
Fuel Cell Standards

XIV Hydrogen Safety and PPE

XIV.d Compressed Gas Safety

Overview:

Classroom and lab topics

- Cylinder type identification
- CGA fittings
- Storage requirements for compressed gases NFPA, etc.
- Storing, moving and securing commercial compressed gas cylinders
- Proper piping and regulator installation and removal
- Proper regulator operation
- Tagging of cylinders
- Reading vendor gas specifications
- Documentation requirements

Description:

Compressed gas cylinders containing flammable and inflammable gas mixtures are used throughout the automotive industry both in testing and repair. Proper handling, storage and use of these cylinders is necessary for the safety of the user, those around them and the vehicle being repaired or tested.

Outcome (Goal):

Student will be able to identify cylinders and pressure rating, the proper fittings and regulator for use and certification of the cylinder. The student will also demonstrate proper handling and utilize the required PPE.



Objective:

Students shall be able to:

1. Identify cylinders type, content and pressure rating
 2. Select the proper fittings and regulator
 3. Verify pressure test certification of the cylinder.
 4. Demonstrate proper cylinder handling and restraint
 5. Describe the required PPE
 6. Explain vendor gas specifications and documentation requirements
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Task:

Students will

1. When given several different commercial cylinders they will identify cylinder type, contents and pressure rating
 2. Verify the pressure test recertification date of the cylinders
 3. Demonstrate proper handling of various sizes of cylinders
 4. Describe the PPE requirements for safe operation
 5. Determine the quality of the gas based on supplier specification
 6. Use a chart to identify different CGA fittings and their application
 7. Select the proper fittings and regulator
 8. Install, operate and safely remove a pressure regulator
 9. Interpret and articulate vendor gas specifications
 10. Explain compressed gas safety when provided specific documentation
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