



Code for Facilities, Technology and Inspection for Manufacturing of Valves for Piping

Deliberation/Resolution by Gas Technical Standards Committee : December 14, 2018

Approval by the Ministry of Trade, Industry & Energy : January 16, 2019

Personnel

Gas Technical Standards Committee

Chairman	Kwang-Won Lee, Professor of Hoseo University
Vice-Chairman	Seung-Hoon Nam, Principal Researcher of KRISS
Ex Officio Member	Hui-Won Lee, Manager of Energy Safety Department, Ministry of Trade, Industry & Energy
	Hae-Myeong Yang, Director of Technology and Safety, Korea Gas Safety Corporation
High-Pressure Gas	Seung-Hoon Nam, Principal Researcher of KRISS
	Beom-Seok Lee, Principal Professor of Kyung Hee University
	Dong-Myeong Ha, Professor of Semyung University
	Chang-Gi Kim, Principal Researcher of Korea Institute of Machinery and Materials
	Hyuk-Myun Kwon, Director General of Occupational Safety & Health Research Institute
	Su-Dong Byun, CEO of Q-Best
Liquefied Petroleum Gas	Doo-Seon Park, Managing Director of Daesung Industrial Gas Co., Ltd
	Hyeong-Hwan Ann, Professor of Korea National University of Transportation
	Byeong-Hak Choei, Professor of Gangneung-Wonju National University
	Seong-Min Lee, Director of KOGAS Research Institute
	Yong-Gwon Lee, Vice-President of EG CNE Co.,Ltd
	Gi-hyeon Jang, Director of Kiturmi
	Jeong-Sik Chon, Direto of E1 CO., Ltd.

History of Establishment and Revision of KGS Code

Code Number	KGS AA331 ²⁰¹⁹
Code Title	Code for Facilities, Technology and Inspection for Manufacturing of Valves for Piping

Date of Establishment/Revision	Description
December 31, 2008	Established (Notification of the Ministry of Knowledge Economy No. 2008-380)
May 15, 2009	Revised (Notification of the Ministry of Knowledge Economy No. 2009-193)
April 29, 2010	Revised (Notification of the Ministry of Knowledge Economy No. 2010-173)
January 5, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2011-635)
August 13, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2012-391)
December 28, 2012	Revised (Notification of the Ministry of Knowledge Economy No. 2012-549)
April 3, 2014	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2014-141)
November 17, 2014	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2014-589)
December 10, 2015	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2015-641)
January 8, 2016	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2016-6)
December 15, 2016	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2016-638)
February 10, 2017	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2017-066)
November 20, 2017	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2017-542)
December 13, 2018	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2018-607)
January 16, 2019	Revised (Notification of the Ministry of Trade, Industry & Energy No. 2019-026)

Table of Contents

1. General.....	1
1.1 Scope.....	1
1.2 Validity of Code.....	1
1.3 Reference Codes and Standards.....	1
1.3.1 Inspection standard for new technology products or products in conformity to acceptable standards	1
1.3.2 Manufacturing registration standard of foreign products.....	2
1.4 Definitions	2
1.5 Application of Codes and Standards.....	4
1.6 Interim Measures	4
1.6.1 Interim measures for manufacturing technology standard, etc.	4
2. Manufacturing Installation Standard.....	4
2.1 Manufacturing Facilities.....	5
2.2 Inspection Facilities.....	5
3. Manufacturing Technology Standard	6
3.1 Design (currently not used)	6
3.2 Materials	6
3.3 Thickness.....	8
3.4 Construction and Dimensions.....	8
3.5 Fabrication (currently not used).....	10
3.6 Welding (currently not used)	10
3.7 Heat Treatment (currently not used).....	10
3.8 Performance	10

3.8.1 Product performance.....	10
3.8.2 Material performance	14
3.8.3 Operating performance	16
3.9 Marking	16
3.9.1 Product marking.....	16
3.9.2 Acceptance mark	17
4. Inspection Standard.....	17
4.1 Kinds of Inspections	17
4.1.1 Manufacturing installation inspection.....	17
4.1.2 Product inspection	17
4.2 Object Audit of Process Inspection	20
4.2.1 Application for audit.....	20
4.2.2 Audit method	20
4.2.3 Adjudication committee.....	21
4.3 Inspection Items	21
4.3.1 Manufacturing installation inspection.....	21
4.3.2 Product inspection	21
4.4 Inspection Method.....	24
4.4.1 Manufacturing installation inspection.....	24
4.4.2 Product inspection	25
4.5 Other Inspection Standards	28
4.5.1 Inspection of imported products	28
4.5.2 Partial omission of inspection.....	28
4.5.3 Disposal of rejected products (not applicable).....	29
4.5.4 Detailed inspection standards	29

Code for Facilities, Technology and Inspection for Manufacturing of Valves for Piping

1. General

1.1 Scope <Revised on December 28, 2012>

This Code applies to facilities, technology and inspection for manufacturing of valves for piping (restrictive to ball valves for liquefied petroleum gas or city gas piping but exclusive of brass ball valves; hereinafter referred to as "valves") exclusive of buried welded type ball valves and polyethylene valves among valves for piping in conformity to the Enforcement Regulation of the Safety Control and Business Regulation of Liquefied Petroleum Gas Act (hereinafter referred to as "Enforcement Regulation"), Table 3, No. 6 and Table 7, No.4-f. <Revised on December 10, 2015>

1.2 Validity of Code

1.2.1 This Code has passed the deliberation and resolution by Gas Technical Standards Committee (Bill No. 2018-10, December 14, 2018) in conformity to the High Pressure Gas Safety Control Act (hereinafter referred to as "High Pressure Gas Act"), Article 33-2 in accordance with the Safety Control and Business Regulation of Liquefied Petroleum Gas Act (hereinafter referred to as "Act"), Article 45, Clause 1, has been approved by the Minister of Trade, Industry & Energy (Notification No. 2019-26 of the Ministry of Trade, Industry & Energy, January 16, 2019), and is valid and effective as the detailed standards in conformity to the Act, Article 45, Clause1.

1.2.2 Conformity to this Code is deemed to conform to Table 7 of the Enforcement Regulation in accordance with the Act, Article 45, Clause4. <Revised on December 10, 2015>

1.3 Reference Codes and Standards

1.3.1 Inspection standard for new technology products or products in conformity to acceptable standards <Revised on December 28, 2012>