







## Service Factors - SF

| Load Characteristics   | Electric Motor,<br>Steam Turbine<br>Gas Turbine | Steam Engine,<br>Water Turbine,<br>8 Cyl. Recip. Engine | 6 Cyl. Recip. Engine | 4 Cyl. Recip. Engine |
|--|---|---|----------------------|----------------------|
|  <b>Constant Torque</b><br>eg. Centrifugal pumps, compressors & blowers, light duty agitators and fans. | 1.0   | 1.5   | 2.0                  | 2.5                  |
|  <b>Slight Fluctuations</b><br>eg. Slurry pumps, Screw compressors, Lobe and Vane Blowers.              | 1.5   | 2.0   | 2.5                  | 3.0                  |
|  <b>Moderate Fluctuations and/or Slight Shock Loads</b><br>Double acting pumps, Recip. Comp.            | 2.0   | 2.5   | 3.0                  | 3.5                  |
|  <b>Large Fluctuations and/or Moderate Shock Loads</b><br>1 or 2 Cylinder Recip.pumps.                  | 2.5   | 3.0   | 3.5                  | 4.0                  |
|  <b>Shock Loads or Light Torque Reversals</b><br>Slitters, Rod Mill, Hot Mill                           | 3.0   | 3.5   | 4.0                  | Consult Factory      |
|  <b>Heavy Shock Loads or Large Torque Reversals</b><br>Feed Rolls, Reversing Mills                      | Consult Factory                                 | Consult Factory   | Consult Factory      | Consult Factory      |

- (1) Use a minimum Service Factor of 1.25 when driving through a gearbox or using a direct on-line electric motor.
- (2) Consult Autogard when using a Reciprocating Engine of less than 4 cylinders.
- (3) Service Factors provided are for reference only. Customer experience may dictate the selection of different Service Factors.