Stainless Steel 4BW Exempted Cylinder / Receptacle

The Columbiana Boiler Company (CBC) manufactures a range of stainless steel cylinders designed to handle the most aggressive liquids and gases, including poisonous-by-inhalation (PIH) gases of Class 2 (Div. 2.3) or PIH liquids of Class 6 (Div. 6.1).

In addition to being approved as a US DOT specification cylinder, the cylinders can be approved up to UN1A1/X2.0/3440 as a performance-based packaging for liquids. The use of UN-approved packagings is authorized by the IMDG Code for international sea transport and by RID/ADR for European land transport (i.e. road and rail).

In addition to hypergolic propellant, Columbiana stainless steel cylinders can be used to transport all commodities authorized for transport under Title 49 of the Code of Federal Regulations (CFR) in a 4BW cylinder. The cylinders can be easily handled by their fork-lift pockets and/or lifting slots.
High Purity

Cylinders are manufactured at Columbiana’s ASME and AAR approved facility. Each cylinder must meet Columbiana’s rigorous quality control program. Additionally, as required by US DOT regulations, production cylinders must pass hydrostatic pressure tests at two times (2x) and four times (4x) their service pressure without bursting and/or defects.

Cylinder Specifications

- **Water Capacity:** 5 - 119 uswg 19 - 450 liters
- **Service Pressure:** 225 - 500 psig 15.5 - 34.5 bar
- **Material:** 300 series stainless steel to SA 240
- **Construction Standards:** Conforms to US DOT Spec 4BW as exempted by DOT SP-11580 (to allow for the use of stainless steel instead of carbon steel)
- **Service Equipment:**
  - 1/4” to 1” ball or plug valves on the gas and liquid lines
  - 1” to 2-1/2” plugged clean out port.
  - Pressure relief devices provided when required.
- **Tare Weight:**
  - 5 uswg (19 liter) - 111 lbs (50 kg) @ 500 psig (34.5 bar)
  - 55 uswg (210 liter) - 300 lbs (136 kg) @ 500 psig (34.5 bar)
  - 119 uswg (450 liter) - 800 lbs (360 kg) @ 500 psig (34.5 bar)
- **Secondary Containment:** Secondary containment using pressure tight lids to 58 psig (4.0 bar) around the valving available.