



BEARINGS

Presenter: Gert Booyse

ABOUT THE PRESENTER: GERT BOOYSE



Gert Booyse started in 1969 in motor and metal industry. Was a fulltime lecturer as well as after hours at various collages. Gerrie was project manager at Krygkor for 4years and from there worked at the MEIETB and MerSETA for 18 years.

Gerrie's qualifications range from various boards. Industrial training Test Certificate; Project Manager - skills program; Quality Management; Assessor (Various levels); Moderator (various levels); HIV/AIDS Laws. Gerrie holds a National Diploma (Ind Elect Eng), as well as a National Technical Diploma (Mech Eng).

Number of days: 2 Cost: R6 750 excl VAT CPD Points: 2

WHO SHOULD ATTEND

This course is ideally designed for Maintenance Engineers and Technicians, Service Engineers, Operations staff, Artisans, Managers and Reliability Engineers. Any person responsible for or involved with bearing performance and reliability will benefit from attending this course.

ABOUT THE COURSE

This course provides an introduction to bearing technology, including bearing description, terminology, different types of bearings, and typical applications. It provides an insight into design and features of bearings and includes information on lubricants, fits and tolerance's, mounting and dismounting, and discusses causes of failure and failure analysis.

AFTER THE COURSE

Attendees should be able to select bearings, make design and lubrication recommendations, understand the principals of mounting and dismounting bearings, understand fits and tolerances, and trouble shoot bearing failure.



MAIN TOPICS

Introduction to bearing Technology

- Introduction, Principals of friction
- Components, terminology, and types of rolling element bearings
- The bearing numbering system and significance of pr- fix and suffix characters
- Construction of Bearing, Components and their functions
- Material of construction
- Bearing design for misalignment compensation
- Bearing life by design
- Tools, service equipment's and Installation
- Precautions for Proper Handling of Bearings
- Inspection of Bearings

Lubricant Types, Uses and Selection Criteria

- Role of lubricating media in machine
- Bearing Lubricating oil / grease selection
- Lubricating oil property, Quality and quantity of lubricant
- Use of additives in lubricant, Effect of lubrication on Bearing life
- Selection of Lubricant in extreme weather conditions
- Calculating relubrication intervals
- Calculating relubrication quantities

Fits and Tolerance's

- The importance of Fits and Tolerances
- Learning how to select the correct fit and tolerance
- Effects of incorrect fits and tolerance's
- Fits and tolerances for different applications
- Understanding ISO tolerances

Mounting and Dismounting

- Cleaning the bearings and related parts.
- Checking the dimensions and finish of related parts.
- Mounting
- Inspection after mounting.
- Mounting of Bearings with Cylindrical Bores
- Press Fits
- Bearing Induction Heaters
- Mounting of Bearings with Tapered Bores
- Mounting of Spherical Roller Bearings with Tapered Bores
- Dismounting of Outer Rings
- Dismounting of Bearings with Cylindrical Bores
- Dismounting of Bearings with Tapered Bores

Causes of Failure and Failure Analysis

- Why do bearing fail, bearing failure stages
- Types of wear, Major signals of bearing failure
- Methods of Failure analysis
- Safety precautions that are essential for working
- Bearing Servicing procedure, Bearing check sheet
- Troubleshooting Bearing Failures and Countermeasures



Registration Form

Number of days: 2 Cost: R6 750 excl VAT CPD Points: 2

How to register for the course:

- 1. Complete this registration form and fax it to Phindi Mbedzi: Tel: 011 325 0686 Fax: 011 325 0488 Email: Phindi@2kg.co.za
- Acknowledgement will be emailed to you. 2.
- Final confirmation and details will be faxed or emailed to you approximately 7 days before the commencement of the seminar. 3.

Conditions of entry:

- Cancellations are accepted in writing and without penalty, up to 7 working days prior to commencement of the seminar. 1.
- Cancellations in writing less than 7 working days prior to the seminar will be liable to pay 20% cancellation fee. 2.
- If prior written notification of cancellation is not received, defaulter will be liable to pay 50% cancellation fee. 3.
- 4. In case of insufficient applications for the workshop 2KG reserves the right to cancel the seminar. Applicants will be informed and all fees will be refunded immediately.

Delegate information:

Title:	Surname:	Name:
Full Company name:		Job Title:
Postal Add	dress (to which invoice must be sent):	
	VAT number:	
Tel: ()	_ fax: ()
Cell:		
Contac	t/ Accounts information:	
Title:	Surname:	Name:
Tel: ()	_ fax: ()
Cell:		Email:
Dietary	Requirements: Normal	Vegetarian Halaal
Accom	modation Requirements:	Yes No
Please tick the course that you would like to attend:		
	-2 March 2016 ohannesburg, CedarWoods	15-16 August 2016 Secunda, Graceland Hotel
I have read	d and agreed to all the conditions of registratic	n as stipulated in this brochure

to all the conditions of registration as stipulated in this brochure.

Signature

Date

For more info and to register contact Phindi Mbedzi on tel: 011 325 0686 or cell: 071 125 6188 and email: phindi@2kg.co.za or visit www.2kg.co.za