

**SINGAPORE STANDARD**

**Code of practice for the filling, inspection,  
testing and maintenance of containers for  
the storage and transport of compressed  
gases**

– Part 1 : Seamless metal containers for gases,  
excluding dissolved acetylene

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The Mechanical Standards Committee appointed by the Standards Council consists of the following members:

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## Foreword

This Part of the Singapore Standard Code of Practice was first prepared in 1980 and was meant to introduce a common basis for the apparatus, materials and techniques used for the operations described. It is intended that adherence to the code will enable these operations to be performed safely and result in an end product which will be safe to handle when used with the normal precautions. CP 12 consists of two Parts as follows:

- (a) Part 1 : Seamless metal containers for gases, excluding dissolved acetylene
- (b) Part 2 : Containers for dissolved acetylene

This Part was revised in 2000 to bring its contents up-to-date with current industrial practices and to enhance safety in the storage and transportation of compressed gas containers.

This revision is primarily based on BS 5430 : Part 1 : 1990 and is implemented with the permission of British Standards Publishing Ltd. Reference was also made to the Factories Act and ISO 11113 : 1995. Where necessary and appropriate, some of the adopted clauses were amended to suit local requirements.

In this revision, the major variations from the 1980 edition are as follows:

- (a) The inspections prior to, during and after the filling have been given further elaboration;
- (b) Filling station, testing station and Competent Person are introduced in the code to streamline their responsibilities;
- (c) For containers carrying permanent gases with dew points not higher than  $-46^{\circ}\text{C}$  at 1.013 bar, the maximum interval between internal inspections with hydraulic test has been extended from 5 years to 10 years (with the exception of Hydrogen);
- (d) For containers carrying corrosive low pressure liquefiable gases, the maximum interval between internal inspections with hydraulic test has been extended from 2 years to 4 years;
- (e) Hydrogen cyanide has been re-classified as a corrosive low pressure liquefiable gas instead of a non-corrosive one;
- (f) Where gases are used for fire extinguishing purposes, the containers shall be inspected externally at least once a year;
- (g) The definition for "Tare weight" is included with an example to show how its value could be determined;
- (h) Stamping of containers after inspection/test shall be done by a Competent Person or a person authorised by him, etc.

Acknowledgement is made for the use of information from the above references.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

### NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
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## **Code of practice for the filling, inspection, testing and maintenance of containers for the storage and transport of compressed gases – Part 1 : Seamless metal containers for gases, excluding dissolved acetylene**

### **1 Scope**

Part 1 of this Code of Practice specifies the minimum requirements for the filling, inspection, testing and maintenance of transportable seamless metal gas containers (hereinafter referred to as 'containers') of 1 litre water capacity and above. It does not apply to aluminium containers, welded metal containers or to dissolved acetylene containers whether with welded or seamless shells.

NOTE – The titles of the publications referred to in this Code of Practice are listed at the end of the standard.