

Principles of Bearings & Lubrication



A DIVISION OF ECPI UNIVERSITY

The Bearings and Lubrication Principles course gives you the knowledge and techniques to significantly reduce operating costs, energy costs, and extend the life of your rotating equipment. This course also includes basic coupling systems and shaft alignment.

Learn the different bearing and coupling systems, including their function, load tolerance, and operating characteristics. The various lubricant characteristics, chemistry, and proper application methods are discussed. This course will help those who have to specify, purchase, install, maintain, or repair bearing and coupling systems.

*Optional Hands-on lab: Clients may opt to include client-owned equipment that has failed to support discussions on what failed and possible root cause analysis. For example: worn bearings, gear boxes, bull gears, and worn shafts. Additional time will be required.

WHAT THIS COURSE COVERS

- Bearing Types and Nomenclature
- Bearing Selection, Installation, Pre-Loading and Alignment Considerations
- Troubleshooting and Inspecting of Bearings
- Grade and Precision of Bearings
- Shaft Bore and Housing Fits
- Lubrication Fundamentals and Selection of Grease and Oils
- Automatic Lubrication Systems
- Coupling Types, Function and Nomenclature
- Coupling and Shaft Alignment

WHO SHOULD TAKE THIS

- Facility Managers \ Facility Maintenance Technicians
- Apprentice and Experienced HVAC Technicians
- Building Engineers
- Stationary Engineers
- Persons Who Need Cross-Training On Rotating Equipment

COURSE OUTCOMES

- Learn the Different Bearing Systems, Including Proper Selection, and Installation Procedures
- Learn the Basics of Industry Testing, Specifying and Application of Lubricants
- Learn Coupling Types and Characteristics
Optional – Review of Client Equipment Failures

COURSE AGENDA

- Power Transmission Physics
- Bearings
- Lubrication
- Couplings and Alignment
- Power Transmission Formulas and Conversions



Lecture



Hands-on•

ONSITE: 2-days (16 hours)



LIVE ONLINE: 2-days (16 hours)



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