Coupling selection method

Selection by kW/100 method

Step 1: Obtain required factor from Service Factor Tables

Step 2: Determine the application kW per 100 RPM:

$$\text{kW per 100 RPM} = \frac{\text{Motor kW x 100 x Service Factor}}{\text{Coupling RPM}}$$

Step 3: From Rating Tables, find a rating equal to or greater than the kW/100 RPM

Note coupling size from left hand column.

Step 4: Check maximum RPM capability.

Step 5: Check maximum bore capacity. If maximum bore is exceeded, move to larger size with adequate bore, but be sure maximum RPM of coupling is not exceeded.

Selection by torque method

Step 1: Obtain required factor from Service Factor Tables

Step 2: Determine the application Torque (N-m):

$$\text{Torque (N-M)} = \frac{\text{Motor kW x 9550 x Service Factor}}{\text{Coupling RPM}}$$

Step 3: From Rating Tables, find a rating equal to or greater than the Calculated torque.

Note coupling size from left hand column.

Step 4: Check maximum RPM capability.

Step 5: Check maximum bore capacity. If maximum bore is exceeded, move to larger size with adequate bore, but be sure maximum RPM of coupling is not exceeded.

Coupling service factors

Application (Read Footnotes)	Para-Flex	D-Flex	Grid-Lign	Gear	Disc
Agitators					
Paddle or Propeller (Vert. or Horiz.)	1.00	1.25	1.00	1.00	1.00
Screw	1.00	1.25	1.00	1.00	1.00
Blowers					
Centrifugal	1.00	1.25	1.00	1.00	1.00
Lobe	1.50	1.50	1.25	1.25	1.25
Vane	1.00	1.25	1.25	1.25	1.25
Brewing & Distilling					
Bottling Machinery, Brew Kettle	1.00	1.25	1.00	1.00	1.00
Cooker (Continuous Duty)	1.00	1.25	1.00	1.00	1.00
Mash Tub	1.00	1.25	1.00	1.00	1.00
Scale Hopper-Frequent Starting Peaks	1.50	♦	1.75	1.75	1.75
Can Filling Machine	1.00	1.25	1.00	1.00	1.00
Car Dumper	1.50	2.00	2.50	2.50	2.50
Car Puller	1.50	1.50	1.50	1.50	1.50
Clarifier	1.00	1.25	1.00	1.00	1.00
Classifier	1.00	1.25	1.00	1.00	1.00
Clay-Working Machines					
Brick Press, Briquette Mach., Clay Working Mach., Pug Mill	1.50	1.50	1.50	1.75	1.50
Compressor**					
Centrifugal. Lobe, Screw	1.00	1.25	1.00	1.00	1.00
Lobe, Rotary	2.00	2.00	1.25	1.25	1.25
Reciprocating 1 cylinder -single acting	3.50	♦	3.00	3.00	3.00
1 cylinder -double acting	3.00	♦	3.00	3.00	3.00
2 cylinder-single acting	3.00	♦	3.00	3.00	3.00
2 cylinder -double acting	2.50	♦	3.00	3.00	3.00
3 cl. or more -single acting	2.50	♦	3.00	3.00	3.00
3 cl. or more -double acting	2.00	♦	2.00	2.00	2.00
Conveyors					
Apron, Assembly, Belt, Chain, Flight, Oven	1.00	1.25	1.00	1.00	1.00
Reciprocating	2.50	©	3.00	3.00	3.00
Screw	1.00	1.25	1.00	1.00	1.00
Cranes and Hoists					
Main Hoist-Medium Duty	1.50	1.50	1.75	1.75	1.75
Main Hoist-Heavy Duty	2.00	2.00	2.00	2.00	2.00
Skip Hoist, Travel Motion, Trolley	1.50	1.00	1.75	1.75	1.75
Motion, Slope	1.50	1.00	1.75	1.75	1.75
Crushers					
Cane	2.00	2.00	2.00	2.00	2.00
Gyratory	2.50	♦	2.50	2.50	2.50
Dredges					
Cable Reel, Screen Drive, Stacker	1.50	1.50	1.75	1.75	1.75
Conveyor	1.50	1.50	1.75	1.25	1.75
Cutter Head Drive, Jig Drive	2.50	2.00	2.00	2.00	2.00
Pump, Utility Winch	1.50	1.50	1.75	1.50	1.75
Dynamometer	1.00	1.25	1.00	1.00	1.00
Elevators					
Bucket, Freight	2.00	2.00	1.25	1.25	1.25
Exciter	1.00	1.25	1.00	1.00	1.00
Fans					
Centrifugal	1.00	1.25	1.00	1.00	1.00
Cooling Tower	2.00	2.00	2.00	2.00	2.00
Heavy Duty (Forced Draft)	1.50	2.00	1.50	1.50	1.50
Induced Draft	1.50	2.00	1.50	1.50	1.50
Light	1.00	1.25	1.00	1.00	1.00
Propeller Indoor	1.50	2.00	1.50	1.50	1.50