



**Code for Facilities, Technology and Inspection
for Manufacturing of Cylinder Valves
for LP Gas Cabinet Heaters**

Deliberation/Resolution by Gas Technical Standards Committee : September 16, 2022

Approval by the Ministry of Trade, Industry & Energy : October 12, 2022

Gas Technical Standards Committee

Chairman Byung-Hak Choi, Professor of Gangneung-Wonju National University

Vice-Chairman Gi-hyun Jang, Professor of Inha University

Ex Officio Member Yoon-Gil Hwang, Manager of Energy Safety Department, Ministry of Trade, Industry & Energy
Chae-Sik Kwak, Director of Technology and Safety, Korea Gas Safety Corporation

High-Pressure Gas Byung-Hak Choi, Professor of Gangneung-Wonju National University
Seong-Jin Song, Vice president of SungKyunKwan University
Beom-Seok Lee, Professor of KyungHee University
Chun-Seok Yoon, CEO of Hanul E&R
Yeong-Hoon Ann, Professor of HanYang University

Liquefied Petroleum Gas Hyeong-Hwan Ann, Professor of Korea National University of Transportation
Hyuk-Myun Kwon, Professor of YonSei University
Jeong-Sik Cheon, Director of E1 CO., Ltd.
kyung-Soo Kang, Senior Researcher of Korea Institute of Energy Research

Urban Gas Yong-Kwon Lee, Vice-President of DaeYeon Co., Ltd.
Dong-Il Shin, Professor of MyongJi University
Jeong-Hoon Kim, Principal Researcher of Korea Institute of Machinery and Materials
In-Cheol Jeong, Director of Yesco Co., Ltd.

Hydrogen Gas Gi-hyun Jang, Professor of Inha University
Kwang-Won Lee, Professor of HoSeo University
Ho-young Jeong, Professor of ChonNam National University
In-Yong Kang, CEO of H&Power Co., Ltd.
Woon-Bong Baek, Senior Researcher of Korea Institute of Standards and Science

This code is the detailed standards established by the Gas Technical Standards Committee in accordance with Article 22-2 of "High-Pressure Gas Safety Control Act", Article 45 of "Safety Control and Business of Liquefied Petroleum Gas Act" and Article 17-5 of "Urban Gas Business Act", Article 48 of "Hydrogen Economy Promotion and Hydrogen Safety Management Act". Since conformity to this Code is deemed to conform to the laws and regulations above, this Code must be observed.

This English version of KGS Code is an informal translation from its Korean original version. Only the Korean version of the KGS Code is officially effective since it has been authorized by the Gas Technical Standards Committee (KGS Code Committee). The secretariat of the Committee reserves the right to revise the English version whenever translation errors are found.

History of Establishment and Revision of KGS Code

Code Number	KGS AA314 ²⁰²²
Code Title	Code for Facilities, Technology and Inspection for Manufacturing of Cylinder Valves for LP Gas Cabinet Heaters

Date of Establishment/Revision	Description
December 30, 2008	Established (Notification of the Ministry of Knowledge Economy No. 2008-379)
May 15, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-193)
June 29, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-250)
January 6, 2010	Revised (Notification of the Ministry of Knowledge Economy No. 2009-480)
June 26, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2012-313)
December 31, 2013	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2013-353)
December 10, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-641)
July 11, 2016	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2016-354)
March 28, 2022	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2022-250)
October 12, 2022	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2022-760)

Table of Contents

1. General.....	1
1.1 Scope	1
1.2 Validity of Code.....	1
1.3.1 Inspection standard for new technology products	1
1.3.2 Manufacturing registration of foreign products <Revised on June 26, 2012>	2
1.4 Definitions.....	2
1.5 Application of Codes and Standards	3
2. Manufacturing Installation Standard.....	4
2.1 Manufacturing Facilities.....	4
2.2 Inspection Facilities.....	4
3. Manufacturing Technology Standard.....	4
3.1 Design (currently not used).....	4
3.2 Materials	5
3.3 Thickness (currently not used)	5
3.4 Construction and Dimensions	5
3.4.1 Construction.....	5
3.4.2 Dimensions	7
3.5 Fabrication (currently not used)	8
3.6 Welding (not applicable).....	8
3.7 Heat treatment (not applicable).....	8
3.8 Performance.....	8
3.8.1 Product performance.....	9
3.8.2 Material performance	9
3.8.3 Operating performance.....	10
3.9.2 Acceptance marking.....	11
4. Inspection Standard	11
4.1 Kinds of Inspections.....	11
4.1.1 Manufacturing installation inspection	11
4.1.2 Product inspection	12
4.2 Object Audit of Process Inspection	13
4.2.1 Application for audit.....	13
4.2.2 Audit method	13
4.2.3 Adjudication committee	14
4.3 Inspection Items.....	15

4.3.1 Manufacturing installation inspection	15
4.4 Inspection Method	17
4.4.1 Manufacturing installation inspection	17
4.4.2 Product inspection	18
4.5 Other Inspection Standards.....	22
4.5.1 Inspection of imported goods (currently not used)	22
4.5.2 Partial omission of inspection <Revised on June 26, 2012>	22
4.5.3 Disposal of rejected products.....	23
5. Re-inspection Standard (not applicable) <Newly established on January 6, 2010>	23
6. Other Manufacturing and Inspection Standards <Newly established on January 6, 2010>	23
6.1 Exception of Manufacturing Registration of Foreign Gas Cylinders, Etc.....	23
Appendix A General Standard for Operation of Quality Control System for High-Pressure Gas Cylinder Valve Manufacturing Plants	25

Code for Facilities, Technology and Inspection for Manufacturing of Cylinder Valves for LP Gas Cabinet Heaters

1. General

1.1 Scope

This Code applies to the facilities, technology and inspection for manufacturing of cylinder valves for LP gas cabinet heaters (hereinafter referred to as "cylinder valves") among accessories attached to the cylinders in conformity to the High-Pressure Gas Safety Control Act (hereinafter referred to as "Act"), Article 3, No.2.

1.2 Validity of Code

1.2.1 This Code has passed the deliberation and resolution by Gas Technical Standards Committee (Bill No. 2022-7, September 16, 2022) in accordance with the Act, Article 22-2, Clause 2, has been approved by the Minister of Trade, Industry & Energy (Notification No. 2022-760 of the Ministry of Trade, Industry & Energy, October 12, 2022), and is valid and effective as the detailed standards in conformity to the Act, Article 22-2, Clause 1.

1.2.2 Conformity to this Code is deemed to conform to Table 10, 2 of the Enforcement Regulation of the High-Pressure Gas Safety Control Act (hereinafter referred to as "Enforcement Regulation") in accordance with the Act, Article 22-2, Clause 4.

1.3 Reference Codes and Standards

1.3.1 Inspection standard for new technology products

1.3.1.1 In case the Minister of Trade, Industry & Energy acknowledges that cylinder valves developed through new technology development do not meet the inspection standard in conformity to this Code in accordance with the Enforcement Regulation, Table 10-2, No.4 but do not hinder safety control, the manufacturing and inspection methods of those cylinder valves may restrictively apply only to them.