

Gas hazardous situations → repair , inspection and maintenance of isolation valves at gas hazardous areas

Safety requirements:



- Operability of automatic locking out and alarm systems has to be checked according to use specification not less than once per month. Inspection with dismantling and cleaning (replacement) of the main details has to be fulfilled annually.
- Cutting out of some gas pipeline sections for inspection and repair of isolation valves has to be fulfilled with sectoral valves or goggle valves. Closing plates of sectoral and goggle valves have to be designed to resist appropriate gas pressure with regard to gas pipeline diameter, meanwhile thickness of a valve has to be not less than 4 mm.
- Operability of isolation valves has to be checked not less than once per quarter.
- Gas pipelines, support structures and isolation valves have to be visually inspected along the whole pipeline route not less than once per day.
- Places of location of isolation and control valves have to be lighted. Lighting has to be explosionproof.
- Outside surfaces of isolation and control valves have to be colored in alert color. Each one-type device has to have its own identification number.
- Permanent conductive paths have to be installed round about flange coupling.
- In the course of repair and inspection of isolation valves, equipped with electric control devices, electrical circuitry has to be disassembled and isolation procedure has to be fulfilled.

Check-list

- ☆ Ⓝ Ⓝ Has proper written work-permit been prepared for repair and inspection of isolation valves?
- ☆ Ⓝ Ⓝ Was a safety briefing on hazardous works organized?
- ☆ Ⓝ Ⓝ Are gas protective equipment and gas detectors available?
- ☆ Ⓝ Ⓝ Are sparkles tools in good order available?
- ☆ Ⓝ Ⓝ Does a place of location of isolation valves comply with safety requirements?
- ☆ Ⓝ Ⓝ Are places of location of isolation valves lighted?
- ☆ Ⓝ Ⓝ Does ID number of repaired (inspected) isolation valves comply with the ID number in a work-permit.
- ☆ Ⓝ Ⓝ Is electrical circuitry disassembled?
- ☆ Ⓝ Ⓝ Is repaired (inspected) isolation valve disconnected from operating gas pipeline with sheet blind flange or sectoral valve?
- ☆ Ⓝ Ⓝ Do flow-bys exist at places of connection of isolation valves?
- ☆ Ⓝ Ⓝ Do cracks at isolation valves body exist?
- ☆ Ⓝ Ⓝ Are conductive paths installed round about flange couplings of isolation valves?
- ☆ Ⓝ Ⓝ Are all bolts installed at flange couplings of isolation valves?
- ☆ Ⓝ Ⓝ Is gland sealing installed at connection joints of isolation valves?
- ☆ Ⓝ Ⓝ Are drive mechanisms of isolation valves lubricated?
- ☆ Ⓝ Ⓝ Are control devices of isolation valves unbroken and operable?
- ☆ Ⓝ Ⓝ Are terminal switches of isolation valves adjusted and operable? (for equipment with electric drive)
- ☆ Ⓝ Ⓝ Are automatic lockout and alarm systems operable?
- ☆ Ⓝ Ⓝ Has coloring been fulfilled?

This document has to be used as a help before starting the work or performing a SFA