

Approved fillers for industrial gases

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Purpose

The purpose of this document is to set out requirements of the Hazardous Substances (Compressed Gases) regulations to the circumstances of approved fillers for industrial gases in the following areas:

- Training of approved fillers
- Filling of acetylene cylinders
- Filling of foreign aircraft and ship cylinders for use overseas
- Filling of export cylinders
- Bulk gas delivery drivers

Scope

The scope of this document is limited to the activities of members of the Australia New Zealand Industrial Gas Association (**anziga**) in New Zealand. These companies are termed Gas Suppliers in this document.

- Full members of anziga are engaged in the manufacture and distribution of gases used in manufacturing, construction, processing, food, hospitality, scientific, medical and other industries.
- Approved fillers for industrial gases are responsible for charging or filling gas containers. (Filling of gas containers is defined as loading or filling a compressed gas container, including pumping, pressure transferring, decanting or gas transferring between gas containers).

Training Approved Fillers for industrial gases

Every person charging a gas container must be an approved filler. Each filler receives specific training on the hazards and risk control measures associated with the pre-determined gas groups.

As practical experience is an integral part of the training process, trainee fillers for industrial gases are allowed to fill gas cylinders under the staged supervision of an Approved Filler. It is expected that a trainee filler will be certified within the timeframe required.

Staged supervision

Staged Supervision consists of direct supervision (Approved Filler present at all times) followed by indirect supervision (Approved Filler in the vicinity) and followed by general supervision (Approved Filler is on site). The timing of the delivery of staged supervision is expected to be as follows:

- Direct Supervision (Approved Filler present) – 25% of the training period (i.e. 1st week of a 1 month timeframe)
- Indirect Supervision (Approved Filler in vicinity) – 25% of the training period (i.e. 2nd week of a 1 month timeframe)

- General Supervision (Approved Filler available) – 50% of the training period (i.e. the last 2 weeks of a 1 month timeframe)

The above training regime applies to fillers of LPG cylinders within the scope of this document.

Filling acetylene cylinders

The filling of Acetylene cylinders has unique requirements for the hazards associated with acetylene. An Approved Filler for acetylene cylinders must have a Test Certificate with specific mention of Acetylene.

Acetylene cylinders are to be filled only by approved fillers for compressed gas production with a specific mention of acetylene, or be under staged supervision by such an approved filler.

Filling LPG cylinders

The filling of LPG cylinders has requirements set out by the LPG industry, including a special regime for the training and certification of LPG fillers. An Approved Filler for LPG cylinders is to be certified in accordance to the LPG industry approved practice guide, and must have a Test Certificate with specific mention of Liquefied Petroleum Gas (LPG).

LPG cylinders are to be filled only by approved fillers for compressed gas production with a specific mention of Liquefied Petroleum Gas (LPG), in accordance with LPG industry approved practice guide.

Filling foreign aircraft and ship cylinders for use overseas

A foreign Aircraft or ship cylinder is normally brought in for refilling with the intent to use on board or outside of New Zealand. The likelihood of these cylinders requiring to be filled more than once in their lifetime in New Zealand is remote.

Clearance

An aircraft or marine cylinder that is not registered in New Zealand (i.e. no LAB No.) does not require an importation clearance before filling.

Marine acetylene cylinders

These cylinders must pass an examination before filling, as described in the following industry procedure:

- ANZIGA Procedure 144-002 *Examination of Acetylene Cylinders Part 2: "Marine" Seamless Shell Type*

Filling export cylinders

An export cylinder is normally brought in for refilling with the intent to use outside of New Zealand. These cylinders require filling more than once in New Zealand. Many of these cylinders will be of a design that is already registered in New Zealand. It would not be practical to identify the design verification number applicable to a given cylinder design, especially if the cylinder has been registered by another statutory authority.

It is also not practical to carry out an initial Laboratory marking complying with the requirements in AS2337.1 as this requires a suitable Periodic Tester to verify through available documentation that the cylinder design has been verified and the design specification and the

manufacturing documentation is available and held in New Zealand. A cylinder for use outside of New Zealand can be filled providing the following requirements are met.

Requirements for cylinders other than insulated welded cylinders

- The cylinder is of a type and construction suitable for its intended contents.
- The cylinder has sufficient markings to establish the design standard and hydrostatic test pressure and these comply with AS2030 requirements.
- The cylinder is subject to a thorough external examination in accordance with AS2337.1 and found to be acceptable.
- The cylinder markings indicating that an international inspection by an international organisation has taken place and the cylinder is within the maximum elapsed period between inspections required by Hazardous Substance (Compressed Gases) regulation (Part 7).
- The cylinder is subjected to any other test or inspection the gas supplier deems necessary to ensure the cylinder is safe to fill.

Requirements for insulated welded cylinders

- The cylinder has in a readily observable location a label identifying the cylinder contents by name.
- The stamping indicates the design code to be DOT 4L or equivalent.
- The cylinder is marked with all markings required by specification DOT 4L or equivalent.
- Outlet connections are appropriate for intended contents.
- There is no evidence of damage, cold spots or maltreatment of the cylinder or fittings.
- The cylinder fittings and safety devices include all of the following: a pressure relief valve, a bursting disc, a pressure gauge, a safety valve for the vacuum chamber.
- The cylinder and its fittings are subjected to any other test or inspection the filler deems necessary to ensure the cylinder is safe to fill.

Note: Any cylinder which does not comply with these requirements is to be tagged unsuitable for filling and returned to its owner.

Bulk gas delivery drivers

Bulk gas delivery drivers are required to be Approved Fillers for the gases delivered by them.

Yours sincerely,

The Australia New Zealand Industrial Gas Association



Approval of this position

Jean Pierre Rossi:

Signature

Date

Colin Isaac:

Signature

Date

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