



EXPERIENCE THE EXCEPTIONAL



The API 682 Standard 4th Edition

Shaft Sealing Systems for  
Rotary Pumps

2019 / 2020



# AESSEAL MIDDLE EAST FZE

## Dubai, UAE

**Enrol Today!**

### ABOUT THE PRESENTER :

**Richard Smith AESSEAL Plc Director O&G Petrochem Development**



Richard Smith trained as design engineer with the Ford Motor Company working in both production and product development.

For the last 32 years Richard's has focussed on sealing technology. Joining AESSEAL in 1989, Richard and has worked within the application engineering of sealing technology.

Richard became a Director of AESSEAL in 1998 and for the past 17 years has been at the company's forefront of the Oil Gas and Petrochemical industry sectors being involved with the development of products for both upstream and downstream applications. Richard was a member of the API 682 mechanical seal task force for the current 4<sup>th</sup> edition and a current member of the forthcoming 5<sup>th</sup> edition.

Richard has had many papers published at international rotating machinery events and numerous articles published in international journals. These have predominantly focussed on the practical application of mechanical seal technology in Industry. Richard is 57 years old, lives near London England.

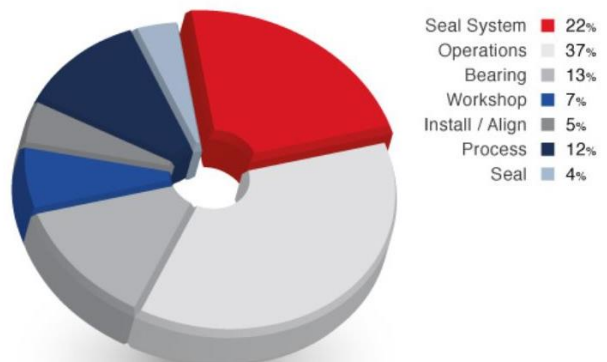
### Who should attend

Whether new to this field or a seasoned professional looking to refresh their knowledge, this course is designed to give a practical insight into improved plant reliability. The course is suitable for plant operators, maintenance personnel, purchasing personnel and Engineers.

### Reliability Enhancement

Research has proven that the biggest mechanical preventative of mechanical seal failure is the use of effective Seal Support Systems.

This means that no matter how well designed your mechanical seal or bearing systems are, without a reliable Seal Support System there is still the possibility of your mechanical seal failing. The innovative and reliable Seal Support System Range at AESSEAL® gives customers the confidence to remove this root cause of mechanical seal failure.



# Course Content

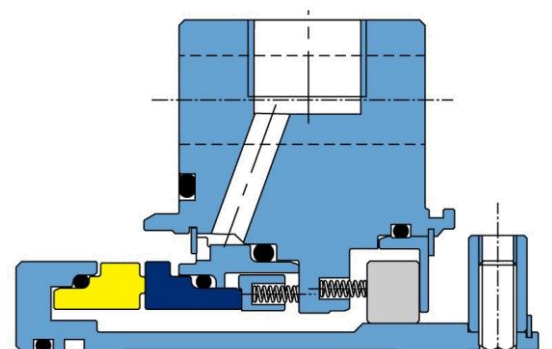
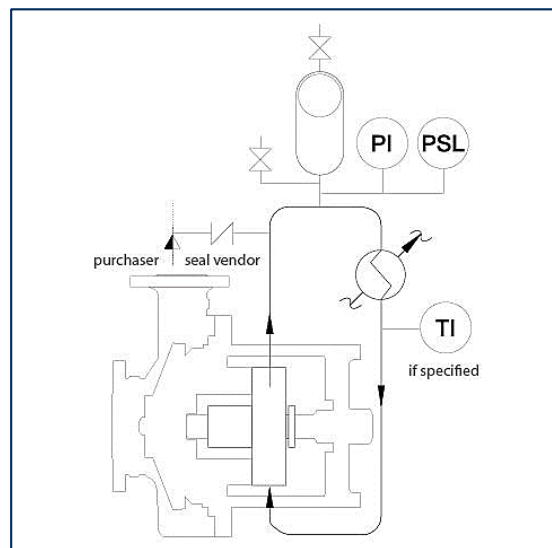
Availability of the trainers and package prices are subject to confirmation.

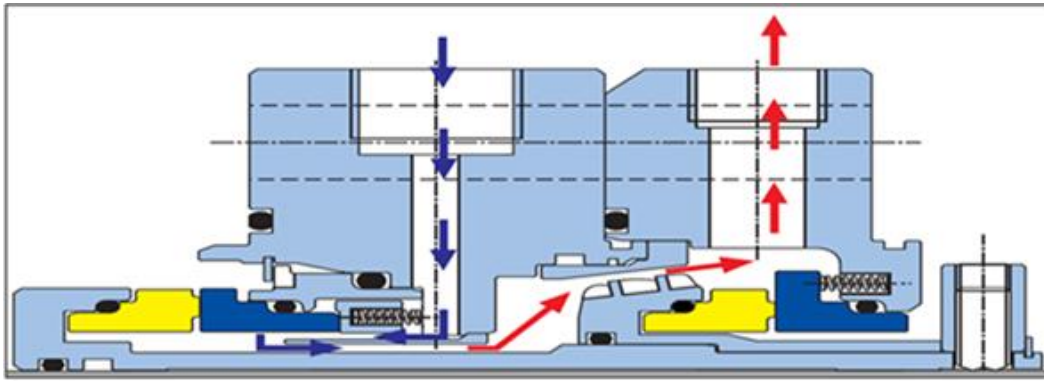
## API 682:

1. Seal selection criteria and types of seals based on application/product
2. System selection criteria based on application/product
3. API updates – latest edition
4. Type of seals with schematic drawings and its application, examples, case studies, etc.
  - a. Rotary vs. Stationary
  - b. Face-to-Face, Face-to-Back, Back-to-Back
  - c. Balance and Unbalanced
  - d. Face material selection criteria and combinations
  - e. API Seals - types, arrangements and categories
  - f. Pusher type seals and bellow seals
  - g. Types of Coolers

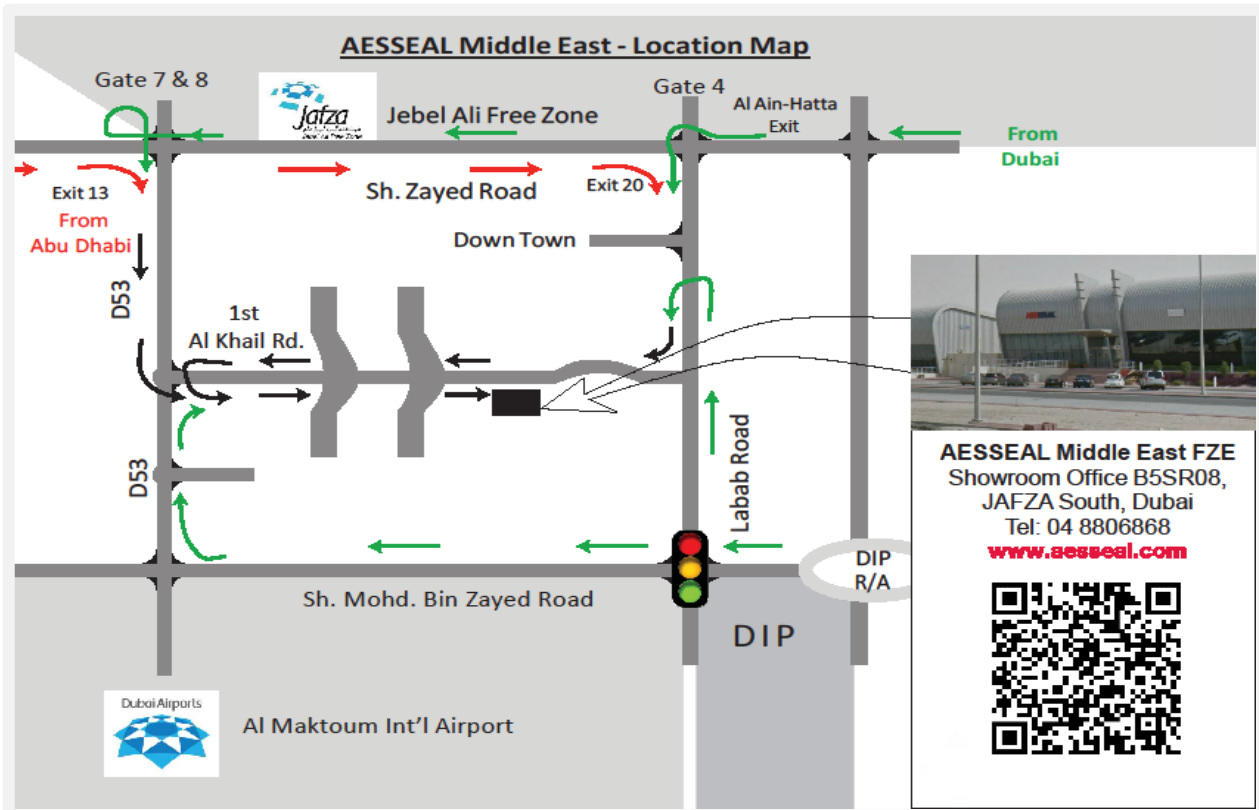
- Leakage & Emissions
- Introduction API Specs
- API 610 Pump Types
- Refineries and Petrochem Simplified
- Introduction & Objectives
- Categories
- Types
- Arrangements
- Orientations
- Nomenclature & Seal Coding
- API Plans – Process & Atmos
- API Plans – Arrangement 2
- API Plans – Arrangement 3

- Piping Issues Requirements
- Temperature & Pressure Limitations
- High Temperature Machines
- Arrangement 2 Dry Containment Seals
- Flashing HCs VPM
- Seal Chamber Pressure
- API Plan 11
- Management of Change - Hazop
- API Testing Requirements
- Product differentiation
- Types of Coolers
- System Selection Based on Application
- Seal Selection Based on Application





# AESSEAL CAPI API 682 Design



If you have any questions or want to know more information please contact us.

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