MECHANICAL SEALS

Presenter: Rob Waites

Rob Waites started his career as an apprentice at Mono Pumps in 1976. He completed his trade and studied further to receive his Government Ticket (Mechanical) in 1984.He spent a brief period on the commercial side of business with E. L. Bateman and NTC before returning to Mono Pumps in 1987 as Technical Manager

In 1989, together with 4 staff members of Mono Pumps, he started the new Orbit Pump Manufacturing Company in the position of Technical Director. In 1994 he moved to the UK to open a manufacturing facility for Orbit Pumps in Manchester. Robert joined AES Engineering Ltd in Rotherham UK in 1998 as Business Development Manager with South Africa being part of his remit.

He moved back to South Africa on a permanent basis in January 2000 as Managing Director of AESSEAL (Pty) Ltd, the responsibility for the entire Middle East, Africa and Australia fell under his remit and he was employed as Director/Executive Chairman for these areas. Whilst he has a passion for heavy duty slurry seals his Middle East experiences have generated a specific interest and skill in the Oil and Gas sectors.

Number of days: 2 **CPD Points:** 2

Live Virtual Classroom

2KG Training Live Virtual Courses offer participants the same instructors, training systems, course materials, personal support, and face-to-face engagement with instructors and other participants that they would expect to find in a conventional classroom.

The Mechanical Seals Live Virtual Course brings participants together in a virtual classroom, where they receive training from an expert via a live video link. Participants are interconnected via audio and video, enabling them to interact both with the instructor and with their classmates. Learners can speak to their instructor at any time to ask questions, request assistance, and instructors can provide hands-on support.

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

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Registration Form

Number of days: 2 **CPD Points:** 2

How to register for the course:

1. Complete this registration form and fax it to Phindi Chauke: 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.

Cancellation Policy:

By signing and returning the registration form, the authorizing signatory on behalf of the stated company is subject to the following terms and conditions.

- All cancellations must be received in writing
- Any cancellations received less than 7 working days before the date of the event, the full fee will be payable and the delegate can attend the next scheduled training course.
- 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: _____

Please tick the course that you would like to attend:

Conventional Classroom

☐ 26 – 27 October 2026, (2 Days)
Johannesburg
R9 900.00 (excl VAT)

Live Virtual Classroom

☐ Currently unavailable, a date to be advised (2 Days)
R7 920.00 (excl VAT)

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 Chauke on tel: 011 325 0686 or cell: 071 125 6188 and email: phindi@2kg.co.za or visit www.2kg.co.za