MECHANICAL SEALS

Presenter: Dr. Chris Carmody

ABOUT THE PRESENTER: CHRIS CARMODY

Chris started his career as a maintenance engineer in the chemical and process industry and joined AESSEAL as the companies first full time mechanical seal designer and development engineer. Chris went on to academia for a bachelor’s degree, a master of science in structural integrity and doctoral degree on the fluid structure interaction of bioprosthetic heart valves.

He re-joined industry as a Consulting engineer and worked on many prestigious projects such as the A380 Airbus, the award winning Falkirk wheel and the new Wembley stadium. Chris returned to AESSEAL and took up the position of special products manager where he is responsible for development of high integrity sealing projects including dry gas seals.

He now has 25 years of experience in the design of mechanical seals and maintenance products and is a named inventor on many of AESSEAL product designs. In addition to his responsibilities at AESSEAL he also sits on several different bodies including the API692 Compressor Dry Gas Seal Committee and has lectured all over the world on sealing, maintenance and reliability matters.

Number of days: 2
Cost: R6 270 excl VAT
CPD Points: 2

WHO SHOULD ATTEND

This course is aimed at anyone who is responsible for or involved with the specification, handling or reliability of mechanical seals and systems. In particular Maintenance Engineers and Technicians, Service Engineers, Operations staff, Artisans, Managers and Reliability Engineers will benefit from the course content.

ABOUT THE COURSE

This course provides an introduction to sealing technology, more specifically mechanical seals and covers terminology, different types of seals, how they should be used and some typical applications. It provides an insight into design and features of different seal arrangements systems and how these can be combined to provide increased reliability of rotating equipment. There is also extensive dialogue on the causes of failure, failure analysis and failure avoidance.

AFTER THE COURSE

Attendees will significantly improve their knowledge on the correct application of mechanical seals and systems. At the end of the course attendees should be familiar with all aspects of mechanical seal and system selection and operation. Understanding of how seals work will lead to attendees obtaining improved seal reliability through trouble shooting mechanical seal failures thus leading to longer and safer operation of rotating equipment.
### MAIN TOPICS

#### Introduction to Sealing Technology
- Basic sealing theory
- Static seals
- Dynamic seals
- Face seals
- Seal terminology
- Seal standards
- Seal types

#### Seal Selection
- Materials of construction
- Seal design characteristics
- Seal face technology
- Environmental Controls
- Tandem seals
- Double seals
- Alarms and health monitoring
- Containment seals
- Mixer seal and other specialist seal types

#### Mechanical Seal Systems
- Flush plans
- Quench considerations
- Closed circuit barrier/ buffer fluid systems
- Open circuit barrier/ buffer fluid systems
- Barrier and buffer fluids

#### Dry Gas Seals
- Pump dry gas seal issues
- Pump double dry gas seals
- Pump containment dry gas seals
- Pump DGS systems
- Compressor dry gas seals
- Compressor DGS systems

#### Mechanical Seal Reliability
- Simple calculations to check your seal or system
- Seal failure analysis
- Why do seals fail
- Seal failure modes
- Failure analysis
- Troubleshooting seal failures
- Getting the most from your seals
Registration Form

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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
2. Acknowledgement will be emailed to you.
3. Final confirmation and details will be faxed or emailed to you approximately 7 days before the commencement of the seminar.

Conditions of entry:

1. Cancellations are accepted in writing and without penalty, up to 7 working days prior to commencement of the seminar.
2. Cancellations in writing less than 7 working days prior to the seminar will be liable to pay 20% cancellation fee.
3. If prior written notification of cancellation is not received, defaulter will be liable to pay 50% cancellation fee.
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 Address (to which invoice must be sent): ____________________________________________________________

Code: ___________________ VAT number: ___________________
Tel: (__________)_________________ fax: (__________)_________________
Cell: ___________________ Email: ___________________

Contact/ Accounts information:

Title: ___________________ Surname: ___________________ Name: ___________________
Tel: (__________)_________________ fax: (__________)_________________
Cell: ___________________ Email: ___________________

Dietary Requirements: □ Normal □ Vegetarian □ Halaal

Accommodation Requirements:

□ Yes □ No

Please tick the course that you would like to attend:

□ 04-05 February 2015 Secunda, Graceland Hotel □ 27-28 May 2015 Johannesburg, Cedar Park □ 02-03 September 2015 Durban, Protea Hotel

I have read and agreed 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