

Powertech Labs Inc.
12388 88th Ave., 27 (604) 590-7500
12388 88th Ave., 18 (604) 590-5347
12388 88th Ave., 19 (604) 590-5347

Project number 14121-34

Prepared for: Nuvair Model: NCC-2

Part Type: 2 Cylinders S.C.B.A Filling Enclosure

Serial Number: NA Part Data: NA

Test Conducted:

The following test was conducted in accordance with: NFPA 1901

Test Procedure:

A finishing enclosure containing two 4500PSI S.C.B.A. cylinders (one pristine and one flawed) was provided for an aerostatic burst test (figure1) The flawed cylinder was subject to a straight longitudinal cut in the composite fiber overwrap 4 in. long and 0.0275 in. deep (sufficient depth to ensure the cylinder ruptured at 4500 PSI)

One pristine cylinder was filled to service pressure prior to the test and installed in the enclosure. A second flawed cylinder was left empty and pressurized pneumatically at a constant rate until rupture. Damage to the remaining cylinder and enclosure were determined visually and documented using photographs.

Test Results:

The enclosure sustained no damage as shown in figure 2.

It was determined the enclosure provided sufficient protection to the filling operator by containing any fragmentation and redirecting the pneumatic release away from the operator.





Figure 1: 2 cylinder enclosure before cylinder rupture

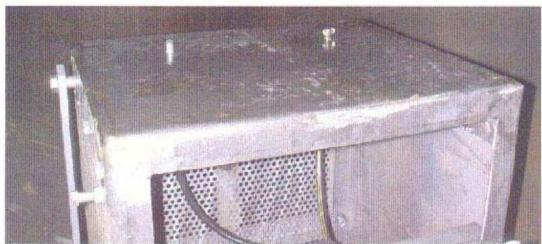


Figure 2: 2 cylinder enclosure after cylinder rupture

Philip Horacek, E.I.T.

Date: April 4, 2003

Approved By:

Craig Webster, P.Eng

PH)