Bearing Life

Bearing life refers to the amount of time any bearing will perform in a specified operation before failure. Bearing life is commonly defined in terms of L-10 life, which is sometimes referred to as B-10. This is the life which 90% of identical bearings subjected to identical usage applications and environments will attain (or surpass) before bearing material fails from fatigue. The bearing's calculated L-10 life is primarily a function of the load supported by (and/or applied to) the bearing and its operating speed.

Many factors have a profound effect on the actual life of the bearing. Some of these factors are:

- Temperature
- Lubrication
- Improper care in mounting resulting in:
- Contamination
- Misalignment
- Deformation

As a result of these factors, an estimated 95% of all failures are classified as premature bearing failures.

Advantages

1. Exceptional power conservation
2. Outstanding lubricating efficiency
3. Clean
4. Low cost operation
5. Ensure high machine accuracy
6. Standardized (Common worldwide)
7. Pre-loadable
8. Can be lubricated with grease

Drawbacks

- Rust easily
- Sensitive to dirt
- Require careful handling