Email: info@gatewayconsulting.com | Phone: +96522968641
https://gatewayconsulting.com

SLIDING AND ROLLING BEARINGS

Start Date:	19/10/2026	**End Date:**	23/10/2026
Categories:	Engineering & Maintenan	**Venues:**	Berlin
Formats:	In Person	**Instructors:**	

OVERVIEW

This hands-on course covers the principles, applications, and maintenance of sliding and rolling element bearings. Participants will learn about load capacities, failure modes, lubrication requirements, and condition monitoring techniques to extend equipment lifespan and minimize downtime.

OBJECTIVES

By the end of this course, participants will be able to: – Identify types and functions of sliding and rolling bearings. – Understand load distribution and speed limitations. – Apply proper lubrication and maintenance practices. – Diagnose common bearing failures and implement corrective actions. – Use vibration and temperature analysis for early fault detection.

COURSE OUTLINE

1- Introduction to Bearing Types and Materials 2- Load, Speed Ratings, and Bearing Life 3- Lubrication and Mounting Procedures 4- Fault Detection and Failure Analysis 5- Monitoring Techniques and Case Reviews

TARGET AUDIENCE

All Supervisory Levels, Maintenance engineers, mechanical technicians, rotating equipment specialists, and asset reliability teams.

METHODOLOGY

Bearing assemblies, lab inspections, failure analysis, hands-on lubrication and vibration demos.

CONCLUSION

Participants will be equipped with the knowledge to select, maintain, and troubleshoot bearings in industrial applications.

DAILY AGENDA

Day 1: Types and Operating Principles

Differentiate between journal, sleeve, ball, roller, and needle bearings and their applications.

Day 2: Performance and Lifespan Factors

Learn how load, speed, and installation affect bearing life and reliability.

Day 3: Lubrication and Installation

Explore grease and oil lubrication systems, mounting practices, and fit tolerances.

Day 4: Failure Modes and Diagnostics

Examine wear, fatigue, misalignment, and contamination with hands-on samples.

Day 5: Condition Monitoring Techniques

Use sensors and vibration analysis to monitor bearing health and detect early failures.

For more information, please contact us:
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