### Workshop on

# "Bearing Failure Analysis" <mark>2-Day On-Site Program</mark>

## **About Us**

We are the training providers and deals in Technical, HSEQ, Management and Soft Skills Training.

We have highly knowledgeable and experienced local & foreign subject matter experts. Our team is highly focused and provides the best support as per your requirements and needs.

We provide a platform from where you can add value in you teams. We are highly fascinated on the development of your Technical and Management Teams.

## **About Trainer**

Mr. Khurram is our freelance trainer certified trainer and also associated with one of the most leading European Brand Bearing Manufacturers as their Country representative in Pakistan.

He is an engineer with more than 20 years' experience in maintenance, bearing failure analysis, bearing mounting & dismounting, pressure compressors, laser alignment, rotation of equipment & condition monitoring with a demonstrated working history.

He is highly skilled at designing training and technical content, training both technical and non-technical staff with an effective imparting knowledge and devise training exercises for all types of learners.

He is level II certified Application Engineering in Singapore & Spherical Roller Bearing in Malaysia. He has Master Degree in MBA. Khurram Shehzad has more than 1000 hours training hours & he is multilingual.

He has an investigative, analysis and explorative skills that keep him an active learner and encourages polishing his skills. He has distinction to conduct training sessions in almost all industrial organizations from Peshawar to Karachi.

### **Overview**

Fifteen percent of premature bearing failures are due to poor fitting and 40 percent due to inadequate lubrication or contamination. As most technical material and other training programs discuss bearings in ideal environments, this course is focused on providing a wealth of practical "best practice" advice to help you understand the issues you'll encounter in the real world.

This course provides participants with a fundamental understanding of bearing failures and their causes. The training is relevant to personnel working in maintenance, operations, condition monitoring, mechanical workshops and all personnel involved in reliability.

This course also covers foundations for Root Cause Failure Analysis (RCFA); Failure Mode and Effect Analysis (FMEA); maintenance and design as part of a successful proactive and precision maintenance strategy.

## **Course Summary**

The course objective is to provide background and methodology for analyzing failed and damaged bearings (due to noise, heat, vibration, etc.) and their components. Students will learn to uncover the true root causes of bearing damage and failures, and reduced service life.

# **Training Content:**

- **Bearing Function**
- Learn how bearing support loads
- Bearing types and their use

#### Mounting damage

- Examples of improper installation procedures

#### **Operating Environment**

- Bearing reaction to moisture, contamination and other external influences

#### Maintenance

- Results of Poor maintenance practices

### Lubrication

- Effects of marginal and excessive lubrication
- Contamination and its effect

#### Vibration/Impact Damages

- How to identify this type of damage -Implement corrective actions to avoid damage

### **Bearing** failures

- Application specific – pumps, gearboxes, motors, fans, extruders, compressors etc.

- See and inspect sample bearings that have failed – identify and interpret actual bearing failures



**Contact Us** Phone: +92 310 265 8003 Email: training@hippocampusgroup.com Web: www.hippocampusgroup.com