

## Selection

### 1) DETERMINE THE CALCULATED TORQUE

$$\text{Calculated Torque (Nm)} = \text{Absorbed Torque (Nm)} \times \text{SF} = \frac{9550 \times \text{Absorbed power (kW)} \times \text{SF}}{\text{Speed (rpm)}}$$

Selection of Service Factor SF: see table below.

### 2) SELECT

The size of coupling whose rated torque is equal or higher than the calculated.

### 3) CHECK

That selected coupling is compatible with speeds and bores as mentioned on the tables.

APPLICATIONS	SF	APPLICATIONS	SF
<b>AGITATORS *</b>	1	<b>LUMBER INDUSTRY</b>	
		Circular rip saw	1.75
<b>CEMENT INDUSTRY</b>		Ban rip saw	1.5
Balls and rods	2	Edger, Head rig Hog	2
Hammer mill or hog	1.75	Log haul	2
Grizzly	2	Rolls, reversing	2
		Trimmer	1.75
<b>COMPRESSORS</b>		<b>MACHINE TOOLS</b>	
Centrifugal	1	Miscellaneous, auxiliary*	1
Rotary	1.25	Notching press	1.75
Reciprocating (1 cylinder, single acting)	3	Planer	1.75
" (1 cylinder, double acting)	3	Main drive	1.5
" (2 cylinder, single acting)	3		
" (2 cylinder, double acting)	3	<b>PAPER INDUSTRY</b>	
" (3 cylinder, single acting)	3	Calender	1.75
" (3 cylinder, double acting)	2	Super-calender	1.75
" (4 cylinder more, single acting)	1.75	Line shaft	1.5
" (4 cylinder more, double acting)	1.75	Cylinder, dryer, couch, press	1.75
<b>CRUSHERS</b>		Chipper	2.5
Minerals	2.5	Reel, rewinder, winder	1.5
Stone	2.5	Beater, pulper	1.75
		Jordan	2
<b>CONVEYORS</b>		Barking drums (final gearing machined)	2
Belt/screw conveyors	1	Barking drums (cast teeth gear)	2
Apron conveyors	1	Felt stretcher	1.25
Scraper	1.5		
Buckets conveyors	1.25	<b>PUMPS</b>	
		Centrifugal	1
<b>CRANES, HOISTS, ELEVATORS*</b>		Gear. Rotary or vane	1.25
Main hoist	1.75	Reciprocating (1 cyl. Dble or single act)	3
Bridge, travel or trolley	1.75	" (2 cyl. Dble act)	1.75
Mach, tools, warehouse	2	" (3 cyl. Dble act)	1.5
Grab-buckets, casting, scraps	2.5		
Filler, pits, strips, ingots	2.5	<b>RUBBER INDUSTRY</b>	
Cranes for general handling	1.75	Calender	2
Cranes for harbor and grab-buckets	2.0	Mixer (Banbury-Werner)	2.5
		External mixer, mixing mill	2.5
<b>FANS</b>		Super calender	2.5
Blowers centrifugal*	1		
Cooling tower fan	2	<b>STEEL WORKS</b>	
Forced draft with slip clutch*	1	Draw bench, wire drawing	2
Induced draft with damper control	1.25	Coilers, uncoilers (at max.torque)	1.5
Induced draft without control	2	Strengtheners flattening	2
		Wire mills	2
<b>FLOUR MILLING</b>		Rod mills	2.5
Various type	1.75	Feed rolls, Blooming mills	3
		Tube conveyor rolls	2
<b>FOOD INDUSTRY</b>			
Beet slicer	1.75	<b>SUGAR INDUSTRY</b>	
Bottling, can filling mach	1	Cane knife and crusher	2
Cookers, continuous duty	1.25	Mill stands turbines driven with helical gears	1.5
		Mill stands turbines driven with any other prime mover	2
<b>GENERATORS</b>			
Even load	1	<b>TEXTILE</b>	
With overload	2	Miscellaneous	1.5
Welder load	2	Calender, Card machine	1.5
A.C dynamo with hyd. turbine*	1	Printing cylinder	2
		<b>WOOD WORKING MACH.</b>	
		Miscellaneous	1.25

\* Only Applicable to installations with Maximum Torque less than 1.5 x Coupling Basic Torque.