



**Code for Facilities, Technology and
Inspection for Manufacturing of Gas Boilers
of Conventional Flue (CF) Type and
Balanced Flue (BF) Type**

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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 17-4 of "Urban Gas Business 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.

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Code for Facilities, Technology and Inspection for Manufacturing of Gas Boilers of Conventional Flue (CF) Type and Balanced Flue (BF) Type

1. General

1.1 Scope

1.1.1 This Code applies to the facilities, technology and inspection for manufacturing of gas hot water boilers of conventional flue type and balanced flue type (hereinafter referred to as "boilers") which come under the following (1) and (2) among the combustion equipment in conformity to the Enforcement Regulation of the Safety Control and Business of Liquefied Petroleum Gas Act (hereinafter referred to as "Enforcement Regulation"), Table 3, No. 10 and Table 7, No.4, j <Revised on November 4, 2015>:

- (1) Boilers of which total heat input is not over 70 kW(60,000 kcal/h) on the basis of gross heating value (gross heating value based on 0°C and 1 atm; hereinafter the same shall apply unless otherwise specified), and
- (2) Boilers of which gas working pressure is not over 3.3 kPa.

1.2 Validity of Code

1.2.1 This Code has passed the deliberation and resolution by Gas Technical Standards Committee (Bill No. 2019-8, October 18, 2019) in conformity to the High Pressure Gas Safety Control Act (hereinafter referred to as "High-pressure Act"), Article 33-2 in accordance with the Safety Control and Business of Liquefied Petroleum Gas Act (hereinafter referred to as "the Act"), Article 45, Clause 1, has been approved by the Minister of Trade, Industry & Energy (Notification No. 2020-167 of the Ministry of Trade, Industry & Energy, March 18, 2020), and is valid and effective as the detailed standards in conformity to the Act, Article 45, Clause 1. <Revised on February 10, 2017>

1.2.2 Conformity to this Code is deemed to conform to Table 7 of the Enforcement Regulation of the Act in accordance with the Act, Article 45, Clause 4. <Revised on November 4, 2015>

1.3 Reference Codes and Standards

1.3.1 Inspection standard for new technology products

In case the Minister of Trade, Industry & Energy acknowledges that the new manufacturing and inspection methods of boilers developed through new technology development do not meet the standard for facilities, technology and inspection in conformity to this Code in accordance with the Enforcement Regulation, Table 7, No. 5, a but do not hinder safety control, such manufacturing and inspection methods of those boilers may restrictively apply only to them.
<Revised on May 15, 2009>

1.3.2 Manufacturing registration standard for foreign products <Newly established on June 26, 2012, Revised on November 4, 2015>

The "manufacturing installation standards and manufacturing technology standards of foreign countries" specified in the Enforcement Regulation, Article 17, proviso of Clause 3 mean the detailed standards specified in the Act, Article 45.

1.4 Definitions

The terms used in this Code are defined as follows:

1.4.1 "Regular quality inspection" means the performance inspection performed by taking samples from products manufactured in mass production to check whether the products which are to undergo production stage inspection are the same products manufactured as the products which have undergone design stage inspection.

1.4.2 "Routine sample inspection" means the inspection performed to check on the basic product performance by taking samples from the same products manufactured in the same production lot for the products to undergo product identification inspection.

1.4.3 "Occasional quality inspection" means the inspection performed by taking samples without any advance notice from products produced in mass production in order to check whether the products which have undergone production process inspection or comprehensive process inspection are being manufactured in the same way as the products which have undergone design stage inspection.

1.4.4 "Process identification audit" means the audit conducted to check on the conformity of quality system operation to the manufacturing and self-inspection processes required for manufacturing the products which have undergone design stage inspection.

1.4.5 "Comprehensive quality control system audit" means the audit conducted to check on the conformity of quality system operation for the whole boiler manufacturing processes such as