

Compressed Gas ER Equipment

May 2022

ER Techniques for leaking cylinders

Shut Valve Repair Valve Containment (Emergency Containment Vessels (ERCV), Capping Kits (Chlorine Kits) Isolate and Divert (Leaker Cabinet) Transfer into Empty Cylinder Cold Coil

Cascade

- Pressure Push
- Vapor Condensation

Dispose

Dilution Vent Flare Solubilize into Liquid Hydrolyze Chemically Neutralize

Compressed Gas ER Kit

Vaportight cap and gasket kit ER Universal DISS 600 and 700 Connector (If applicable) Manual Cylinder Valve Handle Adapters

Ceodeux Pneumatic Cylinder Valve Manual Override





Fiberoptic Camera/scope





Leaker gas cabinet Portable Leak Detection Cylinder cap wrench or strap wrench

Vaportight Cap and Gasket ER Kit

- 1. Vaportight Cap Kit allows for the quick mitigation of a valve seat leak
- 2. Contains 2 each of the most common CGA outlet cap/plugs
- 3. Contains 2 of the most common CGA gaskets
- 4. Secondary seal for cylinder valve

Manual Cylinder Valve Handle Adapters

Allows team to close a cylinder valve when the cylinder connection is leaking and on fire



Leaker Gas Cabinet

The IFC requires the placement of a leaker cabinet for toxic gases. If a cylinder leak is discovered, it would be immediately placed in it and the supplier notified. Empty gas cabinet that is exhausted to a treatment system that will contain a leaking cylinder until a decision is make what to do with it

Emergency Response Containment Vessel (ERCV)

can be used to contain and transport high pressure leaking gas cylinders Cylinder Containment Vessels have become an indispensable tool for leaking cylinders.



- 1. Designed and fabricated to ASME Pressure Vessel, Section 8, Div 1 Specifications
- 2. Painted SA 106 Grade C Carbon Steel (304 Stainless Steel optional)
- 3. Quick Opening Flange by Tube Turns with Double O Ring Seal (Viton inner and Buna N outer)
- 4. Crank Handle Flange Closure
- 5. 12" diameter x 78 3/4" long (Overall Pressure Vessel) (30.5 cm dia x 200 cm)
- 6. Cylinder Slide Rails
- 7. Usable Inside diameter of 10 ½" (26.7 cm)
- 8. Working Pressure 1100 psig (76.8 bar) @ 130oF (54.4oC)
- 9. Internal Volume 33 gallon (131 liter)
- 10. 2 Stainless Steel Swagelok Bonnet Valves (Vent & Purge)
- 11. 2000 psig (138.9 bar) Stainless Steel Pressure Gauge

In the US the primary ERCV suppliers are

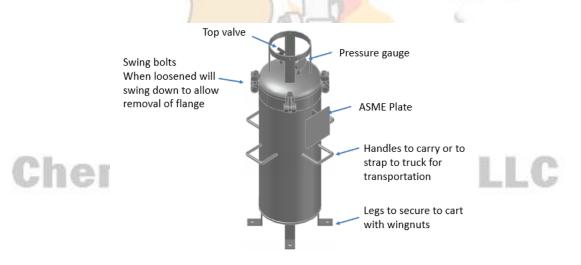
- 1. Sigri
- 1. Solkatronic/Air Products
- 2. IES
- 3. JD Cousin Chemically Speaking LLC





Can safely hold a 50 liter cylinder with pressures greater than 2400 psig since the internal volume is 131 liters or larger

ERCV for pyrophoric or water reactive liquids. Can hold a 20 liter container. Has flow through purge system from bottom to top.



Hoist, toolbox, nitrogen cylinder

- 1. Designed and fabricated to ASME Pressure Vessel, Section 8, Div 1 specifications
- 2. 304 Stainless steel with beadblast finish
- 3. Quick opening flange with Buna N O-ring seal
- 4. Swingbolt closure
- 5. Internal volume 53 liters (14 gal)
- 6. 2 Needle valves for venting and purging



- 7. 8 bar (100 psi) stainless steel pressure gauge
- 8. Can hold a container up to 28 cm diameter x 71 cm high (11"x28")
- 9. Working pressure: 4.5 bar @ up to 54°C (50 psig @ up to 130°F)



Y Capping kit for NH_3 , DCS, CI_2

