

SEAL PRINCIPLES



seals

SEARCH

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TRAINING

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engineering success together



William G. Search Ltd. value the need for training. On-site courses and toolbox talks support our products in the field. Residential courses offer focused learning away from the daily demands of maintenance and engineering professionals.

EC CERTIFIED COURSES ON:

Pump Principles

Mechanical Seal Principles

Gland Packing

Static Sealing

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All EC Certified Courses

Seal Installation

Flange Sealing

Valve Sealing

Live Loading

Toolbox Talks

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Seal Principles

- Purpose of a mechanical seal and how it works.
- Determine mechanical seal face flatness using an optical flat and monochromatic light and its importance to seal operation.
- Identify and describe the various seal parts and their functions.
- Methods to identify mechanical seals regardless of type or manufacturer.
- The advantages and disadvantages of rotary and stationary seal designs.
- The differences between cartridge and component mechanical seals.
- Identify and describe the advantages and disadvantages of split seals.
- Mechanical seal balance and its importance in seal operation.
- Mechanical seal double balance and its importance in seal operation.
- Identify and describe the materials used to manufacture seal rings
- Identify and describe the elastomers used in a mechanical seal.
- Identify and describe the metals used in a mechanical seal.
- Identify and describe the operation of a single, dual, and gas barrier seal.
- Identify and describe environmental controls available to enhance seal life.
- Ways of controlling temperature in the stuffing box to improve seal life.
- Ways to regulate the pressure in the stuffing box to increase seal life.
- Ways to remove solids from the stuffing box with or without dilution.
- Methods used to control barrier/buffer fluids for dual mechanical seals.
- Common mechanical seal failure symptoms and ways to improve life.
- Learn to properly install and maintain a mechanical seal.

