



### **Sleeve Bearings** **Secrets to long life**

Hydrodynamic sleeve bearings operate successfully by creating a very thin oil film between the shaft and itself thus minimizing wear on both components and carrying the load. These bearings can last a long time as long as several critical factors are properly maintained. Following are the guidelines for preventive maintenance and troubleshooting failures.

1. Overloads cause failures. Minimize them by following good operating practices.
2. Make sure that both the bearing and the shaft are properly installed with specified assembly tolerances and alignment.
3. The operational speed should be within the specified limits.
4. The lubrication oil must be within the required specifications
  - Viscosity (SSU)
  - Viscosity Index (VI)
  - Extreme Pressure (EP) additives
  - Cleanliness (contaminants below the max. allowable values)
5. Rate of oil flow (GPM) must be as specified
6. Proper dimensions and grooving for both the bearing and the shaft
7. Specified surface finishes on both the bearing and the shaft
8. Specified materials for both the bearing and the shaft
9. When taken apart for inspection, dress out any nicks and discolored areas
11. Periodically check for wear and replace the component(s) as necessary