PST Technical Bulletin D101

Retesting DOT-E9791 or TC-SU4349-241 Advanced Technology Cylinders Revised 3/20/2000

High pressure steel SCUBA cylinders manufactured by PST must be reinspected and retested at least every five years in accordance with the Code of federal Regulations Title 49 CFR 173.34 (US) or CSA B339 (Canada).

PST high pressure (3,500 psi.) cylinders must be retested in accordance with DOT-E9791 or TC-SU4349 and have special test requirements based on their design and the DOT/TC requirements. This bulletin provides the necessary information.

- 1. The retester must have a current copy either DOT-E9791 or TC-SU4349.
- Use a test adapter that matches the MS 16142(SH) port in the cylinder. Hydrotest Products Part No. 100-58 with o-ring is a suitable adapter. Adapters designed for 4,500 psi. Fireman's cylinders may not seal properly and should not be used.
- 3. The test pressure is 5,250 psi. DOT requires a test pressure of 3/2 times service pressure for all newer designs.
- 4. The wall calculations of CGA-C6 are not applicable to these high-strength steel cylinders. For the purposes of inspection criteria, the minimum wall for a new cylinder is 0.179 inch, the estimated actual wall at time of manufacture is 0.195 inch and the minimum wall in service is 0.172 inch.
- Almost all PST high pressure SCUBA cylinders are hot-dip galvanized for protection from corrosion. Specific procedures must be followed for cylinder preparation and retest checks to obtain accurate results in retesting hot-dip galvanized cylinders. These are described in <u>PST Bulletin D100, Procedures for Hydrostatic Retesting for Hot Dip</u> <u>Galvanized Scuba Cylinders.</u>

Following these procedures will assure an accurate retest for PST SCUBA cylinders. If you experience any difficulty in obtaining acceptable readings, please contact PST SCUBA customer service.

These bulletins are provided free to all retesters approved by the US DOT or Transport Canada.