196.9	2.2	90

##### RATHI DRIVE SHAFT JUMBO HUB (RDJ)#



RDJ Size	ØA	Max. Bore ØC	ØE	F	L
1130	86	50	57.2	2.8	40
1310	102	58	60.4	1.7	45
1410	128	68	69.9	1.7	45
1480	146	92	95.3	2	60
1550	146	92	95.3	1.8	60
1610	176	115	168.3	1.8	70
1710	210	135	196.9	2.2	90

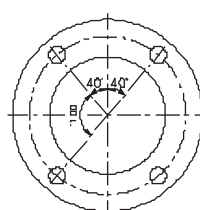
##### RATHI DRIVE SHAFT SAE PLATE (RDP)#



RDP Size	ØJ	No. of Holes	ØL	PCD
6 1/2"	8 1/2"	6	21/64"	7 7/8"
7 1/2"	9 1/2"	8	21/64"	8 3/4"
8"	10 3/8"	6	13/32"	9 5/8"
10"	12 3/8"	8	13/32"	11 5/8"
11 1/2"	13 7/8"	8	13/32"	13 1/8"
14	18 3/8"	8	17/32"	17 1/4"

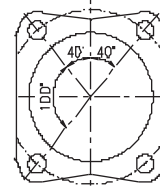
\* Dimensions to suit respective Drive Shaft

##### 4-HOLE FLANGE



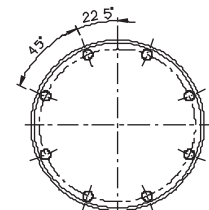
SIZE 1130

##### 4-HOLE RECT. FLANGE



SIZE 1310 TO 1550

##### 8-HOLE FLANGE



SIZE 1610 & 1710

# Special high tensile **self locking** bolts will be supplied with Hub & SAE Plate.

• All Dimensions are in mm otherwise specified

### SELECTION DATA & APPLICATION GUIDELINES

Power Source	F <sub>P</sub>
Electric Motor	1
Gasoline Engine	1.25
Diesel Engine	1.5

OPERATING ANGLES For Two Joints Shafts With Equal or Intersecting Angles	Drive Shaft RPM	Max. Operating Angle	Drive Shaft RPM	Max. Operating Angle
	5000	3° 15'	3000	5° 50'
	4500	3° 40'	2500	7° 0'
	4000	4° 15'	2000	8° 40'
	3500	5° 0'	1500	11° 30'

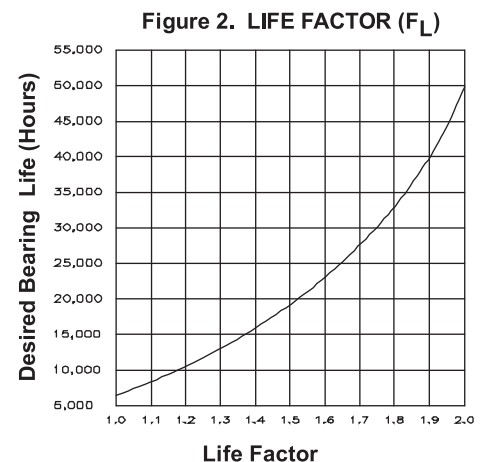
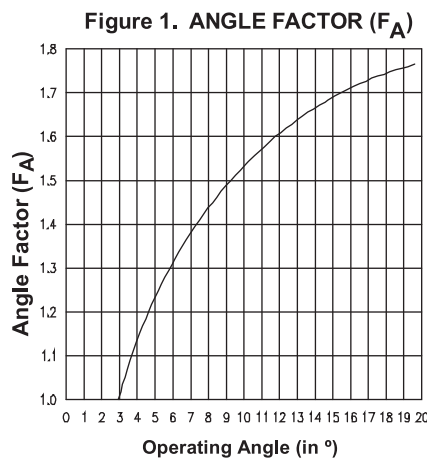
**Selection of DRIVE SHAFT is different from other type of couplings**

- 1) Select the appropriate **SERVICE FACTOR** from the table and graphs
  - a) Power Source : F<sub>P</sub>
  - b) Operating Angle : F<sub>A</sub>
  - c) Life : F<sub>L</sub>
- 2) Calculate **Application ( Operating ) Torque** : T Nm

$$T = \frac{\text{Power kW} \times 1.34 \times 7123}{\text{RPM}} \text{ Nm}$$

- 3) Calculate Design Torque = T x F<sub>P</sub> x F<sub>A</sub> x F<sub>L</sub> Nm
- 4) Refer **short duration torque** from Technical data. Select the drive shaft size based on **Short Duration Torque** = / > Design Torque
- 5) Select required **Mounting Options** : SAE Plate or Hubs.
- 6) Check for **bore sizes**.

**While ordering, place order for individual part as RDT/RDS, RDH/RDJ, RDP.**



SIZE	SHORT DURATION TORQUE Nm	* MAX. RPM	TUBE DIA MM (INCH)	# TUBE LENGTH C-C INSTALLED @ MAX. RPM MM (INCH)
1130	550	2500	63.5 (2.5)	1778 (70)
1310	1085	6000	63.5 (2.5)	1092 (43)
1410	2034	5000	76.2 (3)	1295 (51)
1480	2712	5000	76.2 (3)	1295 (51)
1550	3255	5000	76.2 (3)	1295 (51)
1550	3255	5000	88.9 (3.5)	1397 (55)
1610	4950	4500	88.9 (3.5)	1473 (58)
1710	6511	4500	103.80 (4.08)	1505 (59)

\* Rating applies to universal joint

# Lengths shown are based on 0.66 of the calculated critical speed at max. rate RPM (as applied to industrial applications)

Note: Data provided above is for general guidelines. Please contact RATHI TRANSPOWER PVT. LTD. for specific requirement with complete design data.

- Higher sizes available on request.
- All Dimensions are in mm otherwise specified

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#### Rathi Transpower Pvt Ltd

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