
Overview

This standard identifies the competencies you need to prepare plant, equipment and infrastructure for hydrogen product storage.

You will prepare and demonstrate that you can obtain work permits and permissions, plan and import hydrogen products into the storage facility and communicate with relevant stakeholders in line with all required customer, organisational and legal requirements.

This could include individuals working in the following industries, Chemical, Petro-Chemicals, Storage and Energy production.

Please Note:

This Standard now covers large and small-scale storage of Hydrogen Products.

Performance criteria

You must be able to:

- P1. use all necessary safety equipment in line with organisational and legal requirements
- P2. obtain the necessary work permits, clearances, and isolation permissions before entering the work area, in line with organisational and legal requirements
- P3. handle hydrogen storage tanks safely in line with organisational and legal requirements.
- P4. plan for import and storage conditions in line with customer's requirements
- P5. carryout pre-storage inspection of the import equipment and storage tanks in line with organisational and legal requirements
- P6. report any defects or non-conformity following organisational and legal requirements
- P7. take appropriate action to restore import equipment and storage tanks to standard operating conditions in line with organisational and legal requirements
- P8. prepare import equipment and storage tank to receive the hydrogen product to meet organisational and customer requirements
- P9. complete relevant documentation for starting and maintaining the import and storage in line with organisational and customer requirements.
- P10. communicate information to the appropriate stakeholders within and outside the company in line with organisational, customer and legal requirements.
- P11. manage and maintain hydrogen storage area and storage conditions in line with organisational and legal requirements

Knowledge and understanding

You need to know and understand:

- K1. the safety equipment necessary for safe hydrogen production, including personal protective equipment (PPE), alarms, and monitoring devices
- K2. the requirements for work area access, isolation permissions, working with gases, fire protection and extinguishing requirements for a hydrogen production environment to meet organisational and legal requirements
- K3. the safe working practices for handling hydrogen storage tanks to meet organisational and legal requirements
- K4. how to obtain customer's requirements for hydrogen import and storage
- K5. the importance of selecting the correct import and storage conditions to meet customer requirements
- K6. how to conduct a pre-storage inspection, including corrosion inspections, filter checks, differential pressure, gas leak, meter checks, pressure, temperature, and visual inspection of relief vents
- K7. the procedure for reporting defects or non-conformity to meet organisational and legal requirements
- K8. how to restore import equipment and hydrogen storage tank to standard operating conditions to meet organisational and legal requirements
- K9. the process and organisational requirements for preparing the storage tank to receive the hydrogen product
- K10. the documentation requirements recording the status of the equipment for starting and maintaining operating conditions for import and storage of the hydrogen product
- K11. how to communicate effectively with stakeholders within and outside the company to meet organisational, customer and legal requirements
- K12. the importance of efficiently managing hydrogen storage conditions to meet organisational and legal requirements.
- K13. the importance of effectively managing potential venting or boil-off incidents

COGHS001

Prepare plant, equipment and infrastructure for hydrogen product storage



Developed by Cogent

Version Number 2

Date Approved 30 Mar 2023

Indicative Review Date 30 Mar 2028

Validity Current

Status Original

Originating Organisation Cogent Skills

Original URN COGHS001

Relevant Occupations Engineering and Manufacturing Technologies, Manufacturing Technologies, Process Control Technician, Professional Occupations

Suite Processing Industries Operations

Keywords prepare, plant, equipment, infrastructure
