

Maintenance on Pumps, Motors & Circuits (3014)

Contact Hours

1 hour

Course Description

In your career as a water operator, you will work with many different types of pumps, motors, and circuitry. These components provide the beating heart of the water system, serving as the force that moves water through the plant for processing. This course will teach water operators how to properly work with and maintain a wide variety of pumps, motors, and circuits. This course will also identify how methods of corrosion control, proper pump safety, and the best techniques for moving pumps.

Intended Audience: Water Treatment and Water Distribution Operators

Course Objectives

After successfully completing this course, you will be able to:

- Identify the difference between breakdown, preventive, predictive, and proactive maintenance practices
- Implement appropriate safety precautions when performing maintenance
- Explain the difference between packing and mechanical seals for sealing pumps
- Recall how to properly maintain pumps, motors, and circuits
- Ensure long-term, continuous use of pumps, motors, and circuits through various maintenance techniques
- Identify the safety procedures for lifting a pump
- Recognize basic pump controls concepts
- Interpret basic bearing concepts
- Describe basic motor concepts and troubleshooting techniques

Outline

- Introduction – 3 minutes
- Maintenance and Its Role in the Water System – 5 minutes
- Pumps – 5 minutes
- Pump Maintenance – 5 minutes
- Motors – 5 minutes
- Motor Maintenance – 5 minutes
- Motor Phase Imbalance – 5 minutes
- Corrosion Control – 5 minutes
- Pump Safety Overview – 5 minutes
- Maintenance Safety – 5 minutes
- Moving a Pump – 5 minutes
- Circuits – 5 minutes
- Conclusion – 2 minutes