STANDARDS AUSTRALIA

Australian Standard
Gas cylinders

Part 5: Filling, inspection and testing of refillable cylinders

1 SCOPE

This Standard specifies requirements for the filling, inspection and testing of refillable gas cylinders for the storage and transport of compressed and liquefied gases, of water capacity ranging from 0.1 kg to 3000 kg.

This Standard does not apply to the following:

(a) Acetylene cylinders.

(b) Closed cryogenic receptacles.

(c) Cylinders forming part of aircraft equipment and used solely in aircraft other than as a reference made in a direction pursuant to the Civil Aviation Regulations.

(d) Pressure drums or vessels constructed to a pressure vessel standard.

The requirements for gas cylinders in fire extinguisher systems and fire extinguishers, apply only where suitable requirements are not given in another Australian Standard.

NOTES:

1 The term 'cylinder' is used interchangeably with 'gas cylinder' in this Standard.

2 AS 2030.1 sets out requirements for design, verification and manufacturing of all gas cylinders.

3 AS 2030.2 sets out requirements for compressed dissolved acetylene.

4 AS 2030.4 sets out requirements for closed cryogenic receptacles (formerly called welded cylinders-insulated).

2 REFERENCED DOCUMENTS

A list with titles of the documents referred to in this Standard is given in Appendix A.

3 DEFINITIONS

For the purpose of this Standard, the definitions in AS 2030.1, and those below apply.

3.1 Automatic fill limiter (AFL) valve

A device in the filling system which automatically shuts off the filling when a pre-determined level in the gas cylinder has been reached.

3.2 Filling ratio definitions

3.2.1 *Filling ratio*

The ratio of the mass of gas to the mass of water at 15°C that is filled in a gas cylinder ready for use.

3.2.2 *Maximum filling ratio*

The maximum ratio of the mass of gas to the mass of water at 15°C that is permitted to be filled into a gas cylinder by Table 3 or 4 or the cylinder design.