



# RUBBER BLOCK FLEXIBLE COUPLING

## □ INTRODUCTION :

- TC introduces unique replacement for Gear Coupling.
- The TBC type coupling constructed by Cast Steel and Heavy duty Rubber Blocks.
- Rubber blocks are available in different stiffness to match the application requirement.

## □ INDUSTRY APPLICATION :

- **Mines** – Conveyor , Crusher , Feeder breaker.
- **Cement** – Raw Mill , Coal Mill , Cement Mill , Fan.
- **Thermal Power** – Bowl Mill , Convey , Crusher , Fan.
- **Others** – Fans , Pumps , Compressor , Generator etc.



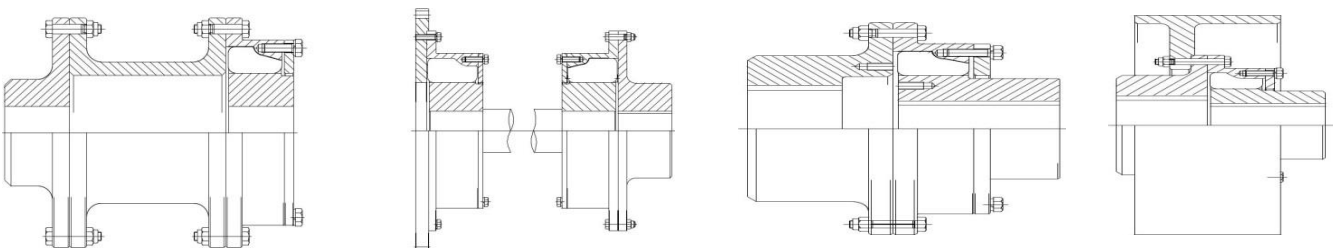
## □ SALIENT FEATURES :

- Severe shock load protection avoiding failure of the driveline under high transient torques.
- Intrinsically fail safe ensuring continuous operation of the driveline in the unlikely event of rubber failure or damage.
- Maintenance free with no lubrication or adjustment required resulting in low running costs.
- Vibration control achieving low vibratory loads in the driveline components by selection of optimum stiffness characteristics.
- Zero backlash eliminating torque amplifications through pre-compression of the rubber elements.
- Misalignment capability allows axial and radial misalignment between the driving and driven machines.
- Future Replacement parts is the only Rubber Blocks & Replacement time is very low.

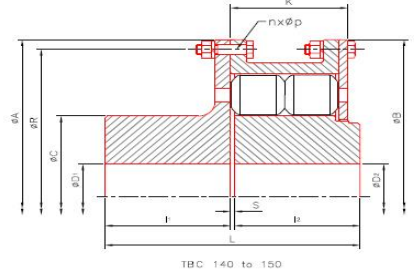
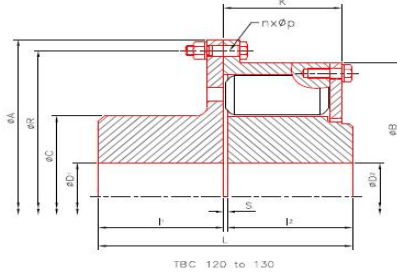
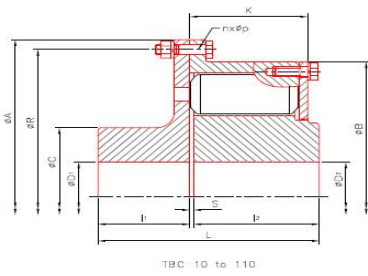
## □ GENERAL ARRANGEMENT :



## □ SPECIAL FITMENT :



## □ DIMENSIONS :



## □ DIMENSION CHART FOR SHAFT TO SHAFT CONNECTION & FLANGE TO SHAFT CONNECTION :

Coupling Size	Torque (Kgm) T <sub>nom</sub>	Max Speed (rpm)	A (mm)	B (mm)	C (mm)	K (mm)	Pilot Bore D <sub>1</sub> (mm)	Pilot Bore D <sub>2</sub> (mm)	Finish Bore D <sub>1</sub> & D <sub>2</sub> max. (mm)	S (mm)	I <sub>1</sub> & I <sub>2</sub> (mm)	Total Length L (mm)	R (mm)	N X Ø <sub>p</sub>	Appx. Coupling Weight (kg)
TBC 10	45	7000	161.9	134	75	36	28	22	41	1	51	103	146	8X9	6.7
TBC 20	70	6000	187.3	158	93	39	28	27	51	2	54	110	171	8X9	10.0
TBC 30	140	5200	216	182	108	46	28	38	64	2	64	130	197	8X9	15.8
TBC 40	320	4350	260.3	222	122	60	36	49	73	3	70	143	235	8X9	23.0
TBC 50	620	4350	261	222	135	81	52	50	85	3	86	175	240	12X9	26.5
TBC 60	820	3700	302	245	148	89	66	66	95	3	95	193	276	12X13	38.0
TBC 70	1230	3350	338	281	168	102	75	72	109	4	109	222	312	12X13	55.0
TBC 80	1850	2900	392	320	194	118	80	80	125	4	125	254	360	12X17	84.9
TBC 90	2780	2600	440	368	220	134	92	92	143	5	143	291	407	12X17	123.5
TBC 100	4000	2300	490	417	252	153	105	105	162	5	162	329	458	16X17	180.0
TBC 110	6100	2000	568	480	288	174	120	120	186	6	186	378	528	12X21	272.0
TBC 120	9200	1750	638	549	330	200	140	140	213	7	213	433	598	16X21	396.0
TBC 130	13250	1550	728	621	373	226	160	160	240	7	240	487	680	16X25	579.0
TBC 140	18400	1460	798	798	415	252	167	185	268	8	268	544	750	20X25	826.0
TBC 150	27550	1260	925	925	475	288.8	192	220	307	9	307	623	865	20X32	1240.0

## □ SELECTION PROCEDURE :

T<sub>OP</sub> : Operating Torque of the Input Machine

P : Input Power (KW)

S : Service Factor (see Table Below)

T<sub>NOM</sub> : Permissible Nominal Torque of the Coupling

N : Coupling Operating Speed (rpm)

$$T_{OP} = 974 \times P/N \text{ Kgm}$$

$$T_{NOM} = T_{OP} \times S$$

## □ IMPORTANT :

After selection the Coupling, it must be checked against bore size (D1 & D2), flywheel connecting dimensions (if application), shaft gap(s) and coupling max speed.

## □ SERVICE FACTORS ( S ) :

Load	Driven Machines	S
Uniform	Axial & Radial Blower, Agitators, Centrifuges, Belt Conveyors Generators, Centrifugal Compressors & Pumps, Fans	1.5
Light & Medium Shock	Construction Machines, Goods & Passenger Lifts, Cooling Tower Fans, Rotary & Piston Blowers, Slewing Gears, Turbo Compressors, Food Machines, Plastic Moulding Machines, Winches, Textile Machines, Medium Duty Cranes, Rotary Pumps, Rotary Screens	2
Heavy Shock	Paper Machines, Stone & Clay Working Machines, Metal Rolling Machines, Metal Working Machines (Breakers, Mills, Ovens), Rubber Moulding Machines, Screw Presses, Crushers, Hammer Mills, Reciprocating Compressors & Pumps, Vibrating Screens, Rubber Calenders, Pulp Grinders	2.5

## TEAM CONSULTANTS AND ENGINEERS