

## **Ordinance on Safety of Boilers and Pressure Vessels**

Ministry of Labour Ordinance No.33 of September 30, 1972

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[In Japanese](#)

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## **Chapter I. General Provisions**

(Definitions)

**Article 1.** In this Ministerial Ordinance, the terms listed in the following items shall be defined as set forth in the corresponding items:

- (1) Boiler shall be defined as the boiler specified in item 3 of [Article 1 of the Enforcement Order of Industrial Safety and Health Law](#) (hereinafter referred to as "Cabinet Order").
- (2) Small-sized Boiler shall be defined as the boiler specified in item 4 of [Article 1 of the Cabinet Order](#).
- (3) First Class Pressure Vessel shall be defined as the first class pressure vessel specified in item 5 of [Article 1 of the Cabinet Order](#).
- (4) Small-sized Pressure Vessel shall be defined as the small-sized pressure vessel specified in item 6 of [Article 1 of the Cabinet Order](#).
- (5) Second Class Pressure Vessel shall be defined as the second class pressure vessel specified in item 7 of [Article 1 of the Cabinet Order](#).
- (6) Maximum Allowable Working Pressure shall be defined as the maximum gauge pressure (hereinafter referred to as "pressure") allowed for use in steam boilers, hot water boilers, first class pressure vessels and second class pressure vessels according to their construction.

(Heating Surface)

**Article 2.** The calculation of heating surface as set forth by the Ministry of Health, Labour and Welfare Ordinance based on a) of item 3 of [Article 1 of the Cabinet Order](#) shall be done for the surface specified in the following items according to the boilers described in the respective items:

(1) Boilers other than water tube boilers and electric boilers: Surface of boiler itself in contact with fire, burning gas and other high-temperature gas (hereinafter referred to as "burning gas, etc.") and in contact on its other side with water or other heat mediums (in the case of boilers having fins, studs, etc., on the surfaces contacting with burning gas, etc., the surfaces calculated by the corresponding application of b) to f) of the following item for the fins, studs, etc., concerned shall be added).

(2) Water tube boilers other than once-through boilers: The total of the following surfaces of the water tubes and headers.

a) For water tubes (excluding those specified in b) to h)) and headers in contact with burning gas, etc., totally or partially, the surfaces in contact with burning gas, etc.

b) For water tubes having fins longitudinally and for which both sides of the fins are in contact with burning gas, etc., the total of the surfaces obtained by multiplication of the surface of one side of the fins and the coefficient shown in the right column of the following table according to the classification of fins shown in the left column of the same table and the surface of the outside circumference of the tubes.

Classification of fins	Coefficient
Fins receiving radiation heat on both sides	1.0
Fins receiving radiation on one side and convection heat on other side	0.7
Fins receiving convection heat on both sides	0.4

c) For water tubes having fins longitudinally and for which one side of the fins is in contact with burning gas, etc., the total of the surfaces obtained by multiplication of the surface of one side of the fins and the coefficient shown in the right column of the following table according to the classification of fins shown in the left column of the same table and the surface of the parts in contact with burning gas, etc., of the outside circumference of the tubes.

Classification of fins	Coefficient
Fins receiving radiation heat	0.5
Fins receiving convection heat	0.2

d) For water tubes having fins around their circumference or helically, the total of twenty percent of the surfaces of one side of the fins (in the case of spiral fins, the surface calculated on the assumption that fins are fixed around the circumference and the number

of their windings equal to the number of sheets of fins around the circumference) and the surface of outside circumference of the tubes.

e) For water tubes covered by firebricks, the projected surfaces to the outside walls of the tubes.

f) For stud tubes covered by fireproof materials and arranged on walls, half of the surfaces of the outside circumference of the tubes. In the case of the tubes of which all circumferences of covering materials are in contact with burning gas, etc., the surface of the outside circumference of the tubes.

g) For stud tubes in contact with burning gas, etc., the total of fifteen percent of the side surfaces of the studs and the surface of the outside circumference of the tubes.

h) For bailey style water walls, the surfaces in contact with burning gas, etc.

(3) Once-through boilers: Of the surfaces of water tubes from the entrance of the combustion chamber to the entrance of the superheater, those in contact with burning gas, etc.

(4) Electric boilers: The surface equivalent to the maximum capacity of the electric facilities on the assumption that 20 kilowatts of the capacity of electric facilities is equal to one square meter.

## **Chapter II. Boilers**

### **Section 1. Manufacturing**

(Permission for Manufacturing)

**Article 3.** A person who is to manufacture boilers (excluding small-sized boilers, hereinafter the same in this Chapter) shall obtain in advance permission from the Director General of the Prefectural Labour Bureau which exercises jurisdiction over the area where the workplace is located (hereinafter referred to as the "Director General of the competent Prefectural Labour Bureau"), for the boilers concerned. However, this provision shall not be applied to boilers similar in model to those which have already been permitted for manufacturing (hereinafter referred to as "permitted model boilers").

2. A person who is to obtain the permission specified by the preceding paragraph shall submit an Application of Permission for Manufacturing of Boiler (Form No.1) together with drawings showing the construction of the boilers concerned and documents stating the following items to the Director General of the competent Prefectural Labour Bureau:

(1) Strength calculation.

(2) Kinds, capacity and number of the equipment used for manufacture and inspection of boilers.

(3) Outline of personal history of the person responsible for workmanship.

(4) Qualification and number of the workers who are to be engaged in the actual fabricating work of boilers.

(5) In the case of manufacturing the boilers by welding, the results of welding procedure tests.

(Report of Changes)

**Article 4.** In the case of manufacturing the boiler which was granted the permission as provided for by paragraph 1 of the preceding Article or the permitted model boiler, when a person who has been granted the said permission changes the equipment as described in item 2 of paragraph 2 of the said Article or the person responsible for workmanship as described in item 3 of the same paragraph, he shall submit a report on the changes concerned without delay to the Director General of the competent Prefectural Labour Bureau.

(Shop Inspection)

**Article 5.** A person who has manufactured a boiler shall have the said boiler inspected by the Director General of the competent Prefectural Labour Bureau (for sectional boilers, by the Director General of the Prefectural Labour Bureau which exercises jurisdiction over the area where the boiler is to be installed, hereinafter the same in this Article) under the provision of [paragraph 1 of Article 38](#) of the Industrial Safety and Health Law (hereinafter referred to as the "Law"). However, this provision shall not apply to those boilers that use high-temperature gas, instead of fire, for heating (called "waste-heat boilers" in item 2 of [paragraph 2 of Article 24](#)) which fall under the category of specified facilities in paragraph 1 of Article 56-3 of the High Pressure Gas Control Law (Law No. 204 of 1951) (called "specified waste-heat boilers" below) that have already been inspected by an authorized agency for inspection at time of manufacture, etc., under [paragraph 1 of Article 38](#) of the Law (called "authorized agency for inspection at time of manufacture, etc." below.)

2. Any boiler fabricated by welding shall not be permitted to go through an inspection by the Director General of the competent Prefectural Labour Bureau or by the authorized agency for inspection at time of manufacture etc., under the provisions of the preceding paragraph (hereinafter referred to as the "shop inspection" in this Chapter) before such boiler is found acceptable by the inspection set forth in [paragraph 1 of Article 7](#).

3. Any person who wants to receive a shop inspection shall submit an Application for Shop Inspection of Boiler (Form No.2) together with a boiler specification (Form No.3) to the person who performs the shop inspection (hereinafter called the "shop inspector").

4. The shop inspector shall stamp a mark (Form No. 4) on the body of the boiler which passed the shop inspection and affix a seal "passed the shop inspection" (Form No.5) on the boiler specification concerned and grant the said specification to the applicant.

5. The Director General of the competent Prefectural Labour Bureau shall issue an inspection certificate (Form No.6) to the applicant in respect of a mobile boiler which passed the shop inspection.

(Measures to Be Taken When Undergoing a Shop Inspection)

**Article 6.** A person who undergoes a shop inspection shall perform the following matters:

(1) Place a boiler at a position where it can be easily inspected.

(2) Prepare for the hydrostatic pressure test.

(3) Arrange safety valves (for the hot water boiler, relief valve, hereinafter the same in this Chapter) and water gauges (only limited to the inspection of steam boilers which is required to measure the water level).

2. The Director General of the Prefectural Labour Bureau may order the following matters to the applicant of shop inspection, when it is deemed necessary in the operation of the said inspection:

(1) To remove all or part of covering materials of boiler.

(2) To draw tubes or rivets, or to put a hole in plates or tubes.

(3) For the cast iron boiler, to dismember in sections.

(4) Other matters deemed necessary.

3. A person who undergoes a shop inspection shall be present at the said inspection.

(Welding Inspection)

**Article 7.** A person who is to weld a boiler which is to be fabricated by welding shall have the said boiler inspected by the Director General of the competent Prefectural Labour Bureau under the provision of [paragraph 1 of Article 38 of the Law](#). However, this provision does not apply where the said boiler has been welded only in its attachments (including only the superheater and economizer, hereinafter the same in this Chapter) or in those parts which are not subject to exposure to any stress, other than compressive stress, where such a boiler is a once-through boiler (excluding those which have a steam separator) or where it is a specified waste-heat boiler which has been inspected by an authorized agency for inspection at time of manufacture, etc.

2. Any person who wants to receive an inspection by the Director General of the competent Prefectural Labour Bureau or by an authorized agency for inspection at time of manufacture, etc., under the provisions of the preceding paragraph (hereinafter referred to as "welding inspection" in this Chapter) shall, before starting to weld the boiler to be inspected, submit an Application for Welding Inspection of Boiler (Form No.7) together with a boiler welding specification (Form No.8) to a person who performs welding inspections (called the "welding inspector" below).

3. The welding inspector shall stamp a mark (Form No. 9) on the body of boiler which passed the welding inspection, and affix a seal "passed the welding inspection" (Form No.10) of the boiler welding specification and grant the said specification to the applicant.

(Measures to Be Taken When Undergoing Welding Inspection)

**Article 8.** A person who undergoes a welding inspection shall perform the following matters:

(1) Make the test pieces for mechanical tests.

(2) Prepare for radiographic examinations.

2. A person who undergoes a welding inspection shall be present at the said inspection.

(Limitation of Placement)

**Article 9.** The employer shall place no person in boiler welding operations from among the operations as set forth in item 4 of [Article 20 of the Cabinet Order](#) except one who has obtained a license of special class boiler welder (hereinafter referred to as "special boiler welder").

However, in relation to operations in which the thickness of the welding part is not over 25 mm, or welding is applied for connection of nozzles, flanges, etc., the employer may place one who has obtained a license of ordinary class boiler welder (hereinafter referred to as "ordinary boiler welder") in the said operation.

## **Section 2. Installation**

(Notification on Installation)

**Article 10.** When the employer who is to install a boiler (excluding mobile boilers, hereinafter the same in this Article) wishes to submit a notification under the provision of [paragraph 1 of Article 88 of the Law](#), the employer shall submit a Notification on Installation of Boiler (Form No.11) together with a boiler specification (Form No.3) and documents showing the following items to the Chief of the Labour Standards Inspection Office which exercises jurisdiction over the area where the workplace concerned is located (hereinafter referred to as the "Chief of the competent Labour Standards Inspection Office"):

- (1) Boiler room as provided for by [Article 18](#) and its surrounding.
- (2) Situation of the placing of boiler and arrangement of piping attached to it.
- (3) Foundation of boiler installation and the construction of combustion chamber and flue.
- (4) Measures to watch whether combustion continues normally or not.

2. In presenting a notification in accordance with the provision of the preceding paragraph, the provision of [paragraph 1 of Article 85 of the Ordinance on Industrial Safety and Health](#) (Ministry of Labour Ordinance No.32 of 1972, hereinafter referred to as the "Safety and Health Ordinance") shall be applied as follows:

- (1) In the case of presenting a notification on a boiler in conjunction with the building or other machines, in accordance with the provision of [paragraph 1 of Article 88 of the Law](#), it shall be deemed unnecessary to describe those items in the notification and documents as described in [paragraph 1 of Article 85 of the Safety and Health Ordinance](#) but overlap with the items which are included in the notification on installation of the boiler, boiler specification and documents prescribed by the preceding paragraph.
- (2) In presenting a notification, in accordance with the provision of [paragraph 1 of Article 88 of](#)

[the Law](#), only on the boiler, the provision of [paragraph 1 of Article 85 of the Safety and Health Ordinance](#) shall not be applicable.

3. When the employer (excluding those provided for by [paragraph 1 of Article 88 of the Law](#)) wishes to install a boiler, he shall, under the provision of paragraph 1 of the same Article which is applied mutatis mutandis in paragraph 2 of the same Article, submit a Notification on Installation of Boiler (Form No.11) together with a boiler specification and documents as described in paragraph 1 to the Chief of the competent Labour Standards Inspection Office.

(Report on Installation of Mobile Boiler)

**Article 11.** A person who is to install a mobile boiler, shall in advance submit a Report on Installation of Boiler (Form No.12) together with a boiler specification (Form No.3) and a boiler inspection certificate (Form No.6) to the Chief of the competent Labour Standards Inspection Office.

(Pre-Installation Inspection)

**Article 12.** The persons described in the following items shall, under the provision of [paragraph 1 of Article 38 of the Law](#), have the boiler specified in the respective items inspected by the Director General of the Prefectural Labour Bureau. This provision shall not apply to a specified waste-heat boiler that has been inspected by an authorized agency for inspection at time of manufacture, etc.:

(1) A person who has imported a boiler.

(2) A person who is to install a boiler which has not been installed for the period of one year or more (two years or more for the boiler which the Director General of the Prefectural Labour Bureau has approved the boiler is kept in a good condition during uninstalled period) after the shop inspection or the inspection as prescribed in this paragraph.

(3) A person who is to reinstall or resume the use of a boiler for which use has been discontinued.

2. A person who has manufactured a boiler in a foreign country may, under the provisions of [paragraph 2 of Article 38](#) of the Law, have said boiler inspected by the Director General of the Prefectural Labour Bureau (by the Director General of the Prefectural Labour Bureau or an

authorized agency for inspection at time of manufacture, etc., for specified waste-heat boilers.). Where said inspection has been conducted, the provisions of the preceding paragraph shall not apply to the person who imported said boiler.

3. Any person who wishes to receive an inspection by the Director General of the Prefectural Labour Bureau or by the authorized agency for inspection at time of manufacture, etc., under either of the preceding two paragraphs (hereinafter referred to as the "pre-installation inspection" in this Chapter) shall submit an Application for Pre-Installation Inspection of Boiler (Form No.13) together with a boiler specification (Form No.3) to the person who performs such inspection (hereinafter called the "pre-installation inspector").

4. When a person who imported a boiler or manufactured it in a foreign country wishes it to undergo a pre-installation inspection, he may attach the document in which a person designated by the Minister of Health, Labour and Welfare (limited to persons with residence in a foreign country) indicates that the construction of the boiler related to the said application is in compliance with the standards (limited only to the parts related to the construction of boilers) established by the Minister of Health, Labour and Welfare based on the provisions of [paragraph 2, Article 37 of the Law](#) for the application prescribed in the preceding paragraph.

5. The pre-installation inspector shall stamp a mark (Form No.4) on the body of the boiler which passed the pre-installation inspection, and stamp a mark "passed the pre-installation inspection" (Form No.14) on the boiler specification concerned and grant the said specification to the applicant.

6. The Director General of the Prefectural Labour Bureau shall issue a boiler inspection certificate (Form No.6) to the applicant in relation to the mobile boiler which passed the pre-installation inspection.

(Measures to Be Taken When Undergoing a Pre-Installation Inspection)

**Article 13.** The provision of [Article 6](#) shall apply mutatis mutandis to a pre-installation inspection.

(Completion Inspection)

**Article 14.** A person who installed a boiler (excluding the mobile ones) shall, under the provision of [paragraph 3 of Article 38 of the Law](#), have the boiler as well as the following matters in relation to the said boiler inspected by the Chief of the competent Labour Standards

Inspection Office. However this provision shall not be applied to the boiler for which it is deemed that such inspection is not necessary by the Chief of the competent Labour Standards Inspection Office:

(1) Boiler room as provided for by [Article 18](#).

(2) Situation of the placing of a boiler and arrangement of piping attached to it.

(3) Foundation of boiler installation and the construction of combustion chamber and flue.

2. The inspection as provided for by the preceding paragraph (hereinafter referred to as the "completion inspection" in this Chapter) shall not be undergone unless the boiler pass the shop inspection or pre-installation inspection.

3. A person who wishes to undergo a completion inspection shall submit an Application for Completion Inspection of Boiler (Form No.15) to the Chief of the competent Labour Standards Inspection Office.

(Boiler Inspection Certificate)

**Article 15.** The Chief of the competent Labour Standards Inspection Office shall issue a boiler inspection certificate (Form No.6) in relation to the boiler which passes the completion inspection or those as described by the provision of paragraph 1 of the preceding Article.

2. When a person who has installed a boiler has lost or damaged a boiler inspection certificate, he shall submit an Application for Reissuance of Boiler Inspection Certificate (Form No.16) together with the following documents to the Chief of the competent Labour Standards Inspection Office (for the boiler inspection certificate for mobile boilers, to the Director General of the Prefectural Labour Bureau who has granted the said certificate through the Chief of the competent Labour Standards Inspection Office) and shall have the said inspection certificate reissued:

(1) When he has lost a boiler inspection certificate, the document showing the fact.

(2) When he has damaged a boiler inspection certificate, the said inspection certificate.

(Appointment of an Operations Chief of Boiler Installation Work)

**Article 16.** The employer shall, with regard to work prescribed in item 16 of [Article 6 of the Cabinet Order](#), appoint an operations chief of boiler installation work from among those who have completed the skill training course for operations chief of boiler installation work.

(Duties of an Operations Chief of Boiler Installation Work)

**Article 17.** The employer shall have an operations chief of boiler installation work perform the following matters:

- (1) Determine the methods of operation and placement of workers, and superintend the operation directly.
- (2) Inspect the existence of defect in materials used for installation work and the function of equipment and tools, and remove defective ones, if any.
- (3) Superintend the use of safety belt (the one as prescribed in item 40 of [Article 13 of the Cabinet Order](#)) and other life lines, and personal protective equipment.

### **Section 3. Boiler Rooms**

(Place Where Boiler Is Installed)

**Article 18.** The employer shall, with regard to the boiler (excluding the mobile boiler and the outdoor type boiler, hereinafter the same in this Section) install it in the exclusive use building or at the place where partitioned by the barrier in the building (hereinafter referred to as the "boiler room"). However this provision shall not apply to the boiler of which heating surface calculated in accordance with the provision of [Article 2](#) (hereinafter referred to as "heating surface") is 3 or less.

(Entrance of Boiler Room)

**Article 19.** The employer shall provide two or more entrances to a boiler room, provided that this shall not apply to a boiler room where there is no difficulty of evacuating boiler operators in a case of emergency.

(Installing Position of Boiler)

**Article 20.** The employer shall maintain a distance from the top of a boiler to the structures located above a boiler such as ceiling, piping and so forth of 1.2 m or more, provided that this shall not apply to the cases when no difficulty is expected in inspection and handling of safety valves and other fittings.

2. The employer shall, with regard to a boiler of which the body is not covered and a vertical boiler, in addition to the provision of the preceding paragraph, maintain a distance from the outer wall of the boiler to the structures located beside the boiler such as walls, piping and so forth (excluding those having no difficulty for inspection and cleaning) of 0.45 m or more. However, for the boiler of which the inside diameter of the shell is 500 mm or less and its length is 1,000 mm or less, this distance shall be 0.3 m or more.

(Distance between Boiler and Inflammable Substances)

**Article 21.** The employer shall, with regard to the inflammable substances within 0.15 m or less from the outside of a boiler, or metallic chimneys or flues attached to boilers (hereinafter referred to as "boilers, etc." in this paragraph), cover them with incombustible substances other than metals, provided that this shall not apply to the cases when boilers, etc., are covered by the incombustible substances other than metals having the thickness of 100 mm or more.

2. When the employer stores fuel in a boiler room or other places where a boiler is installed, he shall place the fuel at a distance from the outside of a boiler of 2 m (for the solid fuel, 1.2 m) or more, provided that this shall not apply to the cases when a suitable barrier is provided between the boiler and the fuel or fuel tanks or when other measures to prevent fire are established.

(Measures to Monitor the Exhaust Gas from the Boiler)

**Article 22.** The employer shall take measures such as installation of windows for observing the situation of exhaust gas from the chimney, in order to allow the operations chief of boilers to easily monitor whether combustion continues normally or not.

## **Section 4. Management**

(Limitation of Placement)

**Article 23.** The employer shall place no person in the operations set forth in item 3 of [Article 20 of the Cabinet Order](#) except one who has obtained the license of special class boiler operator, the license of first class boiler operator or the license of second class boiler operator (hereinafter referred to as the "boiler operator"). However this provision shall not apply to the case provided for by [Article 42 of the Safety and Health Ordinance](#).

2. The employer shall, notwithstanding the provision of the text of the proceedings Article, may place one who has completed the skills training course of the operation of boilers in operations of boiler set forth in a) to d) of item 16 of [Article 6 of the Cabinet Order](#),

(Appointment of an Operations Chief of Boilers)

**Article 24.** The employer shall, with regard to the work set forth in item 4 of [Article 6 of the Cabinet Order](#), appoint an operations chief of boilers from among those who are described in the following items according to the classification of work specified in the respective items:

(1) Operation of boilers in the case when the total heating surface of operating boilers is 500 m<sup>2</sup> or more (excluding the case when only once-through boilers are operated): one who has obtained a license of special class boiler operator (hereinafter referred to as the "special class boiler operator").

(2) Operation of boilers in the case when the total heating surface of operating boilers is 25 m<sup>2</sup> or more but less than 500 m<sup>2</sup> (including the case when only once-through boilers are operated and their total heating surface is 500 m<sup>2</sup> or more): special class boiler operator or one who has obtained a license of first class boiler operator (hereinafter referred to as the "first class boiler operator").

(3) Operation of boilers in the case when the total heating surface of operating boilers is less than 25 m<sup>2</sup>: special class boiler operator, first class boiler operator and one who has obtained a license of second class boiler operator (hereinafter referred to as the "second class boiler operator").

(4) Operation of boilers in the case when only boilers prescribed in a) to d) of item 16 of [Article 6 of the Cabinet Order](#) are operated: special class boiler operator, first class boiler operator, second class boiler operator and those who have completed the skill training course of the operation of boilers.

2. The total of heating surface as prescribed in items 1 to 3 of the preceding paragraph shall be calculated as follows:

- (1) In the case of a once-through boiler, the value obtained by multiplication of the heating surface by one tenth shall be the heating surface of the once-through boiler concerned.
- (2) In the case of waste-heat boilers, the value obtained by multiplying the heating surface by one half shall be the heating surface of the said waste-heat boiler.
- (3) In the case of boilers as prescribed in a) to d) of item 16 of [Article 6 of the Cabinet Order](#), their heating surface shall not be included.

(Duties of an Operations Chief of Boiler)

**Article 25.** The employer shall have an operations chief of boilers perform the following matters:

- (1) Watch the pressure, water level and situation of combustion.
- (2) Do not give any sudden change of load.
- (3) Do not increase pressure over the maximum allowable working pressure.
- (4) Maintain the function of safety valves.
- (5) Checkup the function of water gauges at least once a day.
- (6) Carry out the blowoff in suitable way for prevention of concentration of boiler water.
- (7) Maintain the function of water feeding devices.
- (8) Checkup and adjust the low water burning cutoff device, flame detector and other automatic control devices.
- (9) Take necessary measures immediately, if any abnormality is found concerning a boiler.
- (10) Record the measured concentration of the exhausted smoke and the existence of abnormality in the operation of boiler.

(Prohibition of Use)

**Article 26.** The employer shall not use a boiler which is not in conformity with the standards (only limited to the parts related to the construction of the boiler) as provided for by the Minister of Health, Labour and Welfare on the basis of the provision of [paragraph 2 of Article 37 of the Law](#).

(Prevention of Smoke)

**Article 27.** The employer shall make an effort to exhaust no smoke from the installed boiler by taking necessary measures such as improvement of related facilities and combustion methods for the purpose of prevention of hazards caused by smoke exhausted from the boiler concerned.

(Management of Fittings)

**Article 28.** The employer shall, with regard to the management of safety valve and other fittings of boiler, perform the following matters:

- (1) Adjust a safety valve to let it operate at the maximum allowable working pressure or lower.
- (2) Adjust a safety valve of superheater to let it operate before the operation of safety valve of drum of shell.
- (3) Take necessary measures such as keeping warmth for prevention of freezing of a relief valve.
- (4) With regard to a pressure gauge and a water head gauge, prevent vibration hindering their function in use, and take necessary measures to prevent their insides from freezing and also to maintain the temperature less than 80 degrees.
- (5) With regard to dials of pressure gauges or water head gauges, put up easily visible indications at the position showing the maximum allowable working pressure of the boiler concerned.
- (6) Indicate the ordinary water level at a water gauge or other positions near the said gauge to be able to compare to the actual water level.
- (7) Protect water feeding pipes, blow pipes and connecting pipes of water gauges those which are in contact with burning gas using heatproof material.
- (8) Take necessary measures such as maintaining warmth for prevention of freezing of the return pipes of hot water boiler.

2. When two or more safety valves are provided, and one of them is adjusted in order to operate at the maximum allowable working pressure or lower, the employer may, notwithstanding the provision of item 1 of the preceding paragraph, adjust other safety valves to let them operate at a pressure three percent over the maximum allowable working pressure or lower.

(Management of Boiler Rooms, etc.)

**Article 29.** The employer shall, with regard to the management of boiler rooms, etc., perform the following matters:

- (1) Prohibit persons other than those concerned from entering a boiler room or other places where a boiler is installed without permission, and indicate that fact at an easily visible location.
- (2) Have the workers carry no inflammable substance into a boiler room, except those necessary for use.
- (3) Provide glass tubes for water gauges, gaskets and other necessary spare stores and tools for repairing in a boiler room.
- (4) Put up a boiler inspection certificate, and qualification and name(s) of the operations chief(s) of boilers at an easily visible position of a boiler room or other places where a boiler is installed.
- (5) With regard to a mobile boiler, have the operation chief of boilers hold a boiler inspection certificate or its copy.
- (6) When any crack is found in the bricks of a combustion chamber, flue, etc., or any interstice is found between a boiler body and laid bricks, repair them immediately.

(Ignition)

**Article 30.** In performing an ignition of boiler, the employer shall not ignite unless function of damper is inspected and ventilation of combustion chamber and of inside of flue is done sufficiently.

2. In performing an ignition of boiler, the worker shall not ignite, if it is not in conformity with the provision of the preceding paragraph.

(Blowoff)

**Article 31.** In performing a blowoff, the employer shall observe the following matters:

(1) One person does not blowoff two or more boilers at the same time.

(2) During the blowoff, he does not perform any other operation.

2. In performing a blowoff, the worker shall observe the matters as described in each item of the preceding paragraph.

(Periodical Voluntary Inspection)

**Article 32.** With regard to a boiler, the employer shall implement voluntary inspection, periodically, and at least once for every period not exceeding one month after the commencement of operation, on the matters shown in the right column of the following table for each item shown in the left column of the same table, provided that this provision shall not apply to a non-use period of boilers which are not used for a period exceeding one month.

Item		Matters to be inspected
Boiler itself		Existence of damage
Burning apparatus	Oil heater and fuel feeding device	Existence of damage
	Burner	Existence of adhesive or damage
	Strainer	Existence of clogging or damage
	Burner tile and furnace wall	Existence of adhesive or damage
	Stoker and fire grate	Existence of damage
	Flue	Existence of leakage and other damage, and existence of abnormality in draft pressure
Automatic control systems	Starting and stopping device, flame detector fuel cutoff device, water level regulator and pressure control device	Existence of abnormality in function
	Electric wiring	Existence of abnormality in terminals
Attached equipment and fittings	Water feeding device	Existence of damage and condition of operation
	Steam pipes and their attached valves	Existence of damage and condition of warmth maintenance

	Air preheater	Existence of damage
	Water treatment device	Existence of abnormality in function

2. With regard to the boilers as described in the proviso of the preceding paragraph, the employer shall, before the resumption of use, implement voluntary inspection on the matters shown in the right column of the table in the same paragraph for each item shown in the left column of the same table.

3. When having implemented the voluntary inspections as set forth by the preceding two paragraphs, the employer shall record their results and preserve such records for three years.

(Repairs, etc.)

**Article 33.** In the event that any abnormality has been found as the result of the voluntary inspection as set forth by paragraph 1 or 2 of the preceding Article, the employer shall take such necessary measures as repairs, etc.

(Measures to Be Taken When Entering the Inside of a Boiler or Flue)

**Article 34.** When the employer has a worker enter a boiler (including combustion chambers, hereinafter the same in this Article) or flue in order to perform cleaning, repairs, etc., the employer shall take the following measures:

- (1) Cool boiler or flue.
- (2) Ventilate the inside of boiler or flue.
- (3) With regard to the mobile electric wires used in boiler or flue, use cable or one having the same or more insulating effect and strength, and for the mobile electric light, use one provided with a guard.
- (4) Shut off securely the valve connections between other boilers in operation.

(Limitation of Placement)

**Article 35.** The employer shall place no person in the maintenance work of boilers from among the types of work set forth in item 5 of [Article 20 of the Cabinet Order](#) except one who has obtained a license of boiler maintenance worker (hereinafter referred to as the "boiler maintenance worker").

**Article 36.** Deleted.

## **Section 5. Performance Inspection**

(Validity Term of Boiler Inspection Certificate)

**Article 37.** The validity term of a boiler inspection certificate shall be one year.

2. Notwithstanding the provision of the preceding paragraph, as regarding a mobile boiler which has not been installed after having had the shop inspection or the pre-installation inspection and the Director general of the Prefectural Labour Bureau has approved that it has been kept in good condition, the validity term of said mobile boiler inspection certificate may be extended for the period not exceeding two years from the day of the shop inspection or pre-installation inspection and not exceeding 1 year from the day of the boiler installation.

(Performance Inspection, etc.)

**Article 38.** A person who intends to obtain a renewal of the validity term of a boiler inspection certificate shall undergo a performance inspection as provided for by [paragraph 2 of Article 41 of the Law](#) (hereinafter referred to as the "performance inspection") for the boiler related to the said inspection certificate and the matters set forth in each item of [paragraph 1 of Article 14](#).

2. The Chief of the competent Labour Standards Inspection Office or the Authorized Agency for Performance Inspection as described in [paragraph 2 of Article 41 of the Law](#) (hereinafter referred to as the "authorized agency for performance inspection") shall renew a validity term of a boiler inspection certificate for the boiler which passed the performance inspection as provided for by the preceding paragraph. In this case, the Chief of the competent Labour Standards Inspection Office or the authorized agency for performance inspection may renew a validity term shorter than one year or longer than one year, but not over two years, based on the results of a

performance inspection.

(Application of Performance Inspection, etc.)

**Article 39.** A person who intends to undergo a performance inspection related to a boiler and to be implemented by the Chief of the Labour Standards Inspection Office shall submit an Application for Performance Inspection of Boiler (Form No.19) to the Chief of the Competent Labour Standards Inspection Office.

(Measures to Be Taken When Undergoing a Performance Inspection)

**Article 40.** A person who undergoes a performance inspection related to a boiler shall cool the boiler concerned (including combustion chamber) and flue, clean them and make other preparations required for the performance inspection. However, cooling and cleaning of the boiler (including the combustion chamber) and flue may be omitted in the case of boilers approved by the Chief of the competent Labour Standards Inspection Office.

2. The provisions of paragraph 2 and 3 of [Article 6](#) shall apply mutatis mutandis to a performance inspection related to a boiler. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the said Article shall be read as "the Chief of the Labour Standards Inspection Office."

## **Section 6. Alteration, Suspension and Discontinuance of the Use**

(Notification on Alteration)

**Article 41.** With regard to a boiler, when the employer who intends to alter any part or equipment as described in the following items wishes to present a notification in accordance with the provision of [paragraph 1 of Article 88 of the Law](#), he shall submit a Notification on Alteration of Boiler (Form No.20) together with a boiler inspection certificate and a document showing the content of the alteration concerned to the Chief of the competent Labour Standards Inspection Office:

- (1) Shell, dome, flue, fire box, end plate, crown plate, tube plate, header or stay.
- (2) Attached equipment.

(3) Burning apparatus.

(4) Foundation of installation.

2. The provision of [paragraph 2 of Article 10](#) shall apply mutatis mutandis to the case when the notification under the provision of the preceding paragraph is submitted. In this case, the phrase "notification on installation of boilers, boiler specification and documents preserved by the preceding paragraph" used in item 1 of paragraph 2 of the same Article shall be read as "notification on alteration of boiler and documents prescribed by [paragraph 1 of Article 41](#)."

3. With regard to a boiler, when the employer (excluding those as described in [paragraph 1 of Article 88 of the Law](#)) wishes to alter any part or equipment prescribed in each item of paragraph 1, under the provision of paragraph 1 of the same Article which is applied mutatis mutandis in paragraph 2 of the same Article, he shall submit a Notification on Alteration of Boiler (Form No.20) together with a boiler inspection certificate and a document prescribed in paragraph 1 to the Chief of the competent Labour Standards Inspection Office.

(Alteration Inspection)

**Article 42.** With regard to a boiler, a person who has altered any part or equipment as specified in paragraph 1 of preceding Article, under the provision of [paragraph 3 of Article 38 of the Law](#), shall have the said boiler inspected by the Chief of the competent Labour Standards Inspection Office. However, this provision shall apply to the boiler for which it is deemed that the said inspection is not necessary by the Chief of the competent Labour Standards Inspection Office.

2. A person who intends to undergo an inspection under the provision of the preceding paragraph (hereinafter referred to as the "alteration inspection" in this Chapter) shall submit an Application for Alteration Inspection of Boiler (Form No.21) to the Chief of the competent Labour Standards Inspection Office.

3. The provisions of paragraph 2 and 3 of [Article 6](#) shall apply mutatis mutandis to an alteration inspection. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the said Article shall be read as "the Chief of the Labour Standards Inspection Office."

(Endorsement of Boiler Inspection Certificate)

**Article 43.** The Chief of the Labour Standards Inspection Office shall endorse, with regard to the

boiler which passed the alteration inspection (including the boilers set forth by the provision of paragraph 1 of the preceding Article), the boiler inspection certificate concerned, in respect of the date of inspection, parts of boiler altered and the results of inspection.

(Change of Employer, etc.)

**Article 44.** With regard to an installed boiler, when the employer has changed, the new employer shall, within ten days of the change, submit an Application for Renewal of Boiler Inspection Certificate (Form No.16) together with a boiler inspection certificate to the Chief of the competent Labour Standards Inspection Office, and shall have the said inspection certificate renewed.

2. The provision of the preceding paragraph shall, with regard to an installed mobile boiler, apply mutatis mutandis to the case when the workplace controlling the boiler concerned is changed. In this case, the term "the Chief of the competent Labour Standards Inspection Office" used in the said paragraph shall be read as "the Director General of the Prefectural Labour Bureau who has granted the said boiler inspection certificate through the Chief of the competent Labour Standards Inspection Office."

(Suspension)

**Article 45.** When a person who has installed a boiler intends to suspend the use of the boiler, and the period of suspension to be intended is over a validity term of a boiler inspection certificate, he shall report the fact, within the validity term of the said boiler inspection certificate, to the Chief of the competent Labour Standards Inspection Office."

(Inspection for Resumption of Use)

**Article 46.** A person who intends to resume the use of a boiler in suspension, shall, under the provision of [paragraph 3 of Article 38 of the Law](#), have the said boiler inspected by the Chief of the competent Labour Standards Inspection Office.

2. A person who intends to undergo an inspection under the provision of the preceding paragraph (hereinafter referred to as the "inspection for resumption of use" in this Chapter) shall submit an Application of Inspection for Resumption of Use of Boiler (Form No.22) to the Chief of the competent Labour Standards Inspection Office.

3. The provisions of paragraph 2 and 3 of [Article 6](#) shall apply mutatis mutandis to inspection for resumption of use. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the same Article shall be read as "the Chief of the Labour Standards Inspection Office."

(Endorsement of Boiler Inspection Certificate)

**Article 47.** The Chief of Labour Standards Inspection Office shall endorse, with regard to the boiler which passed an inspection for resumption of use, the boiler inspection certificate concerned in respect of the date of inspection and results of inspection.

(Return of Boiler Inspection Certificate)

**Article 48.** When the employer discontinues the use of a boiler, he shall, without delay, return the boiler inspection certificate to the Chief of the competent Labour Standards Inspection Office (for a boiler inspection certificate of a mobile boiler, to the Director General of the Prefectural Labour Bureau who has granted the said boiler inspection certificate through the Chief of the competent Labour Standards Inspection Office).

### **Chapter III. First Class Pressure Vessels**

#### **Section 1. Manufacturing**

(Permission for Manufacturing)

**Article 49.** A person who is to manufacture first class pressure vessels (excluding small-sized pressure vessels, hereinafter the same in this Chapter) shall obtain in advance permission from the Director General of the competent Prefectural Labour Bureau for the first class pressure vessels concerned. However, this provision shall apply to the first class pressure vessels similar in model to those which have already been permitted for manufacturing (hereinafter referred to as the "permitted model first class pressure vessels").

2. A person who is to obtain the permission specified by the preceding paragraph shall submit an Application of Permission for Manufacturing of First Class Pressure Vessel (Form No.1) together with drawings showing the construction of the first class pressure vessel concerned and documents stating the following items to the Director General of the competent Prefectural Labour Bureau:

(1) Strength calculation.

(2) Kinds, capacity and number of the equipment used for manufacture and inspection of first class pressure vessel.

(3) Outline of personal history of the person responsible for workmanship.

(4) Qualification and number of the workers who are to be engaged in the actual fabricating work of first class pressure vessels.

(5) In the case of manufacturing the first class pressure vessel by welding, the result of welding procedure tests.

(Report on Change)

**Article 50.** In the case of manufacturing the first class pressure vessel which was granted the permission provided for by paragraph 1 of the preceding Article or a permitted model first class pressure vessel, when a person who has been granted the said permission changes the equipment as described in item 2 of paragraph 2 of the same Article or the person responsible for workmanship as described in item 3 of the same paragraph, he shall submit a report on the changes concerned without delay to the Director General of the competent Prefectural Labour Bureau.

(Shop Inspection)

**Article 51.** A person who has manufactured a first class pressure vessel shall have the said first class pressure vessel inspected by the Director General of the competent Prefectural Labour Bureau (for a first class pressure vessel which is to be fabricated at the place where the said first class pressure is to be installed, by the Director General of the Prefectural Labour Bureau which exercises jurisdiction over the area where the first class pressure vessel is to be installed, hereinafter the same in this Article) under the provision of [paragraph 1 of Article 38 of the Law](#).

2. With reference to a first class pressure vessel which is to be fabricated by welding, a person cannot undergo the inspection as provided for by the provision of the preceding Article (hereinafter referred to as "shop inspection" in this Chapter"), unless the said first class pressure vessel passes the inspection set forth by [paragraph 1 of Article 53](#).

3. A person who is to undergo a shop inspection shall submit an Application for Shop Inspection of First Class Pressure Vessel (Form No.2) together with a first class pressure vessel specification (Form No.23) to the Director General of the competent Prefectural Labour Bureau.

4. The Director General of the competent Prefectural Labour Bureau shall stamp a mark (Form No.4) on the body of the first class pressure vessel which passed the shop inspection, and affix a seal "passed the shop inspection" (Form No.5) on the first class pressure vessel specification concerned and grant the said specification to the applicant.

(Measures to Be Taken When Undergoing a Shop Inspection)

**Article 52.** A person who undergoes a shop inspection shall perform the following matters.

- (1) Place the first class pressure vessel at a position where it can be easily inspected.
- (2) Prepare for the hydrostatic pressure test.
- (3) Arrange safety valves or other substitutive safety devices (hereinafter referred to as "safety valves" in this Chapter and the following Chapter).

2. The Director General of the Prefectural Labour Bureau may order the following matters to the applicant of shop inspection, when it is deemed necessary in the operation of the said inspection:

- (1) To remove all or part of the covering materials of first class pressure vessel.
- (2) To draw tubes or rivets, or to put a hole in plates or tubes.
- (3) Other matters deemed necessary.

3. A person who undergoes a shop inspection shall be present at the said inspection.

(Welding Inspection)

**Article 53.** A person who is to weld a first class pressure vessel which is to be fabricated by welding shall have the said first class pressure vessel inspected by the Director General of the competent Prefectural Labour Bureau under the provision of [paragraph 1 of Article 38 of the Law](#). However, this provision shall apply to the first class pressure vessel of which only the parts in which stresses other than compressive stress do not occur are welded.

2. A person who is to undergo an inspection as provided for by the preceding paragraph (hereinafter referred to as the "welding inspection" in this Chapter) shall, before the commencement of the welding operation, submit an Application for Welding Inspection of First Class Pressure Vessel (Form No.7) together with a first class pressure vessel welding specification (Form No.8) to the Director General of the competent Prefectural Labour Bureau.

3. The Director General of the competent Prefectural Labour Bureau shall stamp a mark (Form No.9) on the body of the first class pressure vessel which passed the welding inspection, and affix a seal "passed the welding inspection" (Form No.10) on the first class pressure vessel welding specification concerned and grant the said specification to the applicant.

(Measures to Be Taken When Undergoing a Welding Inspection)

**Article 54.** The provision of [Article 8](#) shall apply mutatis mutandis to a welding inspection.

(Limitation of Placement)

**Article 55.** The employer shall place no person in first class pressure vessel welding operations from among the operations set forth in item 4 of [Article 20 of the Cabinet Order](#) except one who has obtained a license of special class boiler welder. However, in relation to the operation for which the thickness of welding part is not over 25 mm, or welding is applied for connection of nozzles, flanges, etc., the employer may place one who has obtained a license of ordinary class boiler welder in the said operation.

## **Section 2. Installation**

(Notification on Installation)

**Article 56.** When the employer who is to install a first class pressure vessel wishes to present a notification under the provision of [paragraph 1 of Article 88 of the Law](#), the employer shall submit a Notification on Installation of First Class Pressure Vessel (Form No.24) together with a first class pressure vessel specification (Form No.23) and documents showing the vicinity of the place where the first class pressure vessel is to be installed and the situation of piping to the Chief of the competent Labour Standards Inspection Office.

2. In presenting a notification in accordance with the provision of the preceding paragraph, the provision of [paragraph 1 of Article 85 of the Safety and Health Ordinance](#) shall be applied as follows:

(1) In the case of presenting a notification on first class pressure vessel in conjunction with buildings or other machines, in accordance with the provision of [paragraph 1 of Article 88 of the Law](#), it shall be deemed unnecessary to describe those items in the notification and documents as described in [paragraph 1 of Article 85 of the Safety and Health Ordinance](#) but overlap with the items which are included in the notification on installation of first class pressure vessel, first class pressure vessel specification and documents prescribed by the preceding paragraph.

(2) In presenting a notification, in accordance with the provision of [paragraph 1 of Article 88 of the Law](#), only on a first class pressure vessel, the provision of [paragraph 1 of Article 85 of the Safety and Health Ordinance](#) shall not be applicable.

3. When the employer (excluding one provided for by [paragraph 1 of Article 88 of the Law](#)) wishes to install a first class pressure vessel, he shall, under the provision of paragraph 1 of the same Article which is applied mutatis mutandis in paragraph 2 of the same Article, submit a Notification on Installation of First Class Pressure Vessel (Form No.24) together with a pressure vessel specification and documents as described in paragraph 1 to the Chief of the competent Labour Standards Inspection Office.

(Pre-Installation Inspection)

**Article 57.** The persons described in the following items shall, under the provision of [paragraph 1 of Article 38 of the Law](#), have the first class pressure vessel specified in the respective items inspected by the Director General of the Prefectural Labour Bureau:

(1) A person who has imported a first class pressure vessel.

(2) A person who is to install a first class pressure vessel which has not been installed for the period of one year or more after the shop inspection or the inspection as prescribed in this paragraph.

(3) A person who is to reinstall or to resume the use of a first class pressure vessel of which use has been discontinued.

2. A person who has manufactured a first class pressure vessel in a foreign country may, under the provisions of [paragraph 2 of Article 38 of the Law](#), have the said first class pressure vessel inspected by the Director General of the Prefectural Labour Bureau. Where said inspection has been conducted, the provisions of the preceding paragraph shall not apply to the person who has imported the said first class pressure vessel.

3. A person who wishes to undergo an inspection as provided for by the preceding two paragraphs (hereinafter referred to as the "pre-installation inspection" in this Chapter) shall submit an Application for Pre-Installation Inspection of First Class Pressure Vessel (Form No.13) together with a first class pressure vessel specification (Form No.23) to the Director General of the Prefectural Labour Bureau.

4. When a person who imported a first class pressure vessel or manufactured it in a foreign country wishes it to undergo a pre-installation inspection, he may attach a document by which a person designated by the Minister of Health, Labour and Welfare (limited to persons with residence in a foreign country) confirms that the construction of the pressure vessel related to the said application is in compliance with the standards (limited only the parts related to the construction of a first class pressure

vessel) established by the Minister of Health, Labour and Welfare based on the provision of [paragraph 2, Article 37 of the Law](#) for the application prescribed in the preceding paragraph.

5. The Director General of the Prefectural Labour Bureau shall stamp a mark (Form No.4) on the body of the first class pressure vessel which passed the pre-installation inspection, and stamp a mark "passed the pre-installation inspection" (Form No.14) on the first class pressure vessel specification concerned and grant the said specification to the applicant.

(Measures to Be Taken When Undergoing a Pre-Installation Inspection)

**Article 58.** The provision of [Article 52](#) shall apply mutatis mutandis to a pre-installation inspection.

(Completion Inspection)

**Article 59.** A person who installed a first class pressure vessel shall, under the provision of [paragraph 3 of Article 38 of the Law](#), have the said first class pressure vessel and its piping inspected by the Chief of the competent Labour Standards Inspection Office. However, this provision shall apply to the first class pressure vessel for which it is deemed that such inspection is not necessary by the Chief of the competent Labour Standards Inspection Office.

2. The inspection as provided for by the preceding paragraph (hereinafter referred to as the "completion inspection" in this Chapter) shall not be undergone unless a first class pressure vessel passes the shop inspection or pre-installation inspection.

3. A person who wishes to undergo a completion inspection shall submit an Application for Completion Inspection of First Class Pressure Vessel (Form No.15) to the Chief of the competent Labour Standards Inspection Office.

(First Class Pressure Vessel Inspection Certificate)

**Article 60.** The Chief of the competent Labour Standards Inspection Office shall issue a first class pressure vessel inspection certificate (Form No.6) in relation to the first class pressure vessel which passed the completion inspection or those as described by the provision of paragraph 1 of the preceding Article.

2. When a person who has installed a first class pressure vessel has lost or damaged a first class pressure vessel inspection certificate, he shall submit an Application for Reissuance of First Class Pressure Vessel Inspection Certificate (Form No.16) together with the following documents to the Chief of the competent Labour Standards Inspection Office, and shall have the said inspection certificate reissued.

(1) When he has lost a first class pressure vessel inspection certificate, a document showing the fact.

(2) When he has damaged a first class pressure vessel inspection certificate, the said inspection certificate,

(Place Where First Class Pressure Vessel Is Installed)

**Article 61.** The first class pressure vessel shall be installed at a place where no difficulty is expected in handling, inspection and cleaning of the said first class pressure vessel.

2. The provision of [Article 21](#) shall apply mutatis mutandis to an open fire type first class pressure vessel.

### **Section 3. Management**

(Appointment of an Operations Chief of Work Handling First Class Pressure Vessels)

**Article 62.** The employer shall appoint an operations chief of work handling first class pressure vessels from among those who have completed the skill training course for operations chiefs of work handling first class pressure vessels related to chemical facilities in the case of work handling first class pressure vessels related to chemical facilities (chemical facilities shall be defined as those set forth in item 4 of paragraph 1 of [Article 15 of the Cabinet Order](#), hereinafter the same) from among the types of work as described in item 17 of [Article 6 of the Cabinet Order](#), and from among special class boiler operators, first class boiler operators, second class boiler operators or those who have completed the skill training course for operations chiefs of work handling first class pressure vessels related to chemical facilities or the skill training course for operations chiefs of work handling ordinary first class pressure vessels in the case of types of work other than the work handling first class pressure vessels related to chemical facilities from among the types of work set forth in item 17 of the Cabinet Order, respectively.

2. Notwithstanding the provisions of the preceding paragraph, the employer shall, with regard to those jobs set forth in item 17 of [Article 6 of the Cabinet Order](#) which are related to any of the first class pressure vessels under the Electric Utility Law (Law No.170 of 1964), the High Pressure Gas Safety Law or the Gas Utility Law (Law No.51 of 1954), appoint an operations chief of work handling first class pressure vessels from among those who have obtained a license of operations chief of work handling specified first class pressure vessels (for the work handling first class pressure vessels related to chemical facilities from among the said types of work, only limited to those who are described in item 2 or 3 of [paragraph 1 of Article 119](#) and have obtained a license of operations chief of work handling specified first class pressure vessel).

(Duties of an Operations Chief of Work Handling First Class Pressure Vessels)

**Article 63.** The employer shall have an operations chief of work handling first class pressure vessels perform the following matters:

- (1) Refrain from raising pressure over the maximum allowable working pressure.
- (2) Maintain the function of safety valves.
- (3) When first operating a first class pressure vessel, or changing the operating methods or the kind of materials to be handled in the said first class pressure vessel, have the workers in advance know well the procedures of the said operation and superintend the said operation directly.
- (4) Take necessary measures immediately, if any abnormality is found concerning a first class pressure vessel or its piping.
- (5) Check the condition of temperature, pressure, etc., in a first class pressure vessel at any time, and take necessary measures, if any abnormality is found.
- (6) Record the necessary matters regarding the operating conditions of facilities related to first class pressure vessels and guarantee that they are transferred to the next shift.

(Prohibition of Use)

**Article 64.** The employer shall not use a first class pressure vessel which is not in conformity with the standards (only limited to the parts related to the construction of first class pressure vessels) as provided for by the Minister of Health, Labour and Welfare on the basis of the provision of [paragraph 2 of Article 37 of the Law](#) .

(Management of Fittings)

**Article 65.** The employer shall, with regard to the management of safety valve and other fittings of first class pressure vessel, perform the following matters:

- (1) Adjust safety valves to let them operate at the maximum allowable working pressure or lower.
- (2) With regard to a pressure gauge, prevent vibration from hindering its function, and take necessary measures to prevent their insides from freezing and also to maintain the temperature less than 80 degrees.

(3) With regard to the dials of pressure gauges, put up easily visible indications at the position showing the maximum allowable working pressure of the first class pressure vessel concerned.

2. When two or more safety valves are provided, and one of them is adjusted in order to operate at the maximum allowable working pressure or lower, the employer may, notwithstanding the provision of item 1 of the preceding paragraph, adjust other safety valves to let them operate at the pressure three percent over the maximum allowable working pressure or lower.

(Indication)

**Article 66.** The employer shall put up the name(s) of an operations chief(s) of work handling first class pressure vessels at an easily visible location in the place where the first class pressure vessel is installed.

(Periodical Voluntary Inspection)

**Article 67.** With regard to a first class pressure vessel, the employer shall implement voluntary inspection, periodically, and at least once for every period not exceeding one month after the commencement of operation, on the following matters, provided that this provision shall not apply to a non-use period of first class pressure vessels which are not used for a period exceeding one month:

(1) Existence of damage to the vessel itself.

(2) Existence of wear in the locking bolts of cover plate.

(3) Existence of damage in the tubes or valves.

2. With regard to the first class pressure vessels as described in the proviso of the preceding paragraph, the employer shall, before the resumption of use, implement voluntary inspection on the matter as described in each item of the same paragraph.

3. When having implemented the voluntary inspections as set forth by the preceding two paragraphs, the employer shall record their results and preserve such records for three years.

(Repairs, etc.)

**Article 68.** In the event that any abnormality has been found as the result of the voluntary inspection as set forth by paragraph 1 or 2 of the preceding Article, the employer shall take such necessary measures as repairs, etc.

(Measures to Be Taken When Entering the Inside of a First Class Pressure Vessel)

**Article 69.** When the employer has a worker enter a first class pressure vessel in order to perform cleaning, repairs, etc., the employer shall take the following measures:

- (1) Cool the first class pressure vessel.
- (2) Ventilate the inside of the first class pressure vessel.
- (3) With regard to the mobile electric wires used in first class pressure vessel, use cable or one having the same or more insulating effect and strength, and for the mobile electric light, use one provided with a guard.
- (4) Shut off securely the valve connections between boilers in operation and other pressure vessels.

(Limitation of Placement)

**Article 70.** The employer shall place no person in the maintenance work of first class pressure vessels from among the types of work as set forth in item 5 of [Article 20 of the Cabinet Order](#) except one who has obtained a license of boiler maintenance worker.

**Article 71.** Deleted.

#### **Section 4. Performance Inspection**

(Validity Term of First Class Pressure Vessel Inspection Certificate)

**Article 72.** The validity term of a first class pressure vessel inspection certificate shall be one year.

(Performance Inspection, etc.)

**Article 73.** A person who intends obtaining a renewal of the validity term of a first class pressure vessel inspection certificate shall undergo a performance inspection in respect of the first class pressure vessel related to the said inspection certificate and its piping.

2. The Chief of the competent Labour Standards Inspection Office or the Authorized Agency for Performance Inspection shall renew the validity term of a first class pressure vessel inspection certificate for the first class pressure vessel which passed the performance inspection as provided for by the

preceding paragraph. In this case, the Chief of the competent Labour Standards Inspection Office or the Authorized Agency for Performance Inspection may renew a validity term of shorter than one year or longer than one year, but not over two years, based on the results of a performance inspection.

(Application of Performance Inspection, etc.)

**Article 74.** A person who intends to undergo a performance inspection related to a first class pressure vessel and to be implemented by the Chief of the Labour Standards Inspection Office shall submit an Application for Performance Inspection of First Class Pressure Vessel (Form No.19) to the Chief of the competent Labour Standards Inspection Office.

(Measures to Be Taken When Undergoing a Performance Inspection)

**Article 75.** A person who undergoes a performance inspection related to a first class pressure vessel shall cool the first class pressure vessel concerned, clean it, and make other preparations required for the performance inspection. However, cooling and cleaning may be omitted first class pressure vessels so approved by the Chief of the competent Labour Standards Inspection Office.

2. The provision of [paragraph 2 and 3 of Article 52](#) shall apply mutatis mutandis to a performance inspection related to a first class pressure vessel. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the said Article shall be read as "the Chief of the Labour Standards Inspection Office".

## **Section 5. Alteration, Suspension and Discontinuance of Use**

(Notification of Alteration)

**Article 76.** When the employer who is to alter the shell, end plate, bottom plate, tube plate, cover plate or stay wishes to present a notification in accordance with the provision of [paragraph 1 of Article 88 of the Law](#), he shall submit a Notification on Alteration of First Class Pressure Vessel (Form No. 20) together with a first class pressure vessel inspection certificate and a document showing the content of the alteration concerned to the Chief of the competent Labour Standards Inspection Office.

2. The provision of [paragraph 2 of Article 56](#) shall apply mutatis mutandis to the case when the notification under the provision of the preceding paragraph is submitted. In this case, the phrase "notification on installation of first class pressure vessel, first class pressure vessel specification and documents prescribed by the preceding paragraph" used in item 1 of paragraph 2 of the same Article shall be read as "notification on alteration of first class pressure vessel and documents prescribed by [paragraph 1 of Article 76](#)."

3. When the employer (excluding those described in [paragraph 1 of Article 88 of the Law](#)) wishes to alter any part of a first class pressure vessel prescribed in [paragraph 1](#), under the provision of [paragraph 1](#) of the same Article which is applied mutatis mutandis in paragraph 2 of the same Article, he shall submit a Notification on Alteration of First Class Pressure Vessel (Form No. 20) together with a first class inspection certificate and a document prescribed in paragraph 1 to the Chief of the competent Labour Standards Inspection Office.

(Alteration Inspection)

**Article 77.** A person who has altered any part of a first class pressure vessel specified in paragraph 1 of the preceding Article, under the provision of [paragraph 3 of Article 38 of the Law](#), shall have the said first class pressure vessel inspected by the Chief of the competent Labour Standards Inspection Office. However, this provision shall apply to the first class pressure vessel for which it is deemed that the said inspection is not necessary by the Chief of the competent Labour Standards Inspection Office.

2. A person who intends to undergo an inspection under the provision of the preceding paragraph (hereinafter referred to as the "alteration inspection" in this Chapter) shall submit an Application for Alteration Inspection of First Class Pressure Vessel (Form No.21) to the Chief of the competent Labour Standards Inspection Office.

3. The provisions of [paragraph 2 and 3 of Article 52](#) shall apply mutatis mutandis to an alteration inspection. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the said Article shall be read as "the Chief of the Labour Standards Inspection Office".

(Endorsement of First Class Pressure Vessel Inspection Certificate)

**Article 78.** The Chief of the Labour standards Inspection Office endorses, with regard to the first class pressure vessel which passed the alteration inspection (including the first class pressure vessels set forth by the provision of paragraph 1 of the preceding Article), the first class pressure vessel inspection certificate concerned, in respect of the date of inspection, parts of first class pressure vessel altered and the results of inspection.

(Change of the Employer etc.)

**Article 79.** With regard to an installed first class pressure vessel, when the employer has changed, the new employer shall, within ten days after change, submit an Application for Renewal of First Class Pressure Vessel Inspection Certificate (Form No.16) together with a first class pressure vessel inspection certificate to the Chief of the competent Labour Standards Inspection Office, and shall have the said

inspection certificate renewed.

(Suspension)

**Article 80.** When a person who has installed a first class pressure vessel intends to suspend the use of the first class pressure vessel, and the period of suspension to be intended is over the validity term of a first class pressure vessel inspection certificate, he shall report the fact within the validity term of the said first class pressure vessel inspection certificate to the Chief of the competent Labour Standards Inspection Office.

(Inspection for Resumption of Use)

**Article 81.** A person who intends to resume the use of a first class pressure vessel in suspension, shall, under the provision of [paragraph 3 of Article 38 of the Law](#), have the said first class pressure vessel inspected by the Chief of the competent Labour Standards Inspection Office.

2. A person who intends to undergo an inspection under the provision of the preceding paragraph (hereinafter referred to as the "inspection for resumption of use" in this Chapter) shall submit an Application of Inspection for Resumption of Use of First Class Pressure Vessel (Form No.22) to the Chief of the competent Labour Standards Inspection Office.

3. The provisions of [paragraph 2 and 3 of Article 52](#) shall apply mutatis mutandis to inspection for resumption of use. In this case, the term "the Director General of the Prefectural Labour Bureau" used in paragraph 2 of the same Article shall be read as "the Chief of the Labour Standards Inspection Office".

(Endorsement of First Class Pressure Vessel Inspection Certificate)

**Article 82.** The Chief of the Labour Standards Inspection Office endorses, with regard to the first class pressure vessel which passed an inspection for resumption of use, the first class pressure vessel inspection certificate concerned, in respect of the date of inspection and results of inspection.

(Return of First Class Pressure Vessel Inspection Certificate)

**Article 83.** When the employer discontinues the use of a first class pressure vessel, he shall without delay return the first class pressure vessel inspection certificate to the Chief of the competent Labour Standards Inspection Office.

## Chapter IV. Second Class Pressure Vessels

(Examination)

**Article 84.** A person who has manufactured or imported a second class pressure vessel shall undergo an examination under the provision of [paragraph 1 of Article 44 of the Law](#), in respect of the said second class pressure vessel.

2. A person who has manufactured a second class pressure vessel in a foreign country may have the examination prescribed in [paragraph 2 of Article 44 of the Law](#) conducted on the said second class pressure vessel. Where said examination has been conducted, the provisions of the preceding paragraph shall not apply to the person importing said second class pressure vessel.

3. The examination as provided for by the preceding two paragraphs shall be conducted in accordance with the Ordinance on Examination of Machines and Other Equipment (Ministry of Labour Ordinance No.45 of 1972).

**Article 85.** Deleted.

(Adjustment of Safety Valve)

**Article 86.** The employer shall adjust the safety valve of a second class pressure vessel to let it operate at the maximum allowable working pressure or lower. However, when two or more safety valves are provided, and one of them is adjusted in order to operate at the maximum allowable working pressure or lower, the employer may adjust other safety valves to let them operate at the pressure three percent over the maximum allowable working pressure or lower.

(Protection of Pressure Gauge)

**Article 87.** With regard to a pressure gauge, the employer shall take necessary measures to prevent its insides from freezing and also to maintain the temperature less than 80 degrees.

2. With regard to a dial of pressure gauge, the employer shall put up easily visible indication at the position showing the maximum allowable working pressure of the second class pressure vessel concerned.

(Periodical Voluntary Inspection)

**Article 88.** With regard to a second class pressure vessel, the employer shall implement voluntary inspection, periodically, and at least once for every period not exceeding one year after the commencement of operation, on the following matters, provided that this provision shall not apply to a non-use period of second class pressure vessels, which are not used for a period exceeding one year:

- (1) Existence of damage in the vessel itself.
- (2) Existence of wear in the locking bolts of the cover plate.
- (3) Existence of damage in the tubes or valves.

2. With regard to the second class pressure vessels as described in the provision of the preceding paragraph, the employer shall, before the resumption of use, implement voluntary inspection on the matters as described in each item of the same paragraph.

3. When having implemented the voluntary inspections as set forth by the preceding two paragraphs, the employer shall record their results and preserve such records for three years.

(Repairs, etc.)

**Article 89.** In the event that any abnormality has been found as the result of the voluntary inspection as set forth by paragraph 1 or 2 of the preceding Article, the employer shall take such necessary measures as repairs, etc.

**Article 90.** Deleted.

## **Chapter V. Small-sized Boilers and Small-sized Pressure Vessels**

(Examination)

**Article 90-2.** The provision of Article 84 shall apply mutatis mutandis to a person who has manufactured or imported a small-sized boiler or a small-sized pressure vessel, or a person who has manufactured a small-sized boiler or a small-sized pressure vessel in a foreign country.

(Report on Installation)

**Article 91.** When the employer has installed a small-sized boiler, he shall without delay submit a Report on Installation of Small-sized Boiler (Form No.26) together with a construction drawing as provided for

by item 1 of [paragraph 1 of Article 1 of the Ordinance on Examination of Machines](#) and Other Equipment and a small-sized boiler specification as provided for by item 2 of the same paragraph (limited only to the one which has been affixed with a seal indicating the fact of having passed the examination in accordance with the provision of Article 4 of the same Ordinance), and a drawing showing the surrounding of the place where the said small-sized boiler is to be installed to the Chief of the competent Labour Standards Inspection Office.

(Special Education)

**Article 92.** The employer shall, where he is to engage workers in the operation of a small-sized boiler, conduct special education for the safety concerning the said operation of the workers concerned.

2. The special education as provided for by the preceding paragraph shall be conducted on the following subjects:

- (1) Knowledge of the construction of boilers.
- (2) Knowledge of fittings of boilers.
- (3) Knowledge of fuel and combustion.
- (4) Related laws and ordinances.
- (5) Operation and maintenance of small-sized boilers.
- (6) Inspection of small-sized boilers.

3. Besides the matters prescribed by [Article 37 and 38 of the Safety and Health Ordinance](#) and the preceding two Articles, necessary matters in implementing the special education as provided for by paragraph 1 shall be set forth the Minister of Health, Labour and Welfare.

(Adjustment of Safety Valve)

**Article 93.** The employer shall adjust the safety valve of a small-sized boiler or a small-sized pressure vessel to let it operate at a pressure of 0.1 megapascals (for the small-sized boiler described in (e) of item 4 of [Article 1 of the Cabinet Order](#) and the small-sized pressure vessel described in (b) of item 6 of the same Article, at the maximum working pressure) or lower.

(Periodical Voluntary Inspection)

**Article 94.** With regard to a small-sized boiler or small-sized pressure vessel, the employer shall implement voluntary inspection, periodically, and at least once for every period not exceeding one year after the commencement of operation, on the following matters, provided that this provision shall not apply to a non-use period of small-sized boilers or small-sized pressure vessels which are not used for a period exceeding one year:

(1) For a small-sized boiler, existence of damage or abnormality in the boiler itself, burning apparatus, automatic control systems and fittings.

(2) For a small-sized pressure vessel, existence of damage or wear in the pressure vessel itself, locking bolts of cover plate, tubes or valves.

2. With regard to the small-sized boilers or small-sized pressure vessels described in the provision of the preceding paragraph, the employer shall, before the resumption of use, implement voluntary inspection on the matters as described in each item of the same paragraph.

3. When having implemented the voluntary inspections set forth by the preceding two paragraphs, the employer shall record their results and preserve such records for three years.

(Repairs, etc.)

**Article 95.** In the event that any abnormality has been found as the result of the voluntary inspection as set forth by paragraph 1 or 2 of the preceding Article, the employer shall take necessary measures as repairs, etc.

**Article 96.** Deleted.

## **Chapter VI. License**

### **Section 1. License of Special Class Boiler Operator, License of First Class Boiler Operator and License of Second Class Boiler Operator**

(Persons Qualified for the License)

**Article 97.** The license prescribed in the following items shall be granted for the persons described in the respective items by the Director General of the Prefectural Labour Bureau:

(1) License of special class boiler operator: Persons who have passed the license examination for

special class boiler operators.

(2) License of first class boiler operator: Persons who have passed the license examination for first class boiler operators.

(3) License of second class boiler operator:

a) Persons who have passed the license examination for second class boiler operators.

b) Persons who have completed the boiler operating training course under the training program for equipment management and operation specified in the "training course" column of Attached Table 2 of the Enforcement Ordinance (Ministry of Labour Ordinance No.24 of 1969) for the Vocational Skills Development Law (Law No.64 of 1969) or the boiler operating training course specified in the "training course" column of Attached Table 4 of the said ordinance (not including any training course provided by correspondence), among the ordinary vocational training courses which are standard training prescribed in Paragraph 1 of Article 27 of the said Law.

c) Besides the persons described in a) or b), persons specified by the Minister of Health, Labour and Welfare.

(Disqualification for the License)

**Article 98.** Persons described in the respective items of the preceding Article and specified by the Ministry of Health, Labour and Welfare Ordinance based on the provision of item 2 [paragraph 2 of Article 72 of the Law](#) shall be the persons who are under eighteen years of age.

(Person Designated by the Ministry of Health, Labour and Welfare Ordinance based on the Provision of Paragraph 3 of Article 72 of the Law)

**Article 98-2.** A person designated under the provisions of the Ministry of Health, Labour and Welfare Ordinance based on [paragraph 3 of Article 72 of the Law](#) related to the license as described in each item of Article 97 shall be those who can not confirm appropriately the necessary operation or the operating conditions of the boiler in carrying out the work relating to the said license due to the mental or physical function disorder.

(Consideration of Measures, etc., to Cover Handicap)

**Article 98-3.** In case the applicant for the license described in each item of Article 97 shall be the person described in preceding provisions, when the Director General of the Prefectural Labour Bureau decides to grant a license or not, he shall consider that the disorder is covered and the level of disorder is mitigated by the measures and treatments to cover the handicap.

(License with Reservation)

**Article 99.** The Director General of the Prefectural Labour Bureau may grant a license described in the respective items of [Article 97](#) to a handicapped person with the limitations of boiler type which he is able to operate and other necessary reservations concerning the operation.

**Article 100.** Deleted.

(Qualification for Taking the License Examination)

**Article 101.** With regard to the license examinations described in the following items, nobody except those who are mentioned in the respective items can receive these license examinations:

(1) License examination for special class boiler operator.

a) Persons who have experience in the operation of boilers (excluding the boilers described in a) to d) of item 16 of [Article 6 of the Cabinet Order](#) and the small-sized boilers, hereinafter the same in this Article) for at least five years after the receiving of a license of first class boiler operator, or persons who have experience as an operations chief of boilers for at least three years after the receiving of the said license.

b) Persons who have majored in the course or subject concerning boilers at a university or college accredited under the School Education Law (Law No.26 of 1947) (including universities and colleges as accredited under the former University/College Order (Imperial Order No.388 of 1918, hereinafter the same), or a technical college accredited under the same Law (including those under the former Technical College Order (Imperial Order No.61 of 1903, hereinafter the same) and graduated therefrom, and those who have experience in the operation of boilers for at least two years thereafter.

c) Besides the persons described in a) or b), persons specified by the Minister of Health, Labour and Welfare.

(2) License examination for first class boiler operator.

a) Persons who have experience in the operation of boilers for at least two years after the receiving of a license of second class boiler operator or persons who have experience as an operations chief of boilers for at least one year after the receiving of the said license.

b) Persons who have majored in a subject concerning boilers at a university, college, technical college or high school accredited under the School Education Law (including practical schools accredited under the former Secondary School Ordinance (Imperial Order No.36 of 1943, hereinafter the same) and graduated therefrom, and those who have completed practical training on operation of boilers at a school as same level as a high school for a period of one year or more.

c) Besides the persons described in a) or b), persons specified by the Minister of Health, Labour and Welfare.

(3) License examination for second class boiler operator.

- a) Persons who have majored in a subject concerning boilers at a university, college, technical college or senior high school accredited under the School Education Law and graduated therefrom, and those who have completed practical training on operation of boilers for a period of three months or more.
- b) Persons who have completed practical training on operation of boilers for a period of six months or more.
- c) Persons who have completed a skill training course of the operation of boilers conducted by the Director General of the Prefectural Labour Bureau or designated training institution (designated training institution shall be defined as the one which is specified by [paragraph 2 of Article 77 of the Law](#)), and those who have experience in the operation of boilers described in a) to d) of item 16 of [Article 6 of the Cabinet Order](#) at least four months.
- d) Besides the persons described in a) through c), persons specified by the Minister of Health, Labour and Welfare.

(Subjects of Examination in the License Examination)

**Article 102.** The license examination described in each item of the preceding Article shall be conducted in term of the following subjects with a written test:

- (1) Knowledge of the construction of boilers.
- (2) Knowledge of the operation of boilers.
- (3) Knowledge of fuel and combustion.
- (4) Related laws and ordinances.

(Exemption from Certain Subjects of Examination)

**Article 102-2.** The Director General of the Prefectural Labour Bureau may, when conducting the special class boiler operator license examination, grant an exemption to those persons who have already undergone an examination in the subjects set forth in the relevant items of the preceding Article and attained qualifying marks in some subjects for those subjects in which they gained the qualifying marks in the previous examination (limited to persons retaking a license examination within two years from the first day of the month immediately following the one in which the examinations in which they attained a qualifying mark was held).

(Details of License Examination)

**Article 103.** Such details necessary for implementing the license examinations as described in the respective items of [Article 101](#), other than those as prescribed by [Article 71 of the Safety and Health Ordinance](#) and the preceding three Articles, shall be set forth by the Minister of Health, Labour and Welfare.

## **Section 2. License of Special Class Boiler Welder and License of Ordinary Class Boiler Welder**

(Persons Qualified for the License)

**Article 104.** The license of special class boiler welder and the license of ordinary class boiler welder shall be granted to persons who have passed the license examination for special class boiler welders, or those who have passed the license examination for ordinary class boiler welders or those who have been exempted from all subjects of the written test and all of the practical test in the license examination for ordinary class boiler welders under the provision of [Article 111](#) by the Director General of the Prefectural Labour Bureau, respectively.

(Disqualification for the License)

**Article 105.** Persons described by the Ministry of Health, Labour and Welfare Ordinance based on the provision of item 2 of [paragraph 2 of Article 72 of the Law](#) relating to the license of special class boiler welder and the license of ordinary class boiler welder shall be the persons who are under eighteen years of age.

(Person Designated by the Ministry of Health, Labour and Welfare Ordinance based on the Provision of [Paragraph 3 of Article 72 of the Law](#))

**Article 105-2.** Persons designated by the Ministry of Health, Labour and Welfare Ordinance based on the provision of paragraph 3 of Article 72 of the Law relating to the license of special class boiler welder and the license of ordinary class boiler welder shall be the persons who can not operate appropriately the necessary welding equipment in carrying out the work relating to the license due to the mental or physical function disorder.

(Consideration of Measures, etc., to Cover Handicap)

**Article 105-3.** In case the applicant for the license of special class boiler welder or ordinary class boiler welder shall be the person described in preceding provisions, when the Director General of the Prefectural Labour Bureau decides to grant a license or not, he shall consider that the disorder is covered and the level of disorder is mitigated by the measures and treatments to cover the handicap.

(License with Reservation)

**Article 106.** The Director General of the Prefectural Labour Bureau may grant a license of special class boiler welder or a license of ordinary class boiler welder to a handicapped person suffering mental or physical function disorder with the limitation of operations he is able to perform and the necessary reservations concerning the operation.

(Validity Term of License)

**Article 107.** The validity term of the license of special class boiler welder and the license of ordinary class boiler welder shall be two years.

2. The Director General of the Prefectural Labour Bureau shall not renew the validity term of such license except in the case where the special class boiler welder or the ordinary class boiler welder (hereinafter referred to as the "boiler welder" in this Article) has welded a boiler or boilers and/or a first class pressure vessel or vessels within one year of the end of the term of validity of his or her license and all the boilers or first class pressure vessels welded by the boiler welder in the validity term of the said license have passed the welding inspection as provided for by [paragraph 2 of Article 7](#) or [paragraph 2 of Article 53](#) or the alteration inspection as provided for by [paragraph 2 of Article 42](#) or [paragraph 2 of Article 77](#), and the case where the skill of the boiler welder is considered as not decreasing.

3. Any person who intends to renew his or her license of special class boiler welder or of ordinary class boiler welder shall submit an Application for Renewal of License (Form No.12 under the Safety and Health Ordinance) within the validity term of the said license to the Director General of the Prefectural Labour Bureau who has granted the said license or who has jurisdiction over the district in which such person's residence is located.

**Article 108.** Deleted.

(Qualification for Taking the License Examination)

**Article 109.** With regard to a license examination for special class boiler welders, no person except those who have experience in the welding operation of boilers or first class pressure vessels for at least one year after the receiving of a license of ordinary class boiler welder can take this license examination.

2. Those other than persons who have experience in the welding operation at least one year can not take a license examination for ordinary class boiler welders.

(Subjects of Examination in the License Examination)

**Article 110.** The license examination for special class boiler welders and the license examination for ordinary class boiler welders shall be conducted with a written test and practical test, and the practical test shall be implemented for the persons who have passed the written test.

2. The written test shall be conducted in term of the following subjects:

- (1) Knowledge of the construction of boilers, and materials used for boilers.
- (2) Workmanship and methods of repairs of boilers.
- (3) Knowledge of the outline of welding procedures.
- (4) Knowledge of the outline of electrodes and properties of welded parts.
- (5) Knowledge of the outline of inspection methods for welded parts.
- (6) Knowledge of the operation of welding machines and related equipment.
- (7) Knowledge of safe welding operations.
- (8) Related laws and ordinances.

3. Practical test shall be conducted with a butt welding.

(Exemption of Subjects of Examination)

**Article 111.** The Director General of the Prefectural Labour Bureau shall exempt the subjects of examination shown in the right column of the following table for the persons shown in the middle column of the same table according to the classification of the license examination shown in the left column of the same table.

Classification of license examination	Persons exempted from subject of examination	Subjects of Examination to be exempted
License Examination for special class boiler welders	<p>(1) Persons who have passed the written test in the last license examination for special class boiler welders conducted by the Director General of the Prefectural Labour Bureau who intends to conduct the license examination concerned.</p> <p>(2) Persons who have passed the written test in the license examination for special class boiler welders conducted by the designated testing institution (designated testing</p>	All subjects in the the written test

	<p>institution shall be defined as that which is specified by the provision of paragraph 1 of Article 75-2 of the Law, hereinafter the same) which intends to implement the said license examination, and for which no more than one year has passed since the date of the said written test.</p> <p>(3) Persons who had the license of special class boiler welder, and for whom two years have not passed after the expiration of the validity term of the said license.</p>	
License Examination of ordinary class boiler welders	<p>(1) Persons who have passed the written test in the last license examination for ordinary class boiler welders conducted by the Director General of the Prefectural Labour Bureau who intends to conduct the license examination concerned.</p> <p>(2) Persons who have passed the written test in the license examination for ordinary class boiler welders conducted by the designated testing institution which intends to conduct the license examination concerned, and for which no more than one year has passed since the date of the said written test.</p> <p>(3) Persons who had the license of ordinary class boiler welder, and for whom two years have not passed after the expiration of the validity term of the said license.</p>	All subjects in the the written test
	<p>(1) Persons who have passed the welding skill test in category A of first class, category A of second class, category B of first class, category B of second class, or category D of first class, as provided for by Section 3 of Chapter 25 of the Construction Rules of Steel Vessels (Ministry of Communication Ordinance No.24 of 1940).</p> <p>(2) Persons who have been considered as having the same or more ability regarding butt welding compared with the persons described in the preceding item by the Director General of the Prefectural Labour Bureau.</p>	All of the practical test

(Details of License Examination)

**Article 112.** Such details necessary for implementing a license examination for special class boiler welders and a license examination for ordinary class boiler welders, besides those prescribed by Article 71 of the Safety and Health Ordinance and the preceding three Articles shall be set forth by the Minister of Health, Labour and Welfare.

### **Section 3. License of Boiler Maintenance Worker**

(Persons Qualified for the License)

**Article 113.** The license of boiler maintenance worker shall be granted to the persons who have passed the license examination for boiler maintenance workers by the Director General of the Prefectural Labour Bureau.

(Disqualification for the License)

**Article 114.** Persons described by the Ministry of Health, Labour and Welfare Ordinance based on the provision of item 2 of [paragraph 2 of Article 72 of the Law](#) relating to the license of boiler maintenance worker shall be the persons who are under eighteen years of age.

(Person Designated by the Ministry of Health, Labour and Welfare Ordinance based on the Provision of [Paragraph 3 of Article 72 of the Law](#))

**Article 114-2.** Persons described by the Ministry of Health, Labour and Welfare Ordinance based on the provision of paragraph 3 of Article 72 of the Law relating to the license of boiler maintenance worker shall be the persons who can not conduct appropriately cleaning of the boiler or disassembling of the fittings etc., in carrying out the work relating to the license due to the mental or physical function disorder.

(Consideration of Measures, etc., to Cover Handicap)

**Article 114-3.** In case the applicant for the license of boiler maintenance worker shall be the person who described in preceding provisions, when the Director General of the Prefectural Labour Bureau decides to grant a license or not, he shall consider that the disorder is covered and the level of disorder is mitigated by the measures and treatments to cover the handicap.

(License with Reservation)

**Article 114-4.** The Director General of the Prefectural Labour Bureau may grant a license of boiler maintenance worker to a person suffering from mental or physical function disorder with the limitation of operations he is able to perform and other necessary reservations concerning the

operation.

(Qualification for Taking the License Examination)

**Article 115.** Those other than the following persons can not receive the license examination for boiler maintenance workers:

(1) Persons who have experience in a supplementary operation for the work described by item 5 of [Article 20 of the Cabinet Order](#) at least six months.

(2) Persons who have experience in maintenance work of boilers (those which are specified by a) to d) of item 16 of [Article 6 of the Cabinet Order](#), but excluding small-sized boilers) or maintenance work of first class pressure vessels (those which are specified by a) or b) of item 17 of the same Article, but excluding small-sized pressure vessels) at least six months.

(3) Those who meet the provisions in (b) of item 3 of [Article 97](#).

(Subjects of Examination in the License Examination)

**Article 116.** The licensee examination for boiler maintenance workers shall be conducted in term of the following subjects with a written test.

(1) Knowledge of boilers and first class pressure vessels.

(2) Knowledge of maintenance work of boilers and first class pressure vessels.

(3) Knowledge of equipment, tools, chemicals, etc., used for maintenance work of boilers and first class pressure vessels.

(4) Related laws and ordinances.

(Exemption of Subjects of Examination)

**Article 117.** The Director General of the Prefectural Labour Bureau may exempt the subjects of examination described in item 1 of the preceding Article for boiler operators and the persons specified in b) of item 3 of [Article 97](#).

(Details of License Examination)

**Article 118.** Such details necessary for implementing a license examination for boiler maintenance workers, besides those prescribed by [Article 71 of the Safety and Health Ordinance](#) and the preceding three Articles shall be set forth by the Minister of Health, Labour and Welfare.

#### **Section 4. License of Operations Chief of Work Handling Specified First Class Pressure Vessels**

**Article 119.** The license of operations chief of work handling specified first class pressure vessels shall be granted to the following persons by the Director General of the Prefectural Labour Bureau:

(1) Persons who have received a license of first class boiler turbine chief engineer under item 6 of paragraph 1 of Article 44 of the Electric Utility Law or a license of second class boiler turbine chief engineer as set forth by item 7 of the same paragraph.

(2) Persons who have received a license of manufacturing safety officer or a license of sales supervisor as set forth by paragraph 1 of Article 29 of the High Pressure Gas Safety Law.

(3) Persons who have received a license of gas chief engineer as set forth by paragraph 1 of Article 32 of the Gas Utility Law.

2. Cases related to the license of operations chief of work handling specified first class pressure vessels as provided for by the Ministry of Health, Labour and Welfare Ordinance based on the provision of item 5 of [paragraph 2 of Article 74 of the Law](#) shall be the cases when the persons described in the respective item of the preceding paragraph were ordered to return the said license by the Minister of Economy, Trade and Industry or the Prefectural Governor under the provision of paragraph 4 of Article 44 of the Electric Utility Law, Article 30 of the High Pressure Gas Safety Law or Article 33 of the Gas Utility Law, as well as the cases specified by [Article 66 of the Safety and Health Ordinance](#).

**Chapter VII. Skill Training Course for Operations Chiefs of Boiler Installation Work, Skill Training Course of the Operation of Boilers, Skill Training Course for Operations Chiefs of Work Handling First Class Pressure Vessels related to Chemical Facilities and Skill Training Course for Operations Chiefs of Work Handling Ordinary First Class Pressure Vessels**

(Qualification for Taking the Skill Training Course for Operations Chiefs of Boiler Installation Work)

**Article 120.** Those other than the following persons can not receive the skill training course for operations chiefs of boiler installation work:

(1) Persons who have majored in the course or subject concerning boilers at a university, college or technical college accredited under the School Education Law and graduated therefrom, and who have experience in boiler installation work for at least two years thereafter.

(2) Persons who have majored in a subject concerning boilers at a high school or other schools as same level as a high school accredited under the School Education Law and graduated therefrom, and who have experience in boiler installation work for at least five years thereafter.

(3) Persons who have the experience in boiler installation work for at least eight years.

(4) Persons who have received a license of special class boiler operator and who have experience in boiler installation work for at least two years thereafter.

(5) Persons who have received a license of first class boiler operator and who have experience in the boiler installation work for at least five years thereafter.

(Subjects of Training in the Skill Training Course for Operations Chief of Boiler Installation Work)

**Article 121.** The skill training course for operations chiefs of boiler installation work shall be conducted in term of the following subjects with theoretical instruction:

(1) Knowledge of the construction, operation and fuel of boilers.

(2) Knowledge of the foundation, laying bricks and insulation work of boilers.

(3) Knowledge of installation of boiler body and attached equipment, etc.

(4) Related laws and ordinance.

(Subjects of Training in the Skill Training Course of the Operation of Boilers)

**Article 122.** The skill training course of the operation of boilers shall be conducted in item of the following subjects with theoretical instruction:

- (1) Knowledge of the construction of boilers.
- (2) Knowledge of operation of boilers.
- (3) Knowledge of ignition and combustion.
- (4) Knowledge of inspection and measures to be taken in case of an abnormal situation.
- (5) Related laws and ordinances.

(Qualification for Receiving the Skill Training Course for Operations Chiefs of Work Handling First Class Pressure Vessels Related to Chemical Facilities)

**Article 122-2.** Those other than persons who have experience in the work handling chemical facilities for at least five years cannot receive a skill training course for operations chiefs of work handling first class pressure vessels related to chemical facilities.

(Subjects of Training in the Skill Training Course for Operations Chiefs of Work Handling First Class Pressure Vessels Related to Chemical Facilities and the Skill Training Course for Operations Chiefs of Work Handling Ordinary First Class Pressure Vessels)

**Article 123.** The skill training course for operations chiefs of work handling first class pressure vessels related to chemical facilities shall be conducted in term of the following subjects with theoretical instruction:

- (1) Knowledge of the construction of first class pressure vessels.
- (2) Knowledge of operation of first class pressure vessels.
- (3) Knowledge of dangerous substances and chemical reactions.
- (4) Related laws and ordinances.

2. The skill training course for operations chiefs of work handling ordinary first class pressure vessels shall be conducted in term of the following subjects with theoretical instruction:

- (1) Knowledge of the construction of first class pressure vessels (excluding those related to chemical facilities, hereinafter the same in the following item).

(2) Knowledge of operation of first class pressure vessels.

(3) Related laws and ordinances.

(Details of Skill Training Course)

**Article 124.** Such details necessary for implementing a skill training course for operation chiefs of boiler installation work, skill training course of the operation of boilers, skill training course for operation chiefs of work handling first class pressure vessels related to chemical facilities and skill training courses for operation chiefs of work handling ordinary first class pressure vessels, other than those prescribed by Article 80 through 82 of the Safety and Health Ordinance and this Chapter shall be set forth by the Minister of Health, Labour and Welfare.

## **Chapter VIII. Miscellaneous Provisions**

**Article 125.** With reference to the boilers, first class pressure vessels and second class pressure vessels as described in the following items, the provisions prescribed in the respective items shall not be applied.

1. Boilers, first class pressure vessels and second class pressure vessels which are used in ships under the application of the Ship Safety Law (Law No.11 of 1933) and those which are under the application of the Electric Utility Law:

[Article 3](#) through [Article 8](#), [Article 10](#) through [15](#), [Article 26](#), [Article 32](#), [Article 33](#), [Article 36](#) through [Article 54](#), [Article 56](#) through [Article 60](#), [Article 64](#), [Article 67](#), [Article 68](#), [Article 71](#) through [Article 85](#), [Article 88](#) through [Article 91](#) and [Article 94](#) through [Article 96](#)

2. First class pressure vessels and second class pressure vessels which are under the application of the High Pressure Gas Safety Law:

[Article 49](#) through [Article 54](#), [Article 56](#) through [Article 60](#), [Article 64](#), [Article 67](#), [Article 68](#), [Article 71](#) through [Article 85](#), [Article 88](#) through [Article 90-2](#) and [Article 94](#) through [Article 96](#)

3. First class pressure vessels and second class pressure vessels which are under the application of the Gas Utility Law:

[Article 49](#) through [Article 54](#), [Article 56](#) through [Article 60](#), [Article 64](#), [Article 67](#), [Article 68](#), [Article 71](#) through [Article 85](#), [Article 88](#) through [Article 90-2](#) and [Article 94](#) through [Article 96](#)

4. First class pressure vessels which are under the application of the Law concerning Safety and Corrected Adjustment of Trade of Liquefied Petroleum Gas (Law No.149 of 1967):

[Article 51](#), [Article 52](#), [Article 56](#) through [Article 60](#), [Article 67](#), [Article 68](#) and [Article 71](#) through [Article 83](#)

5. Second class pressure vessels which are installed in the cars used for railroads under the application of the Railroad Business Law (Law No.65 of 1900), those which are installed in the cars used for railroad services under the application of the Railways Industry Law (Law No.92 of 1986), those which are installed in the cars used for the railways under the application of the Railway Law (Law No.76 of 1921) and those which are installed in the automotive vehicles under the application of the Road Transportation Vehicle Law (Law No.185 of 1951):

[Article 85](#) and [Article 90](#).