

Shaft and Coupling Alignment

This course is designed to provide skills in understanding a wide variety of mechanical power transmission devices and systems. There is a special emphasis on different types of coupling devices including rigid and flexible coupling devices. Different alignment methods are discussed including manual, dial indicator and laser alignment.

Objective

This course will provide the participants with the skills to:

- Gain a more in-depth understanding of mechanical power transmission systems
- Develop troubleshooting skills at the device and system level
- Proper system operations and preventive maintenance
- Alignment using manual, dial indicator and laser techniques.

Who Should Attend

This course is designed to benefit maintenance technicians, systems technicians, engineers, supervisors in maintenance or any staff involved with the support of mechanical power transmission systems.

Course Content

- Rigid coupling familiarization
- Flexible coupling familiarization
- Level 1 manual alignment
- Level 2 Dial indicator alignment
- Level 3 Laser alignment

Course length: 1 ½ days

CEU credits: 1.2

Fee: \$329



Small Engine Maintenance and Troubleshooting

This course provides an understanding of small engine fundamentals and service procedures.

Objective

This course introduces concepts, terminology, and hands-on skill in the maintenance and basic repairs of small two and four cycle engines such as used in lawn mowers, chain saws, and snow blowers and other small under 20 horsepower equipment.

Who Should Attend

This course is intended to benefit maintenance workers and do-it-yourselfers alike. Attendees will find the practical information useful to maintain small engines in working order along with diagnostic steps.

Course Content

- Different types of engine construction and principles of operation
- A comparison of different types of engines: Gasoline, LPG, Diesel
- List the advantages and disadvantages of two and four cycle engine
- Explain the importance of proper fuel-oil mixture in a two cycle engine
- Fundamentals of an ignition system
- Function of lubrication oil
- Air cooled vs. liquid cooled systems.
- Fundamentals of troubleshooting
- Use engine service manuals to determine engine specifications
- Basic engine disassembly and reassembly
- Checking engines for wear and reuse

Course length: 1 ½ days

CEU credits: 1.2

Fee: \$329



H2S Gas Awareness

The gases covered are hydrogen sulfide, hydrogen cyanide, benzene, sulfur dioxide (SO₂), and carbon dioxide. Student will make small group presentations to the class on gas awareness. A final assessment will be given to participants to ensure accuracy of learning concepts.

Objective

Students receive a pocket card upon successful completion that is required to work on an H₂S identified site. Training is good for one year, and the pocket card carries the expiration date. A Refresher class when taken prior to the expiration date is a 2-3 hour course.

Who Should Attend

This course is suitable for any person working in or around a work site with potential gas hazards. This can include gas and oil production and exploration sites.

Course Content

Training topics include:

- Requirements of the ANSI and other industry standards
- American Petroleum Institute (API) best practices
- Chemical information
- Methods of detection
- Hazard control
- Acute and chronic exposure consequences
- All types of PPE
- Toxicity, signs and symptoms
- Routes of entry and target organs
- Burning and flaring characteristics
- Developing a Contingency Plan
- Case studies

Course length: 1 day

CEU credits: 0.8

Fee: \$249

