



GUIDELINES FOR THE APPLICATION FOR GAS CYLINDER APPROVAL

[UNDER DANGEROUS GOODS ORDINANCE (CAP. 295)]

1. Introduction

- 1.1 Pursuant to Regulation 64 of the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong, no person shall use, cause or permit to be used, for the storage of any gas in any cylinder or other container except of a type appropriate to the storage of such gas and approved by the “Authority” i.e. the Director of Fire Services.
- 1.2 Furthermore, in accordance with Regulation 68 of the said Regulations, the Director of Fire Services shall be notified of the destruction of cylinder(s) or cylinder(s) which failed the periodical testing and / or examination.
- 1.3 In Hong Kong, many national standards of foreign countries have been recognized and adopted. It is the responsibility of the owner or importer of the gas cylinders to keep records of the approved design documents and maker's certificates / inspection and test reports of those cylinders as long as they are in use in Hong Kong. Such practice is one of the effective means of control adopted by many other countries.

2. Application and Approval Procedure

- 2.1 All applications for approval of gas cylinder(s)/container(s) shall be submitted to the Investigation and Research Section of the Fire Services Department for processing.
- 2.2 Every application shall be accompanied by the following supporting documents in triplicate indicating that the gas cylinder(s)/container(s) submitted for approval have been manufactured and tested to a standard/design specification acceptable to the Director of Fire Services. One set of the supporting documents will be referred to the Boilers and Pressure Vessels Division (BPVD) of the Labour Department (LD) for technical advice on the acceptability of the gas cylinders/containers. LD will only assess the technical acceptability of the cylinders referred by the Director of Fire Services.

2.3 For the gas cylinder(s)/container(s) of a design introduced for use in Hong Kong in the first time, the following supporting documents shall be provided :-

- a) fully dimensioned drawing and details of construction of the cylinder/container;
- b) design specifications and calculations, in accordance with the relevant standard;
- c) specifications (e.g. material, design, pressure rating, inlet & outlet threads etc.) of valve to be used with the containers/cylinders;
- d) manufacturer's certificate;
- e) inspection report by recognized independent inspection authority/body (please see the Appendix);
- f) report of physical tests and chemical analysis of material used in construction;
- g) report on tests carried out in accordance with the standard/code used;
- h) details of any heat treatment;
- i) gas(es) to be filled into the cylinders/containers;
- j) model/type/serial numbers of the cylinders/containers;
- k) for filament-wound composite cylinders : a life extension plan and the associated NDE scheme, as the case may be, and the maintenance manuals.

2.4 For gas cylinder(s)/container(s) of a type previously approved by the Director of Fire Services, only documents of 2.3 (d) to (j) will be sufficient for assessment provided that the approved design drawing; number of such type/model; and the Director's of Fire Services approval reference can be identified and the type of container valve remains unchanged.

2.5 The inspection report as mentioned at 2.3(e) should be issued by recognised independent inspection authority / body authorised by the relevant local regulatory authority. Authorisation documents should be provided when being considered necessary as follows :-

British Standard (BS) -
to be approved by the UK Health & Safety Executive

US Department of Transportation (DOT) -
to be approved by the US Department of Transportation Associate Administrator for Hazardous Materials Safety

Canadian Transport Commission (CTC) -
to be approved by the Canadian Transport Commission

Australian Standard (AS) -
to be approved by the Standards Australia as required in AS 2337

Chinese National Standard (GB) -
to be approved by the Bureau of Boilers & Pressure Vessels Safety Administration of the China State Bureau of Quality and Technical Supervision for cylinder importation to Hong Kong

Japanese Industrial Standard (JIS) -
to be approved under the Japanese High Pressure Control Law by the Japanese Ministry of International Trade & Industry (MITI) or by the High Pressure Gas Safety Institute of Japan (KHK)

3. Standard/Specifications

- 3.1 Currently, the following standards/specifications together with the appertaining standards on material, welder qualification, testing standards and specifications are acceptable to the Director of Fire Services:-

<u>American Standards</u>	<u>Australian Standards</u>	<u>Canadian Standards</u>
DOT 3A	AS B110	CTC 3A
DOT 3AX	AS B111	CTC 3AX
DOT 3AA	AS B113	CTC 3AA
DOT 3AAX	AS B114	CTC 3AAX
DOT 3AL	AS B115	CTC 3AL
DOT 4B	AS B189	CTC 4B
DOT 4BA	AS B239	CTC 4BA
DOT 4BW	AS 1777	CTC 4BW
DOT 4L	AS 2030	CTC 4L
DOT 8AL	AS 2468	CTC 8AL
DOT 8	AS 2469	CTC 8
DOT 39	AS 2470	CTC 8WC
	AS 2527	
DOT FRP-I Type 3FC	AS 2875	

<u>Chinese Standards</u>	<u>British Standards</u>	<u>Japanese Standards</u>
GB 5099	BS 5045	JIS B8234
GB 5100	BS 6061	JIS B8241
GB 5842	HOAL	JHPGCL
GB 11638		
GB 11639	HSE-AL-FW2	
GB 11640	HSE-TP-FW3	

- 3.2 Engineering Standard other than those listed above may also be considered for acceptance. The applicant is required to provide the concerned standard/specification and evaluation report when necessary. Any documents not written in English or Chinese must be accompanied by the corresponding English or Chinese translation in order to facilitate evaluation. Additional time may then be needed on top of the time normally required for cylinder approval.

4. Processing of Application

- 4.1 Applications are generally dealt with on a first come, first served basis.
- 4.2 All applications will be processed as soon as possible. Under normal circumstances, processing of application for approval of gas cyclinder will not exceed 45 working days.

- 4.3 For any technical irregularities and supplementary information related to the submitted documents, BPVD of LD may contact the applicant direct for clarification. Additional supporting documents shall be submitted to LD via the Director of Fire Services.
- 4.4 When such irregularities have been rectified, and approval to the cylinders is recommended by LD, a letter of approval together with one set of duly endorsed supporting documents will be issued to the applicant by the Director of Fire Services if he thinks fit and all conditions for approval are met.

5. **Enquiry**

For further information and advice regarding :-

- (a) the approval procedures of gas cylinder(s) / container(s), please contact :-

Licensing & Certification Command
Investigation & Research Section
5/F, Fire Services Headquarters Building,
1 Hong Chong Road,
Tsim Sha Tsui East,
Kowloon.

Tel. No. (852) 2733 7827 or 2733 7557
Fax No. (852) 2367 3631

or,

- (b) the technical requirements and assessment, please contact :-

Labour Department
Boilers and Pressure Vessels Division
24/F, Western Harbour Centre,
181 Connaught Road West,
Hong Kong.

Tel. No. (852) 2975 6436 or 2975 6437
Fax. No. (852) 2517 0875

**List of recognised independent inspection authority / body
(for application of Approval of Gas Cylinders)**

(Note: The list hereunder is for reference only and by no means exhaustive.)

	Name of the inspection authority / body
1	APRAGAZ, Belgium
2	Arrowhead Industrial Services, Inc., USA
3	Authorized Testing Inc., USA
4	Beijing Special Equipment Inspection Center, China
5	Bureau Veritas, Vienna
6	Det Norske Veritas, Norway
7	SAQ Kontroll AB, Sweden
8	T.H. Cochrane Laboratories, Ltd., USA
9	TÜV CERT Certification body, Germany
10	TÜV Industrie Service GmbH, Germany
11	TÜV NORD Czech, s.r.o. Germany
12	上海市鍋爐壓力容器檢驗所, China
13	北京市特種設備檢測中心, China