General Valve Safety Warnings

Marshall Excelsior Company (MEC) would like to provide you with information regarding the hazards associated with Liquefied Petroleum Gas (LPG) and anhydrous ammonia (NH3) equipment. In the interest of safety, only personnel trained in the proper procedures, codes, standards, and regulations of the LP-Gas or NH_3 industries should install and service equipment that handles these products.

All MEC products must be installed and maintained in accordance with NFPA 58 "Liquefied Petroleum Gas Code", NFPA 59 "Utility LP-Gas Plant Code" for LPG, and ANSI/CGA G-2.1 for NH3, as well as all other applicable state, federal and local requirements. For installation in the Europeean Union, the equipment must also comply with PED/TPED and EN ISO standards. Periodic inspections, intermediate inspections and exceptional checks of transportable pressure equipment should be carried out in accordance with the Annexes of Directive 2008/68/EC and with 2010/35/EU Directive (TPED) to ensure continued compliance with their safety requirements.

MEC products are mechanical devices that are subject to wear, contaminants, corrosion, and aging of components made of materials such as rubber and metal. Over time these devices will eventually become inoperative. The safe service life of these products is affected by the environment and conditions of use that they are subjected to. MEC products have a long record of quality and service, so managers and service personnel must keep in mind the hazards that can arise from using aging devices that have outlived their safe service life.

!WARNING!

Contact with, or inhalation of liquid propane, anhydrous ammonia, and their vapors can cause serious injury and death! NH3 and LPG must be released outdoors in air currents that will ensure dispersion to prevent exposure to people and livestock and in accordance with local regulations. LPG must be kept far enough from open flame or other sources of ignition to prevent fire or explosion! LPG vapor is heavier than air and will not disperse or evaporate rapidly if released in still air!

An abundant supply of clean water must be readily available and easily accessible as a means of providing IMMEDIATE First Aid treatment for exposure to anhydrous ammonia.

WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm

!CAUTION!

- Always wear suitable eye protection, gloves and protective clothing when operating or servicing LPG and NH3 equipment.
- Check seals, seats and threads for wear and damage before use. Repair or replace all defective parts immediately.
- Always completely relieve system or line pressure prior to servicing equipment and plumbing.
- Use a suitable sealant on tapered pipe joints and always pressure test for leaks prior to returning to service.
- Always replace protective dust caps after use.
- To prevent the accidental opening of any valve, never carry or grasp a valve by its handle or handwheel.
- To prevent accidental discharge, introducing contaminants and premature wear, never intentionally drag or drop a hose end valve.
- When making an ACME valve connection, use only the special wrenches designed for this purpose.
- Regular inspection and maintenance is essential for continued safe operation.
- If a leak is detected during valve operation, immediately stop the operation and follow procedures to correct the leaking condition.

General Valve Usage and Information

- All MEC open/close valves are are rated for maximum operating pressure of 400 psi (27.6 bar) and a temperature range of -40°F to 212°F (-40°C to 100°C) unless otherwise specified. Do not exceed these parameters during valve operation.
- All open/close valves are marked for intended flow direction and/or inlet and outlet where applicable; if a mark is not present, the valve can be used in any orientation.
- Unless otherwise specified, all open/close valves operate on Clockwise to close, and Counter-clockwise to open
- Open/close valves with non-metal seals are marked with a part number series and a date code indicating the time of manufacture.

Hose End and Filling Valves

Follow this procedure on every filling application in order to prevent hazardous conditions:

- Check hose end valve and filler valve for foreign materials and, if present, remove with extreme care. If foreign material cannot be safely removed, do not proceed with filling and replace valve.
- Make sure the Acme connector easily spins on by hand. Never use hammers or pipe wrenches to tighten Acme connections.
- Before disconnecting a filler valve, close both the filler and hose end valve tightly and vent the trapped gas by (a) using the vent on the hose end valve or (b) slightly loosening coupling nut to vent the gas before disconnecting. Loosen the filler valve very slowly. If the gas does not stop venting, then there is a leak in the filler valve or hose end valve. Do not disconnect the filling connector. Make sure you are familiar with your companies' procedure for handling this hazardous situation and follow it carefully.

Back Checks and Valves with Back Checks

Back checks limit flow to one direction. They are not intended to be a primary shut-off. Always fully close shut-off valves equipped with back checks when not in use.

Excess Flows and Valves with Excess Flows

Excess flows check closed when their rated flow is exceeded. Always fully open a shut-off valve with an excess flow when in use.

Quick Acting Filling Valves

Inspect valves daily to ensure locking mechanism is working properly.

There are developing trends in state legislation and proposed national legislation making the owner of products responsible for replacing products before they outlive their safe service life. LP-Gas dealers should be aware of such legislation as it affects them.

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