

NFPA 1901 Standards

23-9.4 Testing and Certification.

23-9.4.1 The manufacturer of the enclosed air refill station shall test a standard production model. The test shall include pressurizing a 1-hour SCBA cylinder rated at a gauge pressure of 4500 psi (31,027 kPa) to failure. If the system provides for simultaneously refilling of multiple cylinders, the other chambers shall contain air cylinders of equal size filled to a gauge pressure of 4500 psi (31,027 kPa) during the test. These cylinders shall not rupture during the test.

23-9.4.2 The testing shall prove that the air refill station is capable of containing all fragments of a failed cylinder so as to protect the operator and not rupture cylinders in adjacent chambers and prove that the venting provisions are adequate to direct the air concussive release away from the operator.

23-9.4.3 All test results shall be certified by an independent third-party testing organization.

23-9 SCBA Fill Station.

23-9.1 If SCBA or SCUBA air cylinders are to be refilled from a vehicle-mounted air system, the system shall meet the following requirements:

- (1) The system shall fully enclose the cylinder during filling to contain the fragments if a cylinder ruptures.
- (2) The system shall fully enclose the refill lines to the cylinders.
- (3) The system shall direct the concussive air blast away from the operator and bystanders. A fill station within an enclosed crew area shall have provisions to vent the concussive air blast to the exterior of the vehicle.
- (4) A means shall be provided to prevent SCBA or SCUBA cylinders from being refilled unless the system is in the cylinder fill operation position,"
- (5) A warning sign shall indicate the hazards inherent in the operation of filling SCBA or SCUBA cylinders.