

Safety Ordinance for Cranes

(Ordinance of the Ministry of Labour No. 34 of September 30, 1972)

Chapter I General Provisions

(Definitions)

Article 1 In this Ordinance of the Ministry, the meanings of the terms listed in the following items are prescribed respectively in those items:

- (i) "Mobile Crane" means a mobile crane set forth in item (viii) of Article 1 of the Enforcement Order of the Industrial Safety and Health Act (Cabinet Order No. 318 of 1972, hereinafter referred to as "the Order");
- (ii) "Lift for Construction Work" means a construction lift set forth in item (x) of Article 1 of the Order;
- (iii) "Light Capacity Lift" means a light capacity lift set forth in item (ix) of Article 1 of the Order;
- (iv) "Lifting Capacity" means the lifting capacity set forth in Article 10 of the Order;
- (v) "Loading Capacity" means the loading capacity set forth in item (vi) of paragraph (1) of Article 12 of the Order;
- (vi) "Rated Capacity" means the load being subtracted the load corresponding to the weight of a load-lifting attachment such as a hook and a grab bucket from the Lifting Capacity for a crane (excluding a Mobile Crane, the same applies hereinafter.) which is not equipped with a jib or a derrick which is not equipped with a boom, or from the maximum load which can be burdened corresponding to its structure and material, the inclination and length of a jib or a boom, or the position of a trolley on a jib for a crane which is equipped with a jib (hereinafter referred to as "Jib Crane"), a Mobile Crane or a derrick which is equipped with a boom;
- (vii) "Rated Speed" means the maximum speed of motion of lifting, travelling, slewing, transverse of trolley, etc., while suspending a load with the weight corresponding to the Rated Capacity for a crane, a Mobile Crane or a derrick, and the maximum speed of motion of raising while getting a load with the weight corresponding to the Loading Capacity on a cage for an elevator, a Lift for Construction Work or a Light Capacity Lift.

(Exemption of Application)

Article 2 This Ordinance of the Ministry does not apply to a crane, a Mobile Crane, a derrick, an elevator, a Lift for Construction Work or a Light Capacity Lift listed in the following each item:

- (i) a crane, a Mobile Crane or a derrick with Lifting Capacity of less than 0.5 ton;
- (ii) an elevator, a Lift for Construction Work or a Light Capacity Lift with Loading Capacity of less than 0.25 ton;
- (iii) a Lift for Construction Work with Loading Capacity of 0.25 ton or more and also the height of the guide rails (hoist ways, in the case of lifts equipped with them) of less than 10 m;
- (iv) a lift for trap cellar, an elevator installed in the work place and office other than those listed in item (i) to (v) of the Appended Table 1 of the Labour Standards Act (Act No. 49 of 1947), an elevator installed in the ships subject to the Ship Safety Act (Act No. 11 of 1933) and an elevator placed mainly for the service of public use.

Chapter II Crane

Section 1 Manufacturing and Installation

(Permission to manufacture)

Article 3 (1) A person who intends to manufacture a crane (limited to the one set forth in item (iii) of paragraph (1) of Article 12 of the Order, hereinafter the same applies in this Article to Article 10, Article 16 and Article 17, and Section 4 and Section 5 of this Chapter) must obtain, in advance, the permission in respect to the crane intended to manufacture from the Director of the Prefectural Labour Bureau who exercises jurisdiction over the area where the work place is located (hereinafter referred to as "the Director of the Competent Prefectural Labour Bureau"). However, this does not apply to the crane, the type of which is identical with the crane, which has been obtained the said permission already (hereinafter referred to as "permitted type crane" in this Chapter).

(2) A person who intends to obtain the permission set forth in the preceding paragraph must submit an application for the crane manufacturing permission (Form No. 1) with the assembly drawing of the crane and the document stating the following matters to the Director of the Competent Prefectural Labour Bureau:

- (i) standards of strength calculation;
- (ii) outline of the equipment for inspection performed on the process of manufacturing;
- (iii) name and outline of career of the chief designer and the responsible person on manufacturing work.

(Report of Alteration on Equipment, etc., for Inspection)

Article 4 The person who has obtained the permission set forth in paragraph (1)

of the preceding Article must, in the case of manufacturing the crane pertaining the said permission or the permitted type crane, when the equipment set forth in item (ii) of paragraph (2) of the same Article or either the chief designer or the responsible person on manufacturing work set forth in item (iii) of the same paragraph were altered, report that matter without delay to the Director of the Competent Prefectural Labour Bureau.

(Notification for Installation)

Article 5 (1) The employer who intends to install a crane must, when notifying pursuant to the provisions of paragraph (1) of Article 88 of the Industrial Safety and Health Act (hereinafter referred to as "the Act"), submit the crane installation notification (Form No. 2) with the specification of the crane (Form No. 3), the assembly drawing of the crane and the strength calculation statement of the structural parts listed in the right column of the Appended Table corresponding to the type of the crane listed in the left column of the same Table respectively and the document stating the following matters to the Chief of the Labour Standards Inspection Office who exercises jurisdiction over the area where the workplace is located (hereinafter referred to as "the Chief of the Competent Labour Standards Inspection Office"):

- (i) surroundings at the place of installation;
- (ii) outline of the foundation;
- (iii) travelling range for a travelling crane.

(2) In the case of the notification pursuant to the provisions of the preceding paragraph, the provisions of paragraph (1) of Article 85 of the Ordinance on Industrial Safety and Health (the Ordinance of the Ministry of Labour No. 32 of 1972, hereinafter referred to as "the Safety and Health Ordinance") are applied as provided for as follows:

- (i) in the case submitting the notification on a crane in conjunction with the building or other machine, etc., pursuant to the provisions of paragraph (1) of the Article 88 of the Act, it is not required to describe those items which are described in the notification and the document prescribed in paragraph (1) of Article 85 of the Safety and Health Ordinance, and overlap with the items in the notification and the documents presented pursuant to the provisions of the preceding paragraph;
- (ii) in the case of the notification only on a crane pursuant to the provisions of paragraph (1) of Article 88 of the Act, the provisions of paragraph (1) of Article 85 of the Safety and Health Ordinance do not apply.

(3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) who intends to install a crane must, pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis to paragraph (2) of the same Article, submit the crane installation

notification (Form No. 2) with the specification, the assembly drawing, the strength calculation statement set forth in paragraph (1) to the Chief of the Competent Labour Standards Inspection Office.

(Completion Inspection)

Article 6 (1) A person who has installed a crane must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said crane by the Chief of the Competent Labour Standards Inspection Office.

However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.

(2) On the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as the "completion inspection" in this Section), in addition to examining the construction and the function of each part of the crane, the load test and the stability test are to be performed. However, on the completion inspection for an overhead travelling crane or a gantry crane, etc., which is unlikely to cause overturn, the said test is to be limited to the load test.

(3) The load test set forth in the preceding paragraph is to be carried out in such manners as performing motions with hoisting, travelling, slewing, trolley traverse etc., while suspending a load of the mass corresponding to 1.25 times of the Rated Capacity (in the case that the Rated Capacity exceeds 200 tons, the mass of a load added 50 tons on the Rated Capacity).

(4) The stability test set forth in paragraph (2) is to be carried out in such manners as slightly lifting a load off the ground under the most unfavourable condition for the stability for the said crane, while suspending a load of the mass corresponding to 1.27 times of the Rated Capacity. On this test, such equipment as anchoring devices of crane, rail clumps, etc., is not to be functioned.

(5) The Chief of the Competent Labour Standards Inspection Office may, for the crane that the temporary load test set forth in paragraph (1) of Article 8 was carried out within one year before the date of the completion inspection, omit a part of the completion inspection.

(6) A person who intends to undergo the completion inspection for a crane must submit an application for the crane completion inspection (Form No. 4) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the accreditation pursuant to the provisions of the proviso of paragraph (1) of Article 88 of the Act (including the cases where it is applied *mutatis mutandis* in paragraph (2) of the same Article, hereinafter referred to as "Accreditation"), the specification, the assembly

drawing, the strength calculation statement and the documents set forth in paragraph (1) of the preceding Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Completion Inspection)

- Article 7 (1) A person who undergoes the completion inspection must, as regards the crane being subjected to the said inspection, prepare a test load and the slinging equipment for the load test and the stability test.
- (2) The Chief of the Competent Labour Standards Inspection Office may, when having found the necessity for the completion inspection, as regards the crane pertaining to the said inspection, order the following matters to the person who undergoes the said inspection:
- (i) to disassemble safety devices;
 - (ii) to take off a part of coating;
 - (iii) to pick out rivets, or to make a hole in a part of members;
 - (iv) to cut off a part of wire ropes;
 - (v) in addition to the matters listed in the preceding each item, the matters found to be necessary for the said inspection.
- (3) A person who undergoes the completion inspection must be present at the said inspection.

(Temporary Load Test)

- Article 8 (1) A person who has obtained the permission set forth in paragraph (1) of Article 3 may undergo the temporary load test for the crane pertaining to the said permission or the permitted type crane by the Director of the Competent Prefectural Labour Bureau.
- (2) A person who intends to undergo the temporary load test must submit an application for crane temporary load test (Form No. 5) with assembly drawing of the crane to the Director of the Competent Prefectural Labour Bureau.
- (3) The Director of the Competent Prefectural Labour Bureau is to, as regards the crane on which the temporary load test has been carried out, prepare the record of the temporary load test (Form No. 6) and issue it to the person who underwent the temporary load test set forth in the preceding paragraph.

(Inspection Certificate for Crane)

- Article 9 (1) The Chief of the Competent Labour Standards Inspection Office, as regards the crane, which passed the completion inspection or the crane set forth in the proviso of paragraph (1) of Article 6, is to issue the crane inspection certificate (Form No. 7) to the person who submitted the application pursuant to the provisions of paragraph (6) of the same Article.
- (2) A person who has installed a crane must, when having lost or damaged the

crane inspection certificate, submit an application for reissue of the crane inspection certificate, (Form No. 8) with the following document to the Chief of the Competent Labour Standards Inspection Office and be granted the reissue:

(i) the document explaining the lost of the crane inspection certificate in the event of losing;

(ii) the crane inspection certificate in the event of damaging.

(3) On alteration of the person who has installed the crane, the replaced person must, within ten days from the said alteration, submit an application for renewal of crane inspection certificate (Form No. 8) with the crane inspection certificate to the Chief of the Competent Labour Standards Inspection Office, and be granted the renewal.

(Validity Term of Inspection Certificate)

Article 10 The validity term of the crane inspection certificate is for two years.

However, based on the results of the completion inspection, the said validity term may be restricted for less than two years.

(Report for Installation)

Article 11 The employer who intends to install a crane set forth in item (xiv) of paragraph (3) of Article 13 of the Order must submit, in advance, the crane installation report (Form No. 9) to the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the employer who has obtained the Accreditation.

(Load Test, etc.)

Article 12 The employer must, when having installed the crane set forth in the preceding Article, perform the load test set forth in paragraph (3) of Article 6 and the stability test set forth in paragraph (4) of the same Article for the said crane.

(Clearance between Travelling Crane and Building, etc.)

Article 13 The employer must comply with the following provisions, as regards the clearance between the travelling crane (excluding the one having no crane girder or having no footpath on the crane girder) installed in the building and the said building or the installations in the building. However, as regards the provisions of item (ii), this does not apply to when the said travelling crane equipped with a canopy (limited to the one installed over the footpath on the crane girder and having the height of 1.5 m or more from the said footpath):

(i) the clearance between the highest part of the said travelling crane

(excluding parts of an electric collector) and a part of building such as braces, girders and beams, or piping, other crane, other equipment that are located

- above the said travelling crane be 0.4 m or more;
- (ii) the clearance between a footpath on a crane girder and a part of the building such as braces, girders and beams, or piping, other crane, other equipment that are located above the said footpath, be 1.8 m or more.

(Footpath between Crane and Building, etc.)

Article 14 The employer must, when installing a footpath between a travelling crane or a slewing crane and the building or the equipment, ensure the width of the said footpath of 0.6 m or more. However, as regards the part of the said footpath being contact with pillars of the building, this width may be reduced to 0.4 m or more.

(Clearance between Operator's Cab, etc., and Footpath)

Article 15 The employer must make the clearance between the side of the operator's cab or the operating station and the end of the footpath led to the said operator's cab or the operating station concerned, or the clearance between the end of the footpath installed on the crane girder and the end of the footpath led to the said footpath, 0.3 m or less. However, this does not apply to when it is unlikely to cause danger to workers due to falling.

Section 2 Use and Placement

(Providing with Inspection Certificate)

Article 16 The employer must, when carrying out the work using a crane, provide the crane inspection certificate of the said crane at the place where the said work is carried out.

(Limitation of Use)

Article 17 The employer must not use a crane, unless it complies with the standard prescribed by the Minister of Health, Labour and Welfare set forth in paragraph (2) of Article 37 of the Act (hereinafter referred to as "the Standard Prescribed by the Minister of Health, Labour and Welfare") (limited to the structural parts of the crane).

(Loading Condition as to Design Base)

Article 17-2 The employer is to, when using a crane, in order to prevent steels, etc., which construct the structural parts of the said crane from deformation, breakage, etc., take into account the number of loading cycle and the mass of lifted loads to be regularly loaded (hereinafter referred to as "Loading Condition") upon which the design of the said crane is based.

(Prevention for Over-winding)

Article 18 The employer must, as regards an over-winding preventive device on a crane, adjust the vertical distance between the upper surface of the load-lifting attachment such as a hook and a grab bucket or the upper surface of the hoisting sheave of the said load-lifting attachment and the lower surface of a drum, a sheave, a trolley frame and others which is liable to coming into contact with the said upper surface (excluding an inclined jib), for 0.25 m or more (0.05 m or more for the direct driven type over-winding preventive device).

Article 19 The employer must, as regards a crane without an over-winding preventive device, take such measures as marking on hoisting wire ropes and installing warning devices in order to prevent workers from dangers due to over-winding of hoisting wire ropes.

(Adjustment of Safety Valves)

Article 20 The employer must, as regards safety valves for preventing the excessive pressure rise of the water pressure or the oil pressure of a crane which uses the water pressure or the oil pressure as power source, adjust them for being actuated at not more than the pressure corresponding to the water pressure or the hydraulic pressure at which the said cranes are operated with the load corresponding to the Rated Capacity (for a Jib Crane, the maximum value of the Rated Capacity). However, this does not apply to the case of loading over its Rated Capacity pursuant to the provisions of paragraph (2) of Article 23, or performing the load test or the stability test pursuant to the provisions of Article 12, and adjusting the valves for being actuated at the pressure necessary for those cases.

(Use of Safety Catch)

Article 20-2 The employer must, when lifting a load using a crane equipped with a device for preventing sling wire ropes, etc., from slipping off from a hook (hereinafter referred to as "Safety Catch"), make use of the said Safety Catch.

(Special Education)

Article 21 (1) The employer must, when placing a worker in operation of the cranes listed in the following each item, give the special education for the safety related to the said operation, to the said worker:

- (i) a crane having the Lifting Capacity of less than 5 tons;
- (ii) a telfer flying over railways having the Lifting Capacity of 5 tons or more.

(2) The special education set forth in the preceding paragraph must be conducted on the following subjects:

- (i) knowledge on cranes;

- (ii) knowledge on prime movers and the electricity;
- (iii) knowledge on the dynamics necessary for operation of cranes;
- (iv) related legislation;
- (v) operation of cranes;
- (vi) signals for operation of cranes.

(3) In addition to the matters prescribed in Article 37 and Article 38 of the Safety and Health Ordinance and in the preceding two paragraphs, the Minister of Health, Labour and Welfare prescribes necessary matters related to the special education set forth in paragraph (1).

(Special Education)

Article 22 The employer must, as regards the works listed in item (vi) of Article 20 of the Order, place nobody in the said works other than the one who has obtained the crane/derrick operator's license. However, as regard the crane operated by an operator, who is staying on a floor and moving simultaneously along with the movement of lifted loads (hereinafter referred to as "Floor-operated Crane"), the employer may place the person who has completed the skill training course for floor-operated crane operation in the said work.

(Limitation on Overload)

Article 23 (1) The employer must not use a crane being loaded with the load exceeding its Rated Capacity.

(2) Notwithstanding the provisions of the preceding paragraph, the employer may, in the case of having remarkable difficulty to conform to the provisions of the same paragraph due to the unavoidable reason and when taking the following measures, use the crane loaded over its Rated Capacity up to the load on the load test prescribed in paragraph (3) of Article 6:

- (i) to submit in advance, a crane special case report (Form No. 10) to the Chief of the Competent Labour Standards Inspection Office;
- (ii) to confirm in advance, that there is no abnormality by performing the load test prescribed in paragraph (3) of Article 6;
- (iii) to designate a person who supervises the operation, and to operate the crane under the direct supervision by the said person.

(3) The employer must, when having performed the load test pursuant to the provisions of item (ii) of the preceding paragraph and used the crane loaded over its Rated Capacity, record the results and reserve them for three years.

(Limitation of Jib Angle)

Article 24 The employer must not use a Jib Crane, exceeding a range of jib angle stated in the specification of the crane (for a Jib Crane with the Lifting Capacity of less than 3 tons, the range of jib angle designated by the

manufacturer).

(Indication, etc., for Rated Capacity)

Article 24-2 The employer must, when carrying out the work using a crane, take measures for indications or others so that a crane operator and slingers are always able to confirm the Rated Capacity of the said crane.

(Signals for Operation)

Article 25 (1) The employer must, when carrying out the work using a crane, set fixed signals for operation of the crane, designate a person who gives the said signals and have the said person give the said signals. However, this does not apply to when having only a crane operator carry out the work single-handedly.
(2) The person designated pursuant to the preceding paragraph, when engaging in the work set forth in the same paragraph, must give the signals set forth in the same paragraph.
(3) Workers engaging in the work set forth in paragraph (1) must follow the signals set forth in the same paragraph.

(Restriction on Riding)

Article 26 The employer must not carry workers by a crane, nor have workers work being hanged from the crane.

Article 27 (1) The employer may, notwithstanding the provisions of the preceding Article, in the unavoidable case due to the nature of the work or in a necessary case to carry out the work safely, provides the exclusive riding equipment fitted with a load-lifting attachment and ride workers on the crane.
(2) The employer must, as regards the riding equipment set forth in the preceding paragraph, ensure the following matters in order to prevent workers from the dangers due to falling:
(i) to take measures for preventing the riding equipment from the transposition and the falling;
(ii) to have workers use safety belts (meaning safety belts set forth in item (xxviii) of paragraph (3) of Article 13 of the Order) and other lifelines (hereinafter referred to as "Safety Belts, etc.");
(iii) to make the riding equipment lower by the method of power lowering.
(3) Workers must, when having been instructed to use Safety Belts, etc. in the case referred to in the preceding paragraph, make use of them.

(Prohibition of Entry)

Article 28 The employer must, when carrying out the work using a cable crane, in order to prevent workers from dangers due to rebounding of a hoisting or a

traversing wire rope or flying of a sheave or its fittings caused by damage of the said sheave through which the said hoisting or traversing wire rope reeves or damage of its fittings, not allow workers to enter the area within interior angle of the said wire rope where it is liable to cause the said dangers to workers.

Article 29 The employer must, when carrying out the work pertaining to a crane and in the case falling under any of the following each item, not allow workers to enter the place under the lifted load (in the case set forth in item (vi), including load-lifting attachments):

- (i) when a load slung using lifting hooks being suspended;
- (ii) when a load slung using a single clamp being suspended;
- (iii) when a load slung at one position of the load using a wire rope sling, chain sling, fibre rope sling or fibre belt sling (hereinafter and up to the Article 115, referred to as "wire rope sling, etc.") being suspended (excluding the case of slinging a load by reeving the wire rope sling, etc., through an hole or an eye-bolt provided on the load);
- (iv) when plural loads being lifted at a time, and not fixed such as bundled and kept in a box;
- (v) when a load slung using a load-lifting attachment or a sling gear equipped with the magnet system or the vacuum system being suspended;
- (vi) when lowering a load or a load-lifting attachment by methods other than power lowering.

(Work of Repairs, etc., on Juxtaposed Cranes)

Article 30 The employer must, when carrying out the work repairing, adjusting, checking, etc., on travelling cranes installed side by side on the same runway, or when carrying out the work on the runway or other places where it is liable to cause dangers to a worker due to contact with the travelling cranes, in order to prevent workers from dangers due to the collision of the travelling cranes each other or having the travelling cranes contact with workers, take such measures as placing a watcher or installing stoppers on the runways.

(Prohibition of Operation, etc.)

Article 30-2 The employer must, when carrying out the work for checking, repairing, painting, etc. (hereinafter referred to as "checkup work, etc.", in this Article) for overhead travelling cranes or bridge cranes (hereinafter referred to as "overhead cranes, etc.", in this Article), or the building, the machinery, the equipment, etc., close to the said overhead travelling cranes, etc., on crane girders, cantilevers, legs of the said overhead travelling cranes, etc., prohibit to operate the said overhead travelling cranes, etc., and indicate the warning to

prohibit operating the said overhead travelling cranes, etc. at the operating station of the said overhead travelling cranes, etc., in order to prevent workers from dangers due to falling, caught-in-between, etc., by unexpected sudden movement of overhead traveling cranes, etc. However, this does not apply to the case of designating the person who supervises the checkup work, etc., and having the said person supervise the checkup work, etc., and set the method of coordination and signals between workers engaged in the checkup work, etc., on crane girders, cantilevers or legs of the overhead travelling cranes, etc., and operators of the overhead traveling cranes.

(Prevention of Over-run in Storm)

Article 31 The employer must, as regards a travelling crane installed out of doors, when the wind having instantaneous wind velocity of exceeding 30 m/s is expected to blow, take measures such as setting anchoring devices in order to prevent the over-run of the said crane.

(Suspension of Work in Strong Wind)

Article 31-2 The employer must suspend the work pertaining to a crane, when the dangers regarding the said work are forecast due to the strong wind.

(Prevention of Damage in Strong Wind)

Article 31-3 The employer must, when having suspended the work pursuant to the provisions of the preceding Article, and in the case that a jib of the Jib Crane is liable to be damaged, take measures such as fastening the said jib in order to prevent workers from the danger due to damage of the said jib.

(Prohibition of Leaving Cranes Unattended)

Article 32 (1) The employer must not have a crane operator leave his operating station while suspending a load.

(2) The operator set forth in the preceding paragraph must not leave his operating station while suspending a load.

(Erection Work, etc.)

Article 33 (1) The employer must, when erecting or disassembling a crane, take the following measures:

- (i) to appoint a person who supervises the work and to have workers carry out it under supervision by the said person;
- (ii) to prohibit workers other than those concerning the work from entering the area where works are on-going and display a notice to that effect at a readily visible location;
- (iii) when dangers regarding the implementation of the work are forecast due

to bad weather such as strong wind, heavy rain and heavy snow, not to have workers engage in the said work.

- (2) The employer must have the person who supervises the work set forth in item (i) of the preceding paragraph carry out the following matters:
- (i) to determine the work method and the placement of workers and supervise the work;
 - (ii) to check up defects in materials, the function of instruments and tools, and to remove defective ones;
 - (iii) to monitor the use of Safety Belts, etc. and safety helmets during the work.

Section 3 Periodical Self-inspections

(Periodical Self-inspections)

Article 34 (1) The employer must, after installation of a crane, perform self-inspection for the said cranes periodically once every period within a year. However, this does not apply to the non-use period of the crane, which is not used for a period of exceeding one year.

- (2) The employer must, as regards a crane set forth in the proviso of the preceding paragraph, perform the self-inspection before resuming its use.
- (3) The employer must perform the load test on the self-inspection set forth in the preceding two paragraphs. However, this does not apply to the cranes falling under any of the following each item:
- (i) a crane for which the load test pursuant to the provisions of paragraph (1) of the Article 40, has been performed within two months before the said self-inspection, or the validity term of the crane inspection certificate of which is to be expired within two months after the said self-inspection;
 - (ii) a crane installed at power plants, substations, etc. where there is remarkable difficulty to perform the load test, and the load test for which is found unnecessary by the Chief of the Competent Labour Standards Inspection Office.
- (4) The load test set forth in the preceding paragraph is to be done in such manners as performing motions with hoisting, travelling, slewing, trolley traverse, etc., under the Rated Speed, while suspending a load with the mass corresponding to the Rated Capacity.

Article 35 (1) The employer must perform self-inspections for a crane as to the following matters periodically once every period within one month. However, this does not apply to the non-use period of the crane, which is not used for a period exceeding one month:

- (i) abnormalities on over-winding preventive devices and other safety devices, overload warning devices and other warning devices, brakes and clutches;

- (ii) damages on wire ropes and lifting chains;
- (iii) damages on load-lifting attachments such as hooks and grab buckets;
- (iv) damages on the wiring, collectors, switchboards, switches and controllers;
- (v) damages on main ropes, rail ropes, connecting parts of guy ropes, and conditions of setting winches, for cable cranes.

(2) The employer must, as regards a crane set forth in the proviso of the preceding paragraph, perform the self-inspection as to the matters listed in each item of the same paragraph, before resuming its use.

(Checkup before Commencing Work)

Article 36 The employer must, when carrying out the work using a crane, check up the crane as to the following matters before commencing the work for the day:

- (i) the function of over-winding preventive devices, brakes, clutches and controls;
- (ii) the condition on the upper part of runways and rails on which the trolley traverses;
- (iii) the condition of the parts where wire ropes reeve through.

(Checkup after Storm, etc.)

Article 37 The employer must, when carrying out the work using a crane installed out of doors, after the wind having instantaneous wind velocity of exceeding 30 m/s, or after the earthquake of medium intensity or heavier, check up in advance, the abnormalities in each part of the crane.

(Records of Self-inspection, etc.)

Article 38 The employer must record the results of the self-inspection and the checkup, prescribed in this Section (excluding the checkup set forth in Article 36) and reserve these records for three years.

(Repair)

Article 39 The employer must, when any abnormality is found based on the self-inspection or the checkup prescribed in this Section, immediately repair.

Section 4 Performance Inspection

(Performance Inspection)

Article 40 (1) On the performance inspection set forth in paragraph (2) of Article 41 of the Act (hereinafter referred to as "Performance Inspection") pertaining to a crane, in addition to examining the construction and the function of each part of the crane, the load test is to be performed.

(2) The provisions of paragraph (4) of Article 34 apply mutatis mutandis to the load test set forth in the preceding paragraph.

(Application, etc., for Performance Inspection)

Article 41 A person who intends to undergo the Performance Inspection for crane (limited to the one carried out by the Chief of the Labour Standards Inspection Office pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act.) must submit an application for performance inspection for crane (Form No. 11) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Performance Inspection)

Article 42 The provisions of Article 7 (excluding the provisions on the stability test set forth in paragraph (1) of the same Article) apply mutatis mutandis to the case of undergoing the Performance Inspection pertaining to the crane set forth in the preceding Article.

(Renewal for Validity Term of Inspection Certificate)

Article 43 The registered performance inspection agency (means the registered performance inspection agency prescribed in paragraph (2) of Article 41 of the Act.) is to renew the validity term of the crane inspection certificate as regards the crane, which passed the Performance Inspection pertaining to crane. In this case, the validity term may be renewed by fixing the term for less than two years, or for over two years and less than three years based on the results of the Performance Inspection.

(Application of the Provisions in the Case that the Chief of the Labour Standards Inspection Office Carries Out the Performance Inspection Service)

Article 43-2 As regards the application of the provisions set forth in the preceding Article in the case that the Chief of the Labour Standards Inspection Office carries out whole or a part of the Performance Inspection service pertaining to a crane pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act, the term "the registered performance inspection agency" in the preceding Article is deemed to be replaced with "the Chief of the Competent Labour Standards Inspection Office or the registered performance inspection agency".

Section 5 Alteration, Pause of Use, Disuse, etc.

(Notification for Alteration)

Article 44 (1) As regards the crane having been installed, the employer who

intends to alter any of the parts listed in the following each item must, when notifying it pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the crane alteration notification (Form No. 12) with the crane inspection certificate and drawings of the parts to be altered (excluding the one listed in item (v)), to the Chief of the Competent Labour Standards Inspection Office:

- (i) crane girders, jibs, legs, towers and other structural parts;
 - (ii) prime movers;
 - (iii) brakes;
 - (iv) lifting mechanism;
 - (v) wire ropes or lifting chains;
 - (vi) fixed load-lifting attachments such as hooks and grab buckets.
- (2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph.
- (3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) must, as regards a crane, when intending to alter any of the parts listed in each item of paragraph (1), pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis to paragraph (2) of the same Article, submit the crane alteration notification (Form No. 12) with the crane inspection certificate and drawings set forth in paragraph (1), to the Chief of the Competent Labour Standards Inspection Office.

(Alteration Inspection)

- Article 45 (1) A person who altered the parts of a crane falling under item (i) of paragraph (1) of the preceding Article must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said crane by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office has approved the said inspection is unnecessary.
- (2) The provisions of paragraph (2) to (4) of Article 6 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "alteration inspection" in this Section).
- (3) A person who intends to undergo the alteration inspection must submit an application for crane alteration inspection (Form No. 13) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the Accreditation, the inspection certificate and the drawing prescribed in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Alteration Inspection)

Article 46 The provisions of Article 7 apply mutatis mutandis to the case of undergoing the alteration inspection.

(Endorsement on Inspection Certificate)

Article 47 The Chief of the Competent Labour Standards Inspection Office is to, as regards the crane, which passed the alteration inspection or the crane set forth in the proviso of paragraph (1) of Article 45, endorse the inspection date, the parts altered and the results of the inspection on the said crane inspection certificate.

(Report on Pause of Use)

Article 48 A person who has installed a crane must, when intending to pause the use of the crane for a period over the validity term of the crane inspection certificate, report that matter to the Chief of the Competent Labour Standards Inspection Office within the validity term of the said crane inspection certificate. However, this does not apply to the employer who has been given the Accreditation.

(Reuse Inspection)

Article 49 (1) A person who intends to reuse the crane that has paused the use must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said crane by the Chief of the Competent Labour Standards Inspection Office.

(2) The provisions of paragraph (2) to (4) of Article 6 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "reuse inspection" in this Section).

(3) A person who intends to undergo the reuse inspection must submit an application for crane reuse inspection (Form No. 14) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Reuse Inspection)

Article 50 The provisions of Article 7 apply mutatis mutandis to the case of undergoing the reuse inspection.

(Endorsement on Inspection Certificate)

Article 51 The Chief of the Competent Labour Standards Inspection Office is to, as regards the crane, which passed the reuse inspection, endorse the inspection date and the results of the inspection on the said crane inspection certificate.

(Return of Inspection Certificate)

Article 52 A person who had installed a crane must, when having disused or altered its Lifting Capacity down to less than 3 tons (for a stacker type crane, less than 1 ton), return without delay the crane inspection certificate to the Chief of the Competent Labour Standards Inspection Office.

Chapter III Mobile Crane

Section 1 Manufacturing and Installation

(Permission for Manufacturing)

Article 53 (1) A person who intends to manufacture a Mobile Crane (limited to the ones set forth in item (iv) of paragraph (1) of Article 12 of the Order, hereinafter the same applies in this Article to Article 61, Article 63 and Article 64, and Section 4 and Section 5 of this Chapter) must obtain, in advance, the permission in respect to the Mobile Crane intended to manufacture from the Director of the Competent Prefectural Labour Bureau. However, this does not apply to the Mobile Crane, type of which is identical with the Mobile Crane, which has been obtained the said permission already (referred to as "permitted type mobile crane" in the following Article).

- (2) A person who intends to obtain the permission set forth in the preceding paragraph must submit an application for the Mobile Crane manufacturing permission (Form No. 1) with the assembly drawing of the Mobile Crane and the document stating the following matters to the Director of the Competent Prefectural Labour Bureau:
- (i) standards of strength calculation;
 - (ii) outline of the equipment for inspection performed on the process of manufacturing;
 - (iii) name and outline of career of the chief designer and the responsible person on manufacturing work.

(Report of Alteration on Equipment, etc. for Inspection)

Article 54 The person who has obtained the permission set forth in paragraph (1) of the preceding Article must, in the case of manufacturing the Mobile Crane pertaining to the said permission or the permitted type mobile crane, and when the equipment set forth in item (ii) of paragraph (2) of the same Article, or either the chief designer or the responsible person on manufacturing work set forth in item (iii) of the same paragraph were altered, report without delay to the Director of the Competent Prefectural Labour Bureau.

(Manufacturing Inspection)

Article 55 (1) A person who has manufactured a Mobile Crane must, pursuant to the provisions of paragraph (1) of Article 38 of the Act, undergo the inspection

for the said Mobile Crane by the Director of the Competent Prefectural Labour Bureau.

- (2) On the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "manufacturing inspection" in this Section), in addition to examining the construction and the function of each part of the Mobile Crane, the load test and the stability test are to be performed.
- (3) The load test set forth in the preceding paragraph is to be done in such manners as performing motions of hoisting, travelling, slewing, etc., while suspending a load with the mass corresponding to 1.25 times of the Rated Capacity (in the case that the Rated Capacity exceeds 200 tons, the mass of a load added 50 tons to the Rated Capacity).
- (4) The stability test set forth in paragraph (2) is to be done in such manners as slightly lifting a load from the ground under the most unfavourable condition for the said Mobile Crane, while suspending a load with the mass corresponding to 1.27 times of the Rated Capacity.
- (5) A person who undergoes the manufacturing inspection, must submit an application for mobile crane manufacturing inspection (Form No. 15) with the specification of the mobile crane (Form No. 16), the assembly drawing of the Mobile Crane and the strength calculation statement of the structural parts listed in the right column of the Appended Table corresponding to the type of the Mobile Crane listed in the left column of the same Table respectively, to the Director of the Competent Prefectural Labour Bureau. In this case, when the dimension and the Lifting Capacity of the Mobile Crane which is intended to undergo the said inspection, are identical with the Mobile Crane which passed the manufacturing inspection already, the said assembly drawing and the strength calculation statement may be omitted to attach.
- (6) The Director of the Competent Prefectural Labour Bureau is to stamp the Mobile Crane which passed the manufacturing inspection with a die by the Form No. 17, and issue the specification of the said Mobile Crane impressed a seal of the Form No. 18 indicating the manufacturing inspection completed, to the person who submitted the application pursuant to the provisions of the preceding paragraph.

(Measures for the Case of Undergoing Manufacturing Inspection)

- Article 56 (1) The person who undergoes the manufacturing inspection as regards the Mobile Crane being subjected to the said inspection, must carry out the following matters:
- (i) to move the Mobile Crane to the place to inspect easily;
 - (ii) to provide a test load and the slinging equipment for the load test and the stability test.
- (2) The Director of the Competent Prefectural Labour Bureau may, when having

found the necessity for the manufacturing inspection, as regards the Mobile Crane pertaining to the said inspection, order the following matters to the person who undergoes the said inspection:

- (i) to disassemble safety devices;
- (ii) to take off a part of coating;
- (iii) to pick out rivets, or to make a hole in a part of members;
- (iv) to cut off a part of wire ropes;
- (v) in addition to the matters listed in the preceding each item, the matters found to be necessary for the said inspection.

(3) A person who undergoes the manufacturing inspection must be present at the said inspection.

(Use Inspection)

Article 57 (1) The following person must, pursuant to the provisions of paragraph (1) of Article 38 of the Act, undergo the inspection for a Mobile Crane by the Director of the Prefectural Labour Bureau:

- (i) a person who has imported the Mobile Crane;
- (ii) a person who intends to install the Mobile Crane which has not been installed for two years or longer (for three years or longer for the Mobile Crane that the Director of the Prefectural Labour Bureau has found its storage condition has been good) after having undergone the manufacturing inspection or the inspection set forth in this paragraph or next paragraph (hereinafter referred to as "Use Inspection");
- (iii) a person who intends to install or to resume the use of the Mobile Crane which has been disused.

(2) A person who has manufactured a Mobile Crane in a foreign country, pursuant to the provisions of paragraph (2) of Article 38 of the Act, may undergo the inspection by the Director of the Prefectural Labour Bureau for the said Mobile Crane. In the case that the said inspection has been performed, the provisions of the preceding paragraph do not apply to the person who has imported the said Mobile Crane.

(3) The provisions of paragraph (2) to (4) of Article 55 apply mutatis mutandis to the use inspection.

(4) A person who undergoes the use inspection must submit the use inspection application document for the mobile crane (Form No. 19) with the mobile crane specification, the assembly drawing of the Mobile Crane and the strength calculation document set forth in paragraph (5) of Article 55 to the Director of the Prefectural Labour Bureau.

(5) A person who has imported a Mobile Crane or manufactured it in a foreign country may, when undergoing the use inspection, attach the document in which the person (limited to those residing in the foreign country) designated

by the Minister of Health, Labour and Welfare has proved that the structure of the said Mobile Crane complies with the Standard Prescribed by the Minister of Health, Labour and Welfare (limited to the structural part of the Mobile Crane) set forth in paragraph (2) of Article 37 of the Act to the application set forth in the preceding paragraph.

- (6) The Director of the Prefectural Labour Bureau is to stamp the Mobile Crane which passed the use inspection with a die by the Form No. 17 and issue the specification of the said Mobile Crane impressed a seal of the Form No. 20 indicating the use inspection completed, to the person who submitted the application pursuant to the provisions of paragraph (4).

(Measures for the Case of Undergoing Use Inspection)

Article 58 The provisions of Article 56 apply mutatis mutandis to the case of undergoing the use inspection. In this case, the term "the Director of the Competent Prefectural Labour Bureau" in paragraph (2) of the same Article, is deemed to be replaced with "the Director of the Prefectural Labour Bureau".

(Inspection Certificate for Mobile Crane)

Article 59 (1) The Director of the Competent Prefectural Labour Bureau or the Director of the Prefectural Labour Bureau is to, as regards the Mobile Crane, which passed the manufacturing inspection or the use inspection respectively, issue a mobile crane inspection certificate (Form No. 21) to the person who submitted the application pursuant to the provisions of paragraph (5) of Article 55 or paragraph (4) of Article 57 respectively.

- (2) A person who has installed a Mobile Crane must, when having lost or damaged the mobile crane inspection certificate, submit an application for reissue of the mobile crane inspection certificate (Form No. 8) with the following document to the Director of the Prefectural Labour Bureau who issued the said inspection certificate, through the Chief of the Competent Labour Standards Inspection Office, and be granted the reissue:
- (i) the document explaining the lost of the mobile crane inspection certificate in the event of losing;
 - (ii) the mobile crane inspection certificate in the event of damaging.

- (3) On alteration of a person who has installed a Mobile Crane, the replaced person must, within ten days from the said alteration, submit an application for renewal of mobile crane inspection certificate (Form No. 8) with the mobile crane inspection certificate to the Director of the Prefectural Labour Bureau who issued the said inspection certificate, through the Chief of the Competent Labour Standards Inspection Office, and be granted the renewal.

(Validity Term of Inspection Certificate)

Article 60 (1) The validity term of the mobile crane inspection certificate is for two years. However, based on the results of the manufacturing inspection or the use inspection, the said validity term may be restricted for less than two years.

(2) Notwithstanding the provisions of the preceding paragraph, as regards the Mobile Crane which has not been installed and that the storage condition has been found in good quality during that period by the Director of the Prefectural Labour Bureau, the validity term of the inspection certificate of the said Mobile Crane may be extended within the scope not exceeding three years from the date of the manufacturing inspection or the use inspection and within the scope not exceeding two years from the date when the said Mobile Crane has been installed.

(Report for Installation)

Article 61 The employer who intends to install a Mobile Crane must submit, in advance, the mobile crane installation report (Form No. 9) with the specification of the mobile crane (impressed a seal indicating that the manufacturing inspection or the use inspection completed) and the mobile crane inspection certificate, to the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the employer who has been given the Accreditation.

(Load Test, etc.)

Article 62 The employer must, when having installed the Mobile Crane set forth in item (xv) of paragraph (3) of Article 13 of the Order, perform the load test set forth in paragraph (3) of Article 55 and the stability test set forth in paragraph (4) of the same Article for the said Mobile Crane.

Section 2 Use and Operation

(Providing with Inspection Certificate)

Article 63 The employer must, when carrying out the work using a Mobile Crane, provide its mobile crane inspection certificate on the said Mobile Crane.

(Limitation of Use)

Article 64 The employer must not use a Mobile Crane, unless it complies with the Standard Prescribed by the Minister of Health, Labour and Welfare (limited to the structural parts of the Mobile Crane).

(Loading Conditions as to Design Base)

Article 64-2 The employer is to, when using a Mobile Crane, in order to prevent

steels, etc., which construct the structural parts of the said Mobile Crane from deformation, breakage, etc., take into account the Loading Condition upon which the design of the Mobile Crane is based.

(Adjustment on Over-winding Preventive Device)

Article 65 The employer must, as regards an over-winding preventive device on a Mobile Crane, adjust the vertical distance between the upper surface of the load-lifting attachment such as a hook and a grab bucket or the upper surface of the hoisting sheave of the load-lifting attachment and the sheave on the jib point and others which is liable to come into contact with the said upper surface (excluding an inclined jib) for 0.25 m or more (0.05 m or more for the direct driven type over-winding preventive device).

(Adjustment of Safety Valves)

Article 66 The employer must, as regards safety valves for preventing the excessive pressure rise of the water pressure or the oil pressure of a Mobile Crane which uses the water pressure or the oil pressure as power source, adjust them for being actuated at not more than the pressure corresponding to the water pressure or the hydraulic pressure at which the said Mobile Crane is operated with the load corresponding to the maximum value of the Rated Capacity. However, this does not apply to the case of performing the load test or the stability test pursuant to the provisions of Article 62, and adjusting the valves for being actuated at the pressure necessary for those cases.

(Determination, etc. of Work Method, etc.)

Article 66-2 (1) The employer must, when carrying out the work using a Mobile Crane, in order to prevent workers from dangers due to overturning, etc., of a Mobile Crane, establish in advance, the following matters taking into account the space, landform and condition of the nature of the soil of the place pertaining to the said work, the mass of loads to be carried, the type and capability of the said Mobile Crane to be used, etc.:

- (i) work methods for use of a Mobile Crane;
- (ii) preventive methods for overturning of a Mobile Crane;
- (iii) the placement of workers and the work indicating system pertaining to of the work using a Mobile Crane.

(2) The employer must, when having establish the matters set forth in each item of the preceding paragraph, make the said matters known to the workers concerned before commencement of the work

(Use of Safety Catch)

Article 66-3 The employer must, when lifting a load using a Mobile Crane, make

use of Safety Catches.

(Special Education)

- Article 67 (1) The employer must, when placing a worker in operation of a Mobile Crane with the Lifting Capacity of less than 1 ton (excluding the travelling on the road set forth in item (i) of paragraph (1) of Article 2 of the Road Traffic Act (Act No. 105 of 1960)) conduct the special education for the safety related to the said operation, to the said worker.
- (2) The special education set forth in the preceding paragraph must be conducted on the following subjects:
- (i) knowledge on Mobile Cranes;
 - (ii) knowledge on prime movers and the electricity;
 - (iii) knowledge on the dynamics necessary for operation of Mobile Cranes;
 - (iv) related legislation;
 - (v) operation of Mobile Cranes;
 - (vi) signals for operation of Mobile Cranes.
- (3) In addition to the matters prescribed in Article 37 and Article 38 of the Safety and Health Ordinance and in the preceding two paragraphs, the Minister of Health, Labour and Welfare prescribes necessary matters related to the special education set forth in paragraph (1).

(Limitation on Placement)

Article 68 The employer must, as regards the works listed in item (vii) of Article 20 of the Order, place nobody in the said works other than the one who has obtained the mobile crane operator's license. However, as regard the Mobile Crane with the Lifting Capacity of 1 ton or more and less than 5 tons (hereinafter referred to as "Light Capacity Mobile Crane"), the employer may place the person who has completed the skill training course for light capacity mobile crane operation in the said works.

(Limitation on Overload)

Article 69 The employer must not use a Mobile Crane being loaded with the load exceeding its Rated Capacity.

(Limitation of Jib Angle)

Article 70 The employer must not use a Mobile Crane, exceeding the range of jib angle stated in the specification of the mobile crane (for a Mobile Crane with its Lifting Capacity of less than 3 tons, the range of jib angle designated by the manufacturer).

(Indication, etc. for Rated Capacity)

Article 70-2 The employer must, when carrying out the work using a Mobile Crane, take measures of indications or others so that a crane operator and slingers are always able to confirm the said Rated Capacity of the Mobile Crane.

(Prohibition of Use)

Article 70-3 The employer must not carry out the work using a Mobile Crane on the place where is liable to cause overturning to the Mobile Crane due to that the ground is not firm enough, the underground object is liable to be damaged, etc. However, this does not apply to the case of placing steel plates, etc., with necessary space and strength for preventing the Mobile Crane from overturning, and putting the said Mobile Crane on it at the said place.

(Positions of Outriggers)

Article 70-4 The employer must, in the case set forth in the proviso of the preceding Article and when carrying out the work using a Mobile Crane that its outriggers are to be used, set the said outriggers on the said steel plate, etc., and at the place where is unlikely to overturn of the Mobile Crane.

(Extension of Outriggers, etc.)

Article 70-5 The employer must, when carrying out the work using a Mobile Crane equipped with outriggers or extensible crawlers, extend the said outriggers or the said crawlers to maximum limit. However, this does not apply to the case that there is no possibility to extend outriggers or crawlers to maximum limit, and the load to be applied to the said Mobile Crane is clearly estimated not to exceed the Rated Capacity corresponding to the extended width of the outriggers or crawlers.

(Signals for Operation)

Article 71 (1) The employer must, when carrying out the work using a Mobile Crane, set the fixed signals for the operation of the Mobile Crane, designate a person who gives the said signals and have the said person give the said signals. However, this does not apply to when having only a mobile crane operator carry out the work single-handedly.

(2) The person designated pursuant to the preceding paragraph, when engaging in the work set forth in the same paragraph, must give the signals set forth in the same paragraph.

(3) Workers engaged in the work set forth in paragraph (1) must follow the signals set forth in the same paragraph.

(Restriction on Riding)

Article 72 The employer must not carry workers by a Mobile Crane, nor have workers work being hanged from the Mobile Crane.

Article 73 (1) The employer may, notwithstanding the provisions of the preceding Article, in the unavoidable case due to the nature of the works or in a necessary case to carry out the works safely, provides the exclusive riding equipment fitted with a load-lifting attachment and ride workers on the Mobile Crane.

- (2) The employer must, as regards the riding equipment set forth in the preceding paragraph, carry out the following matters for preventing workers from the dangers due to falling:
- (i) to take measures for preventing the riding equipment from the transposition and the falling;
 - (ii) to have workers use Safety Belts, etc.;
 - (iii) as regards the amount of weight added 500 kg to the weight corresponding to 1.3 times the total weight of the riding equipment and persons riding on it, not to exceed the Rated Capacity of the said Mobile Crane;
 - (iv) to make the riding equipment lower by the method of power lowering.
- (3) Workers must, when having been instructed to use Safety Belts, etc., in the case referred to in the preceding paragraph, make use of them.

(Prohibition of Entry)

Article 74 The employer must, when carrying out the work pertaining to a Mobile Crane, not allow workers to enter the places where it is liable to cause dangers to workers due to contact with the superstructure of the said Mobile Crane.

Article 74-2 The employer must, when carrying out the work using a Mobile Crane and in the case falling under any of the following each item, not allow workers to enter the place under a lifted load (in the case of item (vi), including a load-lifting attachment):

- (i) when a load slung using lifting hooks being suspended;
- (ii) when a load slung using a single clamp being suspended;
- (iii) when a load slung at one position of the load using wire rope, etc., being suspended (excluding the case of slinging a load by reeving the wire rope, etc., through an hole or an eye-bolt provided on the load);
- (iv) when plural loads being lifted at a time, and not fixed such as bundled and kept in a box;
- (v) when a load slung using a load-lifting attachment or a slinging equipped with the magnet system or the vacuum system being suspended;
- (vi) when lowering a load or a load-lifting attachment by methods other than

power lowering.

(Suspension of Work in Strong Wind)

Article 74-3 The employer must suspend the work pertaining to a Mobile Crane, when the dangers regarding the said work are forecast due to the strong wind.

(Prevention of Overturning at Strong Wind)

Article 74-4 The employer must, when suspending the work pursuant to the provisions of the preceding Article, and when it is liable to cause turnover of a Mobile Crane, take measures such as fastening the jib of the said Mobile Crane to prevent workers from the danger due to overturning of the Mobile Crane.

(Prohibition of Leaving Mobile Cranes Unattended)

Article 75 (1) The employer must not have a mobile crane operator leave the operating station while suspending a load.
(2) The operator set forth in the preceding paragraph must not leave the operating station while suspending a load.

(Jib Erection Work, etc.)

Article 75-2 (1) The employer must, when erecting or dismantling jibs of a Mobile Crane, take the following measures:
(i) to appoint a person to supervise the work and to have workers carry out it under supervision by the said person;
(ii) to prohibit workers other than those concerning the work from entering the area where works are on-going, and display a notice to that effect at a readily visible location;
(iii) when dangers regarding the implementation of the work are forecast due to bad weather such as strong wind, heavy rain and heavy snow, not to have workers engage in the said work.
(2) The employer must have the person who supervises the work set forth in item (i) of the preceding paragraph carry out the following matters:
(i) to determine the work method and the placement of workers and supervise the work;
(ii) to check up defects in materials, the function of instruments and tools, and remove defective ones;
(iii) to monitor the use of Safety Belts, etc. and safety helmets during the work.

Section 3 Periodical Self-inspections, etc.

(Periodical Self-inspections)

Article 76 (1) The employer must, after installation of a Mobile Crane, perform

self-inspections for the said Mobile Crane periodically once every period within a year. However, this does not apply to the non-use period of the Mobile Crane, which is not used for a period of exceeding one year.

- (2) The employer must, as regards a Mobile Crane set forth in the proviso of the preceding paragraph, perform the self-inspection, before resuming its use.
- (3) The employer must perform the load test on the self-inspection set forth in the preceding two paragraphs. However, this does not apply to the Mobile Crane for which the load test pursuant to the provisions of paragraph (1) of the Article 81 has been performed within two months before the said self-inspection, or the validity term of the mobile crane inspection certificate of which is to be expired within two months after the said self-inspection.
- (4) The load test set forth in the preceding paragraph is to be done in such manners as performing motions with hoisting, slewing, travelling, etc., at the Rated Speed, while suspending a load with the mass corresponding to the Rated Capacity of the Mobile Crane.

Article 77 (1) The employer must perform self-inspections for a Mobile Crane as to the following matters periodically once every period within one month. However, this does not apply to the non-use period of the Mobile Crane, which is not used for a period of exceeding one month:

- (i) abnormalities on over-winding preventive devices and other safety devices, overload warning devices and other warning devices, brakes and clutches;
 - (ii) damages on wire ropes and lifting chains;
 - (iii) damages on load-lifting attachments such as hooks and grab buckets;
 - (iv) damages on the wiring, switchboards and controllers.
- (2) The employer must, as regards a Mobile Crane set forth in the proviso of the preceding paragraph, perform the self-inspection, as to the matters listed in each item of the same paragraph before resuming its use.

(Checkup before Commencing the Work)

Article 78 The employer must, when carrying out the work using a Mobile Crane, check up the function of over-winding preventive devices, overload alarm devices and other alarm devices, brakes, clutches and controls, before commencing the work for the day.

(Records of Self-inspection)

Article 79 The employer must record the results of the self-inspections prescribed in this Section and reserve these records for three years.

(Repair)

Article 80 The employer must, when any abnormality is found based on the self-

inspection or the checkup prescribed in this Section, immediately repair.

Section 4 Performance Inspection

(Performance Inspection)

Article 81 (1) On the Performance Inspection pertaining to a Mobile Crane, in addition to examining the construction and the function of each part of the Mobile Crane, the load test is to be performed.

(2) The provisions of paragraph (4) of Article 76 apply mutatis mutandis to the load test set forth in the preceding paragraph.

(Application, etc., for Performance inspection)

Article 82 A person who undergoes the Performance Inspection pertaining to a Mobile Crane (limited to the one carried out by the Chief of the Labour Standards Inspection Office pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act) must submit an application for performance inspection for mobile crane (From No. 11) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Performance Inspection)

Article 83 The provisions of Article 56 (excluding the provisions on the stability test set forth in item (ii) of paragraph (1) of the same Article) apply mutatis mutandis to the case of undergoing the Performance Inspection pertaining to the Mobile Crane set forth in the preceding Article. In this case, the term "the Director of the Competent Prefectural Labour Bureau" in paragraph (2) of Article 56 is deemed to be replaced with "the Chief of the Competent Labour Standards Inspection Office".

(Renewal for Validity Term of Inspection Certificate)

Article 84 The registered performance inspection agency is to renew the validity term of the mobile crane inspection certificate as regards the Mobile Crane, which passed the Performance Inspection pertaining to Mobile Crane. In this case, the validity term may be renewed by fixing the term for less than two years, or for over two years and within three years based on the result of the Performance Inspection.

(Application of the Provisions in the Case that the Chief of the Labour

Standards Inspection Office Carries Out the Performance Inspection Service)

Article 84-2 As regards the application of the provisions of the preceding Article in the case that the Chief of the Labour Standards Inspection Office carries out

whole or a part of the Performance Inspection service pertaining to a Mobile Crane pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act, the term "the registered performance inspection agency" in the preceding Article is deemed to be replaced with "the Chief of the Competent Labour standards Inspection Office or the registered performance inspection agency".

Section 5 Alterations, Pause of Use, Disuse, etc.

(Notification for Alteration)

Article 85 (1) As regards the Mobile Crane having been installed, the employer who intends to alter any of the parts listed in the following each item must, when notifying it pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the mobile crane alteration notification (Form No. 12) with the mobile crane inspection certificate and drawings of the parts intended to alter (excluding the one listed in item (v)), to the Chief of the Competent Labour Standards Inspection Office:

- (i) jibs and other structural parts;
- (ii) prime movers;
- (iii) brakes;
- (iv) lifting mechanism;
- (v) wire ropes or lifting chains;
- (vi) load-lifting attachments such as hooks and grab buckets;
- (vii) carriers.

(2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "Mobile Crane".

(3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) must, as regards a Mobile Crane, when intending to alter any of the parts listed in the each item of paragraph (1), pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis to paragraph (2) of the same Article, submit the mobile crane alteration notification (Form No. 12) with the inspection certificate and drawings set forth in paragraph (1), to the Chief of the Competent Labour Standards Inspection Office.

(Alteration Inspection)

Article 86 (1) A person who altered the parts of a Mobile Crane falling under item (i) or (vii) of paragraph (1) of the preceding Article must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for

the said Mobile Crane by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.

(2) The provisions of paragraph (2) to (4) of Article 55 apply mutatis mutandis to the inspection (hereinafter referred to as "alteration inspection" in this Section) pursuant to the provisions of the preceding paragraph.

(3) A person who undergoes the alteration inspection must submit an application for mobile crane alteration inspection (Form No. 13) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the Accreditation, the inspection certificate and the drawing set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Alteration Inspection)

Article 87 The provisions of Article 56 apply mutatis mutandis to the case of undergoing the alteration inspection. In this case, the term "the Director of the Competent Prefectural Labour Bureau" in paragraph (2) of the same Article is deemed to be replaced with "the Chief of the Competent Labour Standards Inspection Office".

(Endorsement on Inspection Certificate)

Article 88 The Chief of the Competent Labour Standards Inspection Office is to, as regards the Mobile Crane which passed the alteration inspection or the Mobile Crane set forth in the proviso of paragraph (1) of Article 86, endorse the inspection date, the parts altered and the results of the inspection on the said mobile crane inspection certificate.

(Report on Pause of Use)

Article 89 A person who has installed a Mobile Crane must, when intending to pause the use of the Mobile Crane for a period over the validity term of the mobile crane inspection certificate, report that matter to the Chief of the Competent Labour Standards Inspection Office within the validity term of the said mobile crane inspection certificate. However, this does not apply to the employer who has been given the Accreditation.

(Reuse Inspection)

Article 90 (1) A person who intends to reuse the Mobile Crane, which have paused the use, pursuant to the provisions of paragraph (3) of Article 38 of the Act, must undergo the inspection for the said Mobile Crane by the Chief of the

Competent Labour Standards Inspection Office.

- (2) The provisions of paragraph (2) to (4) of Article 55 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "reuse inspection" in this Section).
- (3) A person who undergoes the reuse inspection must submit an application for mobile crane reuse inspection (Form No. 14) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Reuse Inspection)

Article 91 The provisions of Article 56 apply mutatis mutandis to the case of undergoing the reuse inspection. In this case, the term "the Director of the Competent Prefectural Labour Bureau" in paragraph (2) of the same Article is deemed to be replaced with "the Chief of the Competent Labour Standards Inspection Office".

(Endorsement on Inspection Certificate)

Article 92 The Chief of the Competent Labour Standards Inspection Office is to, as regards the Mobile Crane, which passed the reuse inspection, endorse the inspection date and the results of the inspection on the said mobile crane inspection certificate.

(Return of Inspection Certificate)

Article 93 When a person who had installed a Mobile Crane, disused or altered its Lifting Capacity down to less than 3 tons, the said person must return without delay the mobile crane inspection certificate to the Chief of the Competent Labour Standards Inspection Office.

Chapter IV Derrick

Section 1 Manufacturing and Installation

(Permission for Manufacturing)

- Article 94 (1) A person who intends to manufacture a derrick (limited to the one set forth in item (v) of paragraph (1) of Article 12 of the Order, hereinafter the same applies in this Article to Article 100, Article 103, Article 104, and Section 4 and Section 5 in this Chapter) must obtain, in advance, the permission in respect to the derrick intended to manufacture from the Director of the Competent Prefectural Labour Bureau. However, this does not apply to the derrick, the type of which is identical with the derrick, which has been obtained the said permission already (hereinafter referred to as "permitted type derrick" in the following Article).
- (2) A person who intends to obtain the permission set forth in the preceding

paragraph must submit an application for the derrick manufacturing permission (Form No. 1) with the assembly drawing of the derrick and the document stating the following matters to the Director of the Competent Prefectural Labour Bureau:

- (i) standards of strength calculation;
- (ii) outline of the equipment for inspection performed on the process of manufacturing;
- (iii) names and outline of career of the chief designer and the responsible person on manufacturing work.

(Report of Alteration on Equipment, etc., for Inspection)

Article 95 The person who has obtained the permission set forth in paragraph (1) of the preceding Article must, in the case of manufacturing the derrick pertaining to the said permission or the permitted type derrick, when the equipment set forth in item (ii) of paragraph (2) of the same Article or either the chief designer or the responsible person on manufacturing work set forth in item (iii) of the same paragraph were altered, report without delay to the Director of the Competent Prefectural Labour Bureau.

(Notification for Installation)

Article 96 (1) The employer who intends to install a derrick must, when notifying pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the derrick installation notification (Form No. 23) with the specification of the derrick (Form No. 24), the assembly drawing of the derrick, and the strength calculation statement of the structural parts listed in the right column of the Appended Table corresponding to the type of the derrick listed in the left column of the same Table respectively, and the document stating the following matters to the Chief of the Competent Labour Standards Inspection Office:

- (i) surroundings at the place of installation;
 - (ii) outline of the foundation;
 - (iii) method of anchorage of stays.
- (2) As regards a derrick used for engineering work, construction work, etc., when it is necessary to remove the said derrick within the same workshop and the place of installation of the derrick after the said removal is able to fix previously, the notification concerning the installation after the said removal pursuant to the provisions of paragraph (1) may be made together with the notification concerning the installation before the said removal pursuant to the provisions of the same paragraph.
- (3) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding two

paragraphs. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "derrick".

- (4) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) who intends to install a derrick must, pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis to paragraph (2) of the same Article, submit the derrick installation notification (Form No. 23) with the specification, the assembly drawing, the strength calculation statement and the document set forth in paragraph (1) to the Chief of the Competent Labour Standards Inspection Office.
- (5) The provisions of paragraph (2) apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph.

(Completion Inspection)

Article 97 (1) A person who has installed a derrick must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said derrick by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.

- (2) On the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as the "completion inspection" in this Section), in addition to examining the construction and function of each part of the derrick, the load test is to be performed.
- (3) The load test set forth in the preceding paragraph is to be carried out in such manners as performing motions with lifting, slewing, and derricking a boom, while suspending a load with the mass corresponding to 1.25 times of the Rated Capacity (in the case that the Rated Capacity exceeds 200 tons, the mass of a load added 50 tons on the Rated Capacity).
- (4) A person who intends to undergo the completion inspection for the derrick must submit an application for the derrick completion inspection (Form No. 4) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (4) of the preceding Article is not made because of having been given the Accreditation, the specification, the assembly drawing and the strength calculation statement set forth in paragraph (1) of the same Article and the other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Completion Inspection)

Article 98 (1) A person who undergoes the completion inspection must, as regards the derrick being subjected to the said inspection, prepare a test load and the slinging equipment for the load test

- (2) The Chief of the Competent Labour Standards Inspection Office may, when having found the necessity for the completion inspection, as regards the derrick pertaining to the said inspection, order the following matters to the person who undergoes the said inspection:
- (i) to disassemble safety devices;
 - (ii) to take off a part of coating;
 - (iii) to pick out rivets, or to make a hole in a part of members;
 - (iv) to cut off a part of wire ropes;
 - (v) in addition to the matters listed in the preceding each item, matters found to be necessary for the said inspection.
- (3) A person who undergoes the completion inspection must be present at the said inspection.

(Inspection Certificate for Derrick)

Article 99 (1) The Chief of the Competent Labour Standards Inspection Office is to, as regards the derrick, which passed the completion inspection or the derrick set forth in the proviso of paragraph (1) of Article 97, issue the derrick inspection certificate (Form No. 7) to the person who submitted an application pursuant to the provisions of paragraph (4) of the same Article. In this case, as regards the derrick used for engineering work, or construction work, etc., when the notification is made pursuant to the provisions of paragraph (2) of Article 96, the inspection certificate with respect to the derrick before removal may substitute for that of after removal.

- (2) A person who has installed a derrick must, when having lost or damaged the derrick inspection certificate, submit an application for reissue of the derrick inspection certificate (Form No.8) with the following document to the Chief of the Competent Labour Standards Inspection Office and be granted the reissue:
- (i) the document explaining the lost of the derrick inspection certificate in the event of losing;
 - (ii) the derrick inspection certificate in the event of damaging.
- (3) On alteration of a person who has installed the derrick, the replaced person must, within ten days from the said alteration, submit an application for renewal of derrick inspection certificate (Form No. 8) with the derrick inspection certificate to the Chief of the Competent Labour Standards Inspection Office, and be granted the renewal.

(Validity Term of Inspection Certificate)

Article 100 The validity term of the derrick inspection certificate is for two years. However, based on the results of the completion inspection, the said validity term may be restricted for less than two years.

(Report for Installation)

Article 101 The employer who intends to install a derrick set forth in item (xvi) of paragraph (3) of Article 13 of the Order (excluding the case that the period of the installation for the derrick is less than 60 days up to the time of disuse) must submit, in advance, the derrick installation report (Form No. 25) to the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the employer who has been given the Accreditation.

(Load Test)

Article 102 The employer must, when having installed the derrick set forth in item (xvi) of paragraph (3) of Article 13 of the Order, perform the load test set forth in paragraph (3) of Article 97 for the said derrick.

Section 2 Use and Operation

(Providing with Inspection Certificate)

Article 103 The employer must, when carrying out the work using a derrick, provide the derrick inspection certificate of the said derrick at the place where the said work is carried out.

(Limitation of Use)

Article 104 The employer must not use a derrick, unless it complies with the Standard Prescribed by the Minister of Health, Labour and Welfare (limited to the structural parts of the derrick).

(Prevention for Over-winding)

Article 105 The employer must, as regards an over-winding preventive device on a derrick, adjust the vertical distance between the upper surface of the load-lifting attachment such as a hook and a grab bucket or the upper surface of the hoisting sheave of the said load-lifting attachment and the lower surface of the sheave of a boom top and others which is liable to coming into contact with the said upper surface (excluding a boom) for 0.25 m or more (0.05 m or more for the direct driven type over-winding preventive device).

Article 106 The employer must, as regards a derrick without an over-winding preventive device, take such measures as marking on the hoisting wire ropes and installing warning devices in order to prevent workers from dangers due to over-winding of hoisting wire ropes.

(Special Education)

Article 107 (1) The employer must, when placing a worker in operation of a

- derrick with the Lifting Capacity of less than 5 tons, conduct the special education for the safety related to the said operation, to the said workers
- (2) The special education set forth in the preceding paragraph must be conducted on the following subjects:
- (i) knowledge on derricks;
 - (ii) knowledge on prime movers and the electricity;
 - (iii) knowledge on the dynamics necessary for operation of derricks;
 - (iv) related legislation;
 - (v) operation of derricks;
 - (vi) signals for operation of derricks.
- (3) In addition to the matters prescribed in Article 37 and Article 38 of the Safety and Health Ordinance and in the preceding two paragraphs, the Minister of Health, Labour and Welfare prescribes necessary matters related to the special education set forth in paragraph (1).

(Limitation on Placement)

Article 108 The employer must, as regards the works listed in item (viii) of Article 20 of the Order, place nobody in the said works other than the one who has obtained the careen/derrick operator's license.

(Limitation on Overload)

Article 109 (1) The employer must not use a derrick being loaded with the load exceeding its Rated Capacity.

- (2) Notwithstanding the provisions of the preceding paragraph, the employer may, when taking the following measures in the case of having remarkable difficulty to conform to the provisions of the same paragraph due to the unavoidable reason, use the derrick loading over its Rated Capacity up to the load on the load test prescribed in paragraph (3) of Article 97:
- (i) to submit in advance, the derrick special case report (Form No. 10) to the Chief of the Competent Labour Standards Inspection Office;
 - (ii) to confirm in advance, that there is no abnormality by performing the load test prescribed in paragraph (3) of Article 97;
 - (iii) to designate a person who supervises the operation, and operate the derrick under the direct supervision by the said person.
- (3) The employer must, when having performed the load test pursuant to the provisions of item (ii) of the preceding paragraph or used the derrick loading over its Rated Capacity, record the results and reserve them for three years.

(Limitation of Boom Angle)

Article 110 The employer must not use a derrick equipped with a boom, exceeding a range of boom angle stated in the specification of the derrick (for

the derrick with the Lifting Capacity of less than 2 tons, the range of boom angle designated by the design base).

(Signals for Operation)

Article 111 (1) The employer must, when carrying out the work using a derrick, set fixed signals for operation of the derrick, designate a person who gives the said signals and have the said person give the signals. However, this does not apply to when having only a derrick operator carry out the work single-handedly.

(2) The person designated pursuant to the preceding paragraph, when engaging in the work set forth in the same paragraph, must give the signals set forth in the same paragraph.

(3) Workers engaged in the work set forth in paragraph (1) must follow the signals set forth in the same paragraph.

(Restriction on Riding)

Article 112 The employer must not carry workers by a derrick, nor have workers work being hanged from the derrick.

Article 113 (1) The employer may, notwithstanding the provisions of the preceding Article, in the unavoidable case due to the nature of the work or in the necessary case to carry out the works safely, provides the exclusive riding equipment fitted with load-lifting attachment and carry workers on the derrick.

(2) The provisions of paragraph (2) and (3) of Article 27 apply mutatis mutandis to the case set forth in the preceding paragraph.

(Prohibition of Entry)

Article 114 The employer must, when carrying out the work using a derrick, in order to prevent workers from dangers due to rebounding of a hoisting or a derricking wire rope or flying of a sheave or its fitting caused by damage of the said sheave through which the said hoisting or derricking wire rope reeves or damage of its fittings, not allow the workers to enter the area within interior angle of the said wire rope where it is liable to cause the said dangers to workers.

Article 115 The employer must, when carrying out the work pertaining to a derrick and in the case falling under any of the following each item, not allow workers to enter the place under the lifted load (in the case set forth in item (vi), including load-lifting attachments):

(i) when a load slung using lifting hooks being suspended;

(ii) when a load slung using a single clamp being suspended;

- (iii) when a load slung at one position of the load using wire rope, etc., being suspended (excluding the case of slinging a load reeving through an hole or an eye-bolt provided on the load);
- (iv) when plural loads being lifted at a time, and not fixed such as bundled and kept in a box;
- (v) when a load slung using a lifting attachment or a sling gear of the magnet system or the vacuum system being suspended;
- (vi) when lowering a load or a lifting attachment by methods other than power lowering.

(Measures in Storm)

Article 116 The employer must, when the wind having instantaneous wind velocity of exceeding 30 m/s is expected to blow, as regards a derrick installed out of doors, take measures such as to fasten the boom to the mast or to the fixture on the ground in order to prevent the derrick from damage due to swinging of the boom.

(Suspension of Work in Strong Wind)

Article 116-2 The employer must suspend the work pertaining to a derrick, when the dangers regarding the said work are forecast due to the strong wind.

(Prohibition of Leaving a Derrick Unattended)

- Article 117 (1) The employer must not have a derrick operators leave the operating station while suspending a load.
- (2) The operators set forth in the preceding paragraph must not leave the operating station while suspending a load.

(Erection Work, etc.)

Article 118 (1) The employer must, when erecting or dismantling a derrick, take following measures:

- (i) to appoint a person who supervises the work and to have workers carry out it under supervision by the said person;
 - (ii) to prohibit workers other than those concerning the work from entering the area where works are on-going and display a notice to that effect at a readily visible location;
 - (iii) when dangers regarding the implementation of the work are forecast due to bad weather such as strong wind, heavy rain and heavy snow, not to have workers engage in the said work.
- (2) The employer must have the person who supervises the work set forth in item (i) of the preceding paragraph carry out the following matters:
- (i) to determine the work method and the placement of workers and supervise

- the work;
- (ii) to check up defects in materials, the function of instruments and tools, and to remove defective ones;
- (iii) to monitor the use of Safety Belts, etc. and safety helmets during the work.

Section 3 Periodical Self-inspections, etc.

(Periodical Self-inspections)

- Article 119 (1) The employer must, after installation of a derrick, perform self-inspections for the said derrick periodically once every period within a year. However, this does not apply to the non-use period of the derrick, which is not used for a period of exceeding one year
- (2) The employer must, as regards a derrick set forth in the proviso of the preceding paragraph, perform the self-inspection before resuming its use.
 - (3) The employer must perform the load test on the self-inspection set forth in the preceding two paragraphs. However, this does not apply to the derrick, for which the load test pursuant to the provisions of paragraph (1) of Article 125 has been performed within two months before the said self-inspection, or the validity term of the inspection certificate of which is to be expired within two months after the said self-inspection.
 - (4) The load test set forth in the preceding paragraph is to be done in such manners as performing motions with hoisting, slewing and derricking of a boom under the Rated Speed, while suspending a load with the mass corresponding to the Rated Capacity.

Article 120 (1) The employer must perform self-inspections for a derrick as to the following matters periodically once every period within one month. However, this does not apply to the non-use period of the derrick, which is not used for a period of exceeding one month:

- (i) abnormalities on over-winding protective devices and other safety devices, brakes and clutches;
 - (ii) conditions of setting winches;
 - (iii) damages on wire ropes;
 - (iv) abnormalities on the connecting parts of guy ropes;
 - (v) damages on the load-lifting attachments such as hooks and grab buckets;
 - (vi) damages on wiring, switches and controllers.
- (2) The employer must, as regards a derrick set forth in the proviso of the preceding paragraph, perform the self-inspection as to the matters listed in each item of the same paragraph, before resuming its use.

(Checkup before Commencing Work)

Article 121 The employer must, when carrying out the work using a derrick, check up the following matters before commencing the work for the day:

- (i) the function of over-winding preventive devices, brakes, clutches and controllers;
- (ii) the condition of parts where wire ropes reeve through.

(Checkup after Storm, etc.)

Article 122 The employer must, when carrying out the work using a derrick installed out of doors, after the wind having instantaneous wind velocity of exceeding 30 m/s, or after the earthquake of medium intensity or heavier, check up in advance, the abnormalities in each part of the derrick.

(Record of Self-inspection, etc.)

Article 123 The employer must record the results of the self-inspections and checkup prescribed in this Section (excluding the checkup set forth in Article 121) and reserve the records for three years.

(Repair)

Article 124 The employer must, when any abnormality is found based on the self-inspections or the checkup prescribed in this Section, immediately repair.

Section 4 Performance Inspection

(Performance Inspection)

Article 125 (1) On the Performance Inspection pertaining to a derrick, in addition to examining the construction and the function of each part of the derrick, the load test is to be performed.

(2) The provisions of paragraph (4) of Article 119 apply mutatis mutandis to the load test set forth in the preceding paragraph.

(Application for Performance Inspection, etc.)

Article 126 A person who intends to undergo the Performance Inspection pertaining to a derrick (limited to the one carried out by the Chief of the Labour Standards Inspection Office pursuant to paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act.) must submit an application for performance inspection for derrick (Form No. 11) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Performance Inspection)

Article 127 The provisions of Article 98 apply mutatis mutandis to the case of undergoing the Performance Inspection pertaining to the derrick set forth in

the preceding Article.

(Renewal for Validity Term of Inspection Certificate)

Article 128 The registered performance inspection agency is to renew the validity term of the derrick inspection certificate as regards the derrick, which passed the Performance Inspection pertaining to derrick. In this case, the validity term may renewed by fixing the term for less than two years, or for over two years and within three years based on the results of the Performance Inspection.

(Application of the Provisions in the Case that the Chief of the Labour Standards Inspection Office Carries Out the Performance Inspection Service)

Article 128-2 As regards the application of the provisions in the case that the Chief of the Labour Standards Inspection Office carries out whole or a part of the Performance Inspection service pertaining to a derrick pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act, the term "registered performance inspection agency" in the said Article is deemed to be replace with "the Chief of the Competent Labour Standards Inspection Office or registered performance inspection agency".

Section 5 Alteration, Pause of Use, Disuse, etc.

(Notification for Alteration)

Article 129 (1) As regards the derrick having been installed, the employer who intends to alter any of the parts listed in the following each item must, when notifying it pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the notification for derrick alteration (Form No. 12) with the derrick inspection certificate and the drawings of the parts intended to alter (excluding the one listed in item (v)), to the Chief of the Competent Labour Standards Inspection Office:

- (i) masts, booms, stays and other structural parts;
- (ii) prime movers;
- (iii) brakes;
- (iv) lifting mechanism;
- (v) wire ropes and lifting chains;
- (vi) load-lifting attachments such as hooks and grab buckets;
- (vii) the foundation.

(2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of notification pursuant to the provisions of the preceding paragraph. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be

replaced with "derrick".

- (3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) must, when intending to alter any of the parts listed in each item of paragraph (1) as regards a derrick, pursuant to the provisions of paragraph (1) of Article 88 of the Act, which is applied mutatis mutandis in paragraph (2) of the same Article, submit the derrick alteration notification (Form No. 12) with the inspection certificate and drawings set forth in paragraph (1), to the Chief of the Competent Labour Standards Inspection Office.

(Alteration Inspection)

Article 130 (1) A person who altered the parts of a derrick falling under item (i) or (vii) of paragraph (1) of the preceding Article must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said derrick by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.

- (2) The provisions of paragraph (2) and (3) of Article 97 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "alteration inspection" in this Section).
- (3) A person who undergoes the alteration inspection must submit an application for derrick alteration inspection (Form No. 13) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of preceding Article is not made because of having been given the Accreditation, the inspection certificate and the drawing set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Alteration Inspection)

Article 131 The provisions of Article 98 apply mutatis mutandis to the case of undergoing the alteration inspection.

(Endorsement on Inspection Certificate)

Article 132 The Chief of the Competent Labour Standards Inspection Office is to, as regards the derrick which passed the derrick alteration inspection or the derrick set forth in the proviso of paragraph (1) of Article 130, endorse the inspection date, the parts.

(Report on Pause of Use)

Article 133 A person who has installed a derrick must, when intending to pause

the use of the derrick for a period over the validity term of the derrick inspection certificate, report that matter to the Chief of the Competent Labour Standards Inspection Office within the validity term of the said derrick inspection certificate. However, this does not apply to the employer who has been given the Accreditation.

(Reuse Inspection)

Article 134 (1) A person who intends to reuse the derrick, which has paused the use, pursuant to the provisions of paragraph (3) of Article 38 of the Act, must undergo the inspection for the said derrick by the Chief of the Competent Labour Standards Inspection Office.

(2) The provisions of paragraph (2) and (3) of Article 97 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "reuse inspection" in this Section).

(3) A person who undergoes the reuse inspection must submit an application for derrick reuse inspection (Form No. 14) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Reuse Inspection)

Article 135 The provisions of Article 98 apply mutatis mutandis to the case of undergoing the reuse inspection.

(Endorsement on Inspection Certificate)

Article 136 The Chief of the Competent Labour Standards Inspection Office is to, as regards the derrick, which passed the reuse inspection, endorse the inspection date and the results of the inspection on the said derrick inspection certificate concerned.

(Return of Inspection Certificate)

Article 137 A person who had installed a derrick must, when having disused or altered its Lifting Capacity down to less than 2 tons, return without delay the derrick inspection certificate (excluding the inspection certificate in the case of being substituted by that of before removal pursuant to the provisions of paragraph (1) of Article 99) to the Chief of the Competent Labour Standards Inspection Office.

Chapter V Elevator

Section 1 Manufacturing and Installation

(Permission for Manufacturing)

Article 138 (1) A person who intends to manufacture an elevator (limited to the

one set forth in item (vi) of paragraph (1) of Article 12 of the Order, the same applies hereinafter in this Article to Article 144, Article 147 and Article 148, and Section 4 and Section 5 of this Chapter) must obtain, in advance, the permission in respect to the elevator intended to manufacture from the Director of the Competent Prefectural Labour Bureau. However, this does not apply to the elevator, the type of which is identical with the elevator, which has been obtained the said permission already (hereinafter referred to as "permitted type elevator" in the following Article).

(2) A person who intends to obtain the permission set forth in the preceding paragraph must submit an application for elevator manufacturing permission (Form No. 1) with the assembly drawing of the elevator and the document stating the following matters to the Director of the Competent Prefectural Labour Bureau:

- (i) standards of strength calculation;
- (ii) outline of the equipment for inspection performed on the process of manufacturing;
- (iii) name and outline of career of the chief designer and the responsible person on manufacturing work.

(Report of Alteration on Equipment, etc., for Inspection)

Article 139 The person who has obtained the permission set forth in paragraph (1) of the preceding Article must, in the case of manufacturing the elevator pertaining to the said permission or the permitted type elevator, when the equipment set forth in item (ii) of paragraph (2) of the same Article or either the chief designer or the responsible person on manufacturing work set forth in item (iii) of the same paragraph were altered, report without delay to the Director of the Competent Prefectural Labour Bureau.

(Notification for Installation)

Article 140 (1) The employer who intends to install an elevator must, when notifying pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the elevator installation notification (Form No. 26) with the specification of the elevator (Form No. 27), the assembly drawing of the elevator, and the strength calculation statement of the structural parts listed in the right column of the Appended Table corresponding to the type of the elevator listed in the left column of the same Table respectively, and the document stating the following matters to the Chief of the Competent Labour Standards Inspection Office:

- (i) surroundings at the place of installation;
- (ii) as regards the elevator installed out of door, the outline of the foundation and method of anchorage for stays.

- (2) A person who submits notification pursuant to the provisions of the preceding paragraph as regards the elevator installed in the building listed in item (i) to (iii) of paragraph (1) of Article 6 of the Building Standards Act (Act No. 201 of 1950), must submit the elevator installation notification with the copies of the parts related to the elevator among the application for confirmation pursuant to the provisions of paragraph (1) of Article 6 of the same Act (including the case where it is applied mutatis mutandis to paragraph (1) of Article 87-2 of the same Act) together with copies of the notice for confirmation pursuant to the provisions of paragraph (4) of Article 6 of the same Act, to the Chief of the Competent Labour Standards Inspection Office.
- (3) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding two paragraphs. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "elevator".
- (4) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) who intends to install an elevator must, pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis in paragraph (2) of the same Article, submit the elevator installation notification (Form No. 26) with the specification, the assembly drawing, the strength calculation statement and the document set forth in paragraph (1) to the Chief of the Competent Labour Standards Inspection Office.
- (5) The provisions of paragraph (2) apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph.

(Completion Inspection)

- Article 141 (1) A person who has installed an elevator must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said elevator by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary and to the elevator set forth in paragraph (2) of the preceding Article.
- (2) On the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as the "completion inspection" in this Section), in addition to examining the construction and the function of each part of the elevator, the load test is to be performed.
 - (3) The load test set forth in the preceding paragraph is to be carried out in such manners as performing motions with raising and lowering, while carrying a load with the mass corresponding to 1.2 times of the Loading Capacity.
 - (4) A person who intends to undergo a completion inspection for the elevator must submit an application for elevator completion inspection (Form No. 4) to

the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (4) of the preceding Article is not made because of having been given the Accreditation, the specification, the assembly drawing, the strength calculation statement and the documents set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

- (5) The person who submitted the notification pursuant to the provisions of paragraph (1) of the preceding Article for the elevator set forth in paragraph (2) of the same Article (including the one who does not make the notification because of having been given the Accreditation) must submit a copy of the inspection completion certificate pursuant to the provisions of paragraph (5) of Article 7 of the Building Standards Act (including the case where it is applied mutatis mutandis to paragraph (1) of Article 87-2 of the same Act) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Completion Inspection)

Article 142 (1) A person who undergoes the completion inspection must, as regards the elevator being subjected to the said inspection, prepare a test load for the load test.

- (2) The Chief of the Competent Labour Standards Inspection Office may order the matters, which found to be necessary for the completion inspection to the person who undergoes the said inspection.
- (3) A person who undergoes the completion inspection must be present at the said inspection.

(Inspection Certificate for Elevator)

Article 143 (1) The Chief of the Competent Labour Standards Inspection Office is to, as regards the elevator, which passed the completion inspection or the elevator set forth in the proviso of paragraph (1) of Article 141, issue the elevator inspection certificate (Form No. 28) to the person who submitted the application pursuant to the provisions of paragraph (4) of the same Article or a copy of the inspection completed certificate pursuant to the provisions of paragraph (5) of the same Article.

- (2) A person who has installed an elevator must, when having lost or damaged the elevator inspection certificate, submit an application for reissue of the elevator inspection certificate (Form No. 8) with the following document to the Chief of the Competent Labour Standards Inspection Office and be granted the reissue:
- (i) the document explaining the lost of the elevator inspection certificate in the event of losing;
- (ii) the elevator inspection certificate in the event of damaging.

(3) On alteration of the person who has installed an elevator, the replaced person must, within ten days from the said alteration, submit an application for renewal of the elevator inspection certificate (Form No. 8) with the elevator inspection certificate to the Chief of the Competent Labour Standards Inspection Office and be granted the renewal.

(Validity Term of Inspection Certificate)

Article 144 The validity term of the elevator inspection certificate is for one year.

(Report for Installation)

Article 145 The employer who intends to install an elevator set forth in item (xvii) of paragraph (3) of Article 13 of the Order must submit, in advance, the elevator installation report (Form No. 29) to the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the employer who has been given the Accreditation.

(Load Test)

Article 146 The employer must, when having installed the elevator set forth in item (xvii) of paragraph (3) of Article 13 of the Order, perform the load test set forth in paragraph (3) of Article 141. However, this does not apply to the elevator on which the inspection is performed pursuant to the provisions of paragraph (2) of Article 7 of the Building Standards Act.

Section 2 Use and Operation

(Providing with Inspection Certificate)

Article 147 The employer must, when carrying out the work using an elevator, provide the said elevator inspection certificate of the said elevator at the place where the said work is carried out.

(Limitation of Use)

Article 148 The employer must not use an elevator, unless it complies with the Standard Prescribed by the Minister of Health, Labour and Welfare (limited to the structural parts of the elevator).

(Adjustment on Safety Device)

Article 149 The employer must adjust final limit switches, emergency stop devices and other safety devices in order to ensure their reliable operation.

(Limitation on Overload)

Article 150 The employer must not use an elevator being loaded with the load

over its Loading Capacity.

(Information of the Operation Method)

Article 151 The employer must make the operation method and the measures in the case of trouble of an elevator (excluding the case when only the appointed operators are allowed to operate) known to workers who use the said elevator.

(Measures in Storm)

Article 152 The employer must, when the wind having instantaneous wind velocity of exceeding 35 m/s is expected to blow, as regards an elevator installed out of doors, take measures such as increasing the number of stays in order to prevent the said elevators from collapse.

(Erection Work, etc.)

Article 153 (1) The employer must, when erecting or dismantling a hoist way, towers or guide rail towers of an elevator installed outdoors, take the following measures:

- (i) to appoint a person who supervises the work and to have workers carry out it under supervision by the said person;
- (ii) to prohibit workers other than those concerning the work from entering the area where works are on-going and display a notice to that effect at a readily visible location;
- (iii) when dangers regarding the implementation of the work are forecast due to bad weather such as strong wind, heavy rain and heavy snow, not to have workers engage in the said work.

(2) The employer must have the person who supervises the work set forth in item

(i) of the preceding paragraph carry out the following matters:

- (i) to determine the work method and the placement of workers and supervise the work;
- (ii) to check up defects in materials, the function of instruments and tools, and to remove defective ones;
- (iii) to watch the use of Safety Belts, etc. and safety helmets during work.

Section 3 Periodical Self-inspections, etc.

(Periodical Self-inspections)

Article 154 (1) The employer must, after installation of an elevator listed in item (xvii) of paragraph (3) of Article 13 of the Order, perform self-inspections for the said elevator periodically once every period within a year. However, this does not apply to the non-use period of the elevator, which is not used for a period of exceeding one year.

(2) The employer must, as regards an elevator set forth in the proviso of the preceding paragraph, perform the self-inspection before resuming its use.

Article 155 (1) The employer must perform the self-inspection for an elevator as to the following matters periodically once every period within one month. However, this does not apply to the non-use period of the said elevator, which is not used for a period exceeding one month:

- (i) abnormalities on final limit switches, emergency stop devices and other safety devices, brakes and controlling devices;
- (ii) damages on wire ropes;
- (iii) condition of guide rails;
- (iv) for an elevator installed out of doors, abnormalities on the connecting parts of guy ropes.

(2) The employer must, as regards an elevator set forth in the proviso of the preceding paragraph, perform the self-inspection as to the matters listed in each item of the same paragraph before resuming its use.

(Checkup after Storm, etc.)

Article 156 The employer must, when carrying out the work by using an elevator installed out of doors, after the wind having instantaneous wind velocity of more than 30 m/s or after the earthquake of medium intensity or heavier, check up in advance, abnormalities in each part of the elevator, before.

(Record of Self-inspection, etc.)

Article 157 The employer must record the results of the self-inspection and the checkup prescribed in this Section, and reserve these records for three years.

(Repair)

Article 158 The employer must, when any abnormality is found based on the self-inspection or the checkup prescribed in this Section, immediately repair.

Section 4 Performance Inspection

(Performance Inspection)

Article 159 (1) On the Performance Inspection pertaining to an elevator, in addition to examining the construction and the function of each part of the elevator, the load test is to be performed.

(2) The load test set forth in the preceding paragraph is to be done in such manners as performing motions of raising and lowering under the Rated Speed, while carrying a load with the mass corresponding to the Loading Capacity at the Rated Speed.

(Application, etc., for Performance inspection)

Article 160 A person who intends to undergo the Performance Inspection (limited to the one carried out by the Chief of the Labour Standards Inspection Office pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act) must submit an application for performance inspection for elevator (Form No. 11) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Performance inspection)

Article 161 The provisions of Article 142 apply mutatis mutandis to the case of undergoing the Performance Inspection pertaining to the elevator set forth in the preceding Article.

(Renewal for Validity Term of Inspection Certificate)

Article 162 The registered performance inspection agency is to renew the validity term of the elevator inspection certificate as regard the elevator, which passed the Performance Inspection pertaining to the elevator. In this case, the validity term may be renewed by fixing the term for less than one year, or for over one year and less than two years based on the results of the Performance Inspection.

(Application of the Provisions in the Case that the Chief of the Labour Standards Inspection Office Carries Out the Performance Inspection Service)

Article 162-2 As regards the application of the provisions set forth in the preceding Article in the case that the Chief of the Labour Standards Inspection Office carries out whole or a part of the Performance Inspection service pertaining to an elevator pursuant to the provisions of paragraph (1) of Article 53-2 of the Act which is applied mutatis mutandis in Article 53-3 of the Act, the term "registered performance inspection agency" in the same Article is deemed to be replaced with "Chief of the competent Labour standards Inspection Office or registered performance inspection agency".

Section 5 Alteration, Pause of Use, Disuse, etc.

(Notification for Alteration)

Article 163 (1) As regards the elevator having been installed, the employer intends to alter any of the parts listed in the following each item must, when notifying it pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the elevator alteration notification (Form No. 12) with the elevator inspection certificate and drawings of the parts intended to alter (excluding the

one listed in item (iv)), to the Chief of the Competent Labour Standards Inspection Office:

- (i) cages or counter weights;
 - (ii) hoisting mechanism or prime movers;
 - (iii) brakes;
 - (iv) wire ropes;
 - (v) for an elevator installed out of doors, hoist way towers, guide rail towers and stays.
- (2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of notification pursuant to the provisions of the preceding paragraph. In this case the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "elevator".
- (3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) must, as regards an elevator, when intending to alter any of the parts listed in each item of paragraph (1), pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis in paragraph (2) of the same Article, submit the elevator alteration notification (Form No. 12) with the inspection certificate and the drawings set forth in paragraph (1), to the Chief of the Competent Labour Standards Inspection Office.

(Alteration Inspection)

- Article 164 (1) A person who altered the parts of an elevator falling under item (i) or (v) of paragraph (1) of the preceding Article must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said elevator by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the inspection of the said elevator is unnecessary.
- (2) The provisions of paragraph (2) and (3) of Article 141 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "alteration inspection" in this Section).
- (3) A person who undergoes the alteration inspection must submit an application for elevator alteration inspection (Form No. 13) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the Accreditation, the inspection certificate and the drawing set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Alteration Inspection)

Article 165 The provisions of Article 142 apply mutatis mutandis to the case of undergoing the alteration inspection.

(Endorsement on Inspection Certificate)

Article 166 The Chief of the Competent Labour Standards Inspection Office is to, as regards the elevator, which passed the alteration inspection or the elevator set forth in the proviso of paragraph (1) of Article 164, endorse the inspection date, the parts altered and the results of the inspection on the said elevator inspection certificate.

(Report on Pause of Use)

Article 167 A person who installed an elevator must, when intending to pause the use of the said elevator for a period over the validity term of the elevator inspection certificate, report that matter to the Chief of the Competent Labour Standards Inspection Office within the validity term of the said elevator inspection certificate. However, this does not apply to the employer who has been given the Accreditation.

(Reuse Inspection)

Article 168 (1) A person who intends to reuse the elevator, which has paused the use, pursuant to the provisions of paragraph (3) of Article 38 of the Act, must undergo the inspection for the said elevator by the Chief of the Competent Labour Standards Inspection Office.

(2) The provisions of paragraph (2) and (3) of Article 141 apply mutatis mutandis to the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as "reuse inspection" in this Section).

(3) A person who undergoes the reuse inspection must submit an application for elevator reuse inspection (Form No. 14) to the Chief of the Competent Labour Standards Inspection Office.

(Measures for the Case of Undergoing Reuse Inspection)

Article 169 The provisions of Article 142 apply mutatis mutandis to the case of undergoing the reuse inspection.

(Endorsement on Inspection Certificate)

Article 170 The Chief of the Competent Labour Standards Inspection Office is to, as regards the elevator, which passed the reuse inspection, endorse the inspection date and the results of the inspection on the said elevator inspection certificate.

(Return of Inspection Certificate)

Article 171 A person who had installed an elevator must, when having disused the said elevator, return without delay the elevator inspection certificate to the Chief of the Competent Labour Standards Inspection Office.

Chapter VI Lift for Construction Work

Section 1 Manufacturing and Installation

(Permission for Manufacturing)

Article 172 (1) A person who intends to manufacture a Lift for Construction Work (limited to the one set forth in item (vii) of paragraph (1) of Article 12 of the Order, hereinafter the same applies in this Article to Article 178, Article 180 and Article 181, and Section 4 in this Chapter) must obtain, in advance, the permission in respect to the Lift for Construction Work intended to manufacture from the Director of the Competent Prefectural Labour Bureau. However, this does not apply to the Lift for Construction Work, the type of which is identical with the Lift for Construction Work, which has obtained the said permission already (hereinafter referred to as "permitted type lift for construction work" in the following Article).

(2) A person who intends to obtain the permission set forth in the preceding paragraph must submit an application for lift for construction work manufacturing permission (Form No. 1) with the assembly drawing of the Lift for Construction Work and the document stating the following matters to the Director of the Competent Prefectural Labour Bureau:

- (i) standards of strength calculation;
- (ii) outline of the equipment for inspection performed on the process of manufacturing;
- (iii) name and outline of the career of the chief designer and the responsible person on manufacturing work.

(Report of Alteration on Equipment, etc., for Inspection)

Article 173 The person who has obtained the permission set forth in paragraph (1) of the preceding Article must, in the case of manufacturing the Lift for Construction Work pertaining to the said permission or the permitted type lift for construction work, when the equipment set forth in item (ii) of paragraph (2) of the same Article or either the chief designer or the responsible person on manufacturing work set forth in item (iii) of the same paragraph were altered, report without delay to the Director of the Competent Prefectural Labour Bureau.

(Notification for Installation)

Article 174 (1) The employer who intends to install a Lift for Construction Work

must, when notifying pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the lift for construction work installation notification (Form No. 30) with the specification of the lift for construction work (Form No. 31), the assembly drawing of the Lift for Construction Work and the strength calculation statement of the structural parts listed in the right column of the Appended Table corresponding to the type of the Lift for Construction Work listed in the left column of the same Table respectively, and the document stating following matters to the Chief of the Competent Labour Standards Inspection Office:

- (i) surroundings at the place of installation;
 - (ii) outline of the foundation;
 - (iii) method of anchorage of stays.
- (2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "Lift for Construction Work".
- (3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) who intends to install a Lift for Construction Work must, pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis in paragraph (2) of the same Article, submit the lift for construction work installation notification (Form No. 30) with the specification, the assembly drawing, the strength calculation statement and the document set forth in paragraph (1) to the Chief of the Competent Labour Standards Inspection Office.

(Completion Inspection)

- Article 175 (1) A person who installed a Lift for Construction Work must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said Lift for Construction Work by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.
- (2) On the inspection pursuant to the provisions of the preceding paragraph (hereinafter referred to as the "completion inspection" in this Section), in addition to examining the construction and the function of each part of the Lift for Construction Work, the load test is to be performed.
- (3) The load test set forth in the preceding paragraph is to be carried out in such manners as performing motions with raising and lowering, while carrying a load with the mass corresponding to 1.2 times of the Loading Capacity.
- (4) A person who intends to undergo the completion inspection for the Lift for Construction Work must submit an application for lift for construction work

completion inspection (Form No. 4) to the Chief of the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the Accreditation, the specification, the assembly drawing, the strength calculation statement and the documents set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Completion Inspection)

- Article 176 (1) A person who undergoes the completion inspection must, as regards the Lift for Construction Work being subjected to the said inspection concerned, prepare a test load for the load test.
- (2) The Chief of the Competent Labour Standards Inspection Office may, when having found the necessity for the completion inspection, as regards the Lift for Construction Work pertaining to the said inspection, order the following matters to the person who undergoes the inspection concerned:
- (i) to take off a part of coating;
 - (ii) to pick out rivets, or to make a hole in a part of members;
 - (iii) to cut off a part of wire rope;
 - (iv) in addition to the matters listed in the preceding each item, matters found to be necessary for the said inspection.
- (3) A person who undergoes the completion inspection must be present at the said inspection.

(Inspection Certificate for Lift for Construction Work)

- Article 177 (1) The Chief of the Competent Labour Standards Inspection Office is to, as regards the Lift for Construction Work, which passed the completion inspection or the Lift for Construction Work set forth in the proviso of paragraph (1) of Article 175, issue the lift for construction work inspection certificate (Form No. 32) to the person who submitted the application pursuant to the provisions of paragraph (4) of the same Article
- (2) A person who has installed a Lift for Construction Work must, when having lost or damaged the lift for construction work inspection certificate, submit an application for reissue of the lift for construction work inspection certificate (Form No. 8) with the following document to the Chief of the Competent Labour Standards Inspection Office and be granted the reissue:
- (i) the document explaining the lost of the lift for construction work inspection certificate in the event of losing;
 - (ii) the lift for construction work inspection certificate in the event of damaging.
- (3) On alteration of the person who has installed the Lift for Construction Work, the replaced person must, within ten days from the said alteration, submit an

application for renewal of the lift for construction work inspection certificate (Form No. 8) with the lift for construction work inspection certificate to the Chief of the Competent Labour Standards Inspection Office and be granted the renewal.

(Validity Term of Inspection Certificate)

Article 178 The validity term of the lift for construction work inspection certificate is for a period from installation of Lift for Construction Work to disuse.

Article 179 Deleted.

Section 2 Use and Operation

(Providing with Inspection Certificate)

Article 180 The employer must, when carrying out the work using a Lift for Construction Work, provide the lift for construction work inspection certificate of the said Lift for Construction Work at the place where the said work is carried out.

(Limitation of Use)

Article 181 The employer must not use a Lift for Construction Work, unless it complies with the Standard Prescribed by the Minister of Health, Labour and Welfare (limited to the structural parts of the Lift for Construction Work).

(Prevention for Over-winding)

Article 182 The employer must, as regards the Lift for Construction Work, take such measures as marking on hoisting wire ropes and installing warning devices in order to prevent workers from dangers due to over-winding hoisting wire ropes.

(Special Education)

Article 183 (1) The employer must, when placing a worker in operations of a Lift for Construction Work, give the special education for the safety related to the said operation, to the said worker.

(2) The special education set forth in the preceding paragraph must be conducted on the following subjects:

- (i) knowledge on Lifts for Construction Work;
- (ii) knowledge on the electricity necessary for operation of Lifts for Construction Work;
- (iii) related legislation;

- (iv) operation and checkup of Lifts for Construction Work;
 - (v) signals for operation of Lifts for Construction Work.
- (3) In addition to the matters prescribed in Article 37 and Article 38 of the Safety and Health Ordinance and in the preceding two paragraphs, the Minister of Health, Labour and Welfare prescribes necessary matters related to the special education set forth in paragraph (1).

(Limitation on Overload)

Article 184 The employer must not use a Lift for Construction Work being loaded with the load over its Loading Capacity.

(Signals for Operation)

- Article 185 (1) The employer must, when carrying out the work using a Lift for Construction Work, set the fixed signals for operation of the Lifts for Construction Work, designate a person who gives the said signals and have the said person give the signals.
- (2) The person designated pursuant to the preceding paragraph, when engaging in the work set forth in the same paragraph, must give the signals set forth in the same paragraph.
- (3) Workers engaged in the work set forth in paragraph (1) must follow the signals set forth in the same paragraph.

(Restriction on Riding)

- Article 186 (1) The employer must not have workers ride on the cage of a Lift for Construction Work. However, this does not apply to the case of carrying out the work repairing, adjusting, checking, etc., for the Lift for Construction Work, and when taking measures, which is unlikely to cause dangers to the workers engaging in the said work.
- (2) Workers, excluding the case set forth in the proviso of the preceding paragraph, must not ride on the cage of a Lift for Construction Work.

(Prohibition of Entry)

- Article 187 The employer must, when carrying out the work using a Lift for Construction Work, not allow the workers to enter the following place:
- (i) the place is liable to cause dangers to workers due to raising or lowering motions of the cage of a Lift for Construction Work;
 - (ii) the area, within the interior angle of a hoisting wire rope of a Lift for Construction Work where it is liable to cause dangers to workers due to rebounding of the said wire rope or flying of a sheave or its fittings, due to damage of the said sheave through which the said wire rope reeves or damage of the said fittings.

(Measures for the Case of Cleaning Pit, etc.)

Article 188 The employer must, when cleaning the pit or the basal part of a Lift for Construction Work, take such measures as setting the objects as square lumbers or logs, etc. across the hoist way and placing the cage on that objects, braking a winch securely by a brake equipped with a clump in order to prevent dangers to workers due to falling of the cage.

(Measures in Storm)

Article 189 The employer must, when the wind having instantaneous wind velocity of exceeding 35 m/s is expected to blow, as regards a Lift for Construction Work (excluding the one installed underground), take measures such as increasing the number of stays in order to prevent the said lift from the collapse.

(Prohibition of Leaving Lift for Construction Work Unattended)

Article 190 (1) The employer must not have an operator of a Lift for Construction Work leave the operating station while raising a cage.
(2) The operator set forth in the preceding paragraph must not leave the operating station while raising a cage.

(Assembling Work, etc.)

Article 191 (1) The employer must, when assembling or disassembling a Lift for Construction Work, take the following measures:
(i) to appoint a person who supervises the work and to have workers carry out it under supervision by the said person;
(ii) to prohibit workers other than those concerning the work from entering the area where works are on-going and display a notice to that effect at a readily visible location;
(iii) when dangers regarding the implementation of the work are forecast due to the bad weather such as strong wind, heavy rain and heavy snow, not to have workers engage in the said work.
(2) The employer must have the person who supervises the work set forth in item (i) of the preceding paragraph carry out following matters:
(i) to determine the work method and the placement of workers and supervise the work;
(ii) to check up defects in materials, the function of instruments and tools, and to remove defective ones;
(iii) to monitor the use of Safety Belts, etc. and safety helmets during the work.

Section 3 Periodical Self-inspections, etc.

(Periodical Self-inspections)

Article 192 (1) The employer must perform self-inspections for a Lift for Construction Work, as to the following matters periodically once every period within one month. However, this does not apply to the non-use period of the Lift for Construction Work, which is not used for a period of exceeding one month:

- (i) abnormalities on brakes and clutches;
- (ii) conditions of setting winches;
- (iii) damages on wire ropes;
- (iv) abnormalities on connecting parts of guy ropes;
- (v) damages on wiring, switches and controllers;
- (vi) conditions of guide rails.

(2) The employer must, as regards a Lift for Construction Work set forth in the proviso of the preceding paragraph, perform the self-inspection as to the matters listed in each item of the same paragraph, before resuming its use.

(Checkup before Commencing Work)

Article 193 The employer must, when carrying out the work using a Lift for Construction Work, check up as to the following matters before commencing the work for the day.

- (i) the function of brakes and clutches;
- (ii) the condition of the parts where wire ropes reeve through.

(Checkup after Storm, etc.)

Article 194 The employer must, when carrying out the work using a Lift for Construction Work (excluding the one installed underground), after the wind having instantaneous wind velocity of exceeding 30 m/s, or after the earthquake of medium intensity or heavier, check up in advance, abnormalities in each part of the Lift for Construction Work.

(Record of Self-inspection, etc.)

Article 195 The employer must record the results of the self-inspections and checkup prescribed in this Section (excluding the checkup set forth in Article 193), and reserve these records for three years.

(Repair)

Article 196 The employer must, when any abnormality is found based on the self-inspection or checkup prescribed in this Section, immediately repair.

Section 4 Alteration and Disuse

(Notification for Alteration)

Article 197 (1) As regards the Lift for Construction Work having been installed, the employer who intends to alter any of the parts listed in the following each item must, when notifying it pursuant to the provisions of paragraph (1) of Article 88 of the Act, submit the lift for construction work alteration notification (Form No. 12) with the lift for construction work inspection certificate and drawings of the parts intended to alter (excluding the one listed in item (vi)), to the Chief of the Competent Labour Standards Inspection Office:

- (i) guide rails or hoist ways;
- (ii) cages;
- (iii) prime movers;
- (iv) brakes;
- (v) winches;
- (vi) wire ropes.

(2) The provisions of paragraph (2) of Article 5 apply mutatis mutandis to the case of the notification pursuant to the provisions of the preceding paragraph. In this case, the term "crane" in paragraph (2) of the same Article is deemed to be replaced with "Lift for Construction Work".

(3) The employer (excluding the one set forth in the text of paragraph (1) of Article 88 of the Act) must, as regards a Lift for Construction Work, when intending to alter any of the parts listed in each item of paragraph (1), pursuant to the provisions of paragraph (1) of Article 88 of the Act which is applied mutatis mutandis in paragraph (2) of the same Article, submit the lift for construction work alteration notification (Form No. 12) with the inspection certificate and drawings set forth in paragraph (1), to the Chief of the Competent Labour Standards Inspection Office.

(Alteration Inspection)

Article 198 (1) A person who altered the parts of a Lift for Construction Work falling under item (i) or (ii) of paragraph (1) of the preceding Article must, pursuant to the provisions of paragraph (3) of Article 38 of the Act, undergo the inspection for the said Lift for Construction Work by the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the case that the Chief of the Competent Labour Standards Inspection Office approved the said inspection is unnecessary.

(2) The provisions of paragraph (2) and (3) of Article 175, apply mutatis mutandis to the inspection set forth in the preceding paragraph (hereinafter referred to as "alteration inspection" in this Section).

(3) A person who undergoes the alteration inspection must submit an application for lift for construction work alteration inspection (Form No. 13) to the Chief of

the Competent Labour Standards Inspection Office. In the case that the notification set forth in paragraph (1) or (3) of the preceding Article is not made because of having been given the Accreditation, the inspection certificate and the drawing set forth in paragraph (1) of the same Article, and other document necessary for the completion inspection are to be attached.

(Measures for the Case of Undergoing Alteration Inspection)

Article 199 The provisions of Article 176 apply mutatis mutandis to the case of undergoing the alteration inspection.

(Endorsement on Inspection Certificate)

Article 200 The Chief of the Competent Labour Standards Inspection Office is to, as regards the Lift for Construction Work which passed the alteration inspection or the Lift for Construction Work set forth in the proviso of paragraph (1) of Article 198, endorse the inspection date, the parts altered and the results of the inspection on the said lift for construction work inspection certificate.

(Return of Inspection Certificate)

Article 201 A person who has installed a Lift for Construction Work must, when having disused the said Lift for Construction Work, return the lift for construction work inspection certificate to the Chief of the Competent Labour Standards Inspection Office without any delay.

Chapter VII Light Capacity Lift

Section 1 Installation

(Report for Installation)

Article 202 The employer who intends to install a Light Capacity Lift must submit, in advance, the light capacity lift installation notification (Form No. 29) to the Chief of the Competent Labour Standards Inspection Office. However, this does not apply to the employer who has been given the Accreditation.

(Load Test)

Article 203 (1) The employer must, when having installed a Light Capacity Lift, perform the load test for the said Light Capacity Lift.
(2) The load test set forth in the preceding paragraph is to be done in such manners as performing motions with raising and lowering while carrying a load with the mass corresponding to 1.2 times of the Loading Capacity.

Section 2 Use and Operation

(Adjustment on Safety Device)

Article 204 The employer must adjust over-winding preventive devices and other safety devices of a Light Capacity Lift in order to ensure their reliable operation.

(Limitation on Overload)

Article 205 The employer must not use a Light Capacity Lift being loaded with the load over its Loading Capacity.

(Signals for Operation)

Article 206 (1) The employer must, when carrying out the work using a Light Capacity Lift, set the fixed signals for the operations of the Light Capacity Lift, and have workers engaged in the said work give the said signals.

(2) Workers engaged in the work set forth in the preceding paragraph must give the signals set forth in the same paragraph.

(Restriction on Riding)

Article 207 (1) The employer must not have workers ride on the cage of a Light Capacity Lift. However, this does not apply to the case of carrying out the work repairing, adjusting, checking, etc., for the said lift, and when taking measures, which is unlikely to cause dangers to workers engaged in the said work.

(2) Workers, excluding the case set forth in the proviso of the preceding paragraph, must not ride on a cage of a Light Capacity Lift.

Section 3 Periodical Self-inspections, etc.

(Periodical Self-inspections)

Article 208 (1) The employer must, after installation of a Light Capacity Lift, perform self-inspections for the Light Capacity Lift periodically once every period within a year. However, this does not apply to the non-use period of a Light Capacity Lift, which is not used for a period of exceeding one year.

(2) The employer must, as regards a Light Capacity Lift set forth in the proviso of the preceding paragraph, perform the self-inspection before resuming its use.

(3) The employer must perform the load test on the self-inspections set forth in the preceding two paragraphs.

(4) The load test set forth in the preceding paragraph is to be done in such manners as performing motions with raising and lowering under the Rated Speed, while carrying a load with the mass corresponding to the Loading Capacity.

Article 209 (1) The employer must perform self-inspections for a Light Capacity Lift, as to the following matters periodically once every period within a year. However, this does not apply to the non-use period of the Light Capacity Lift, which is not used for a period of exceeding one month:

- (i) abnormalities on over-winding preventive devices and other safety devices, brakes and controlling devices;
- (ii) damages on wire ropes;
- (iii) conditions of guide rails.

(2) The employer must, as regards a Light Capacity Lift set forth in the proviso of the preceding paragraph, perform the self inspection as to the matters listed in each item of the same paragraph, before resuming its use.

(Checkup before Commencing Work)

Article 210 The employer must, when carrying out the work using a Light Capacity Lift, check up as to the function of brakes before commencing the work for the day.

(Record of Self-inspection)

Article 211 The employer must record the results of the self-inspections prescribed in this Section and reserve these records for three years.

(Repair)

Article 212 The employer must, when any abnormality is found base on the self-inspection or check up prescribed in this Section, immediately repair.

Chapter VIII Sling Work

Section 1 Slinging Equipment

(Safety Coefficient of Wire Rope Sling)

Article 213 (1) The employer must not use a wire rope as the slinging equipment for a crane, a Mobile Crane or a derrick, unless its safety coefficient is 6 or more.

(2) The safety coefficient set forth in the preceding paragraph is the value obtained from dividing the breaking load of a wire rope by the value of the maximum load applied on the said wire rope.

(Safety Coefficient of Chain Sling)

Article 213-2 (1) The employer must not use a chain as the slinging equipment for a crane, a Mobile Crane or a derrick, unless its safety coefficient is more than the value listed in the following items, based on the types of chain slings.

- (i) a chain falling under all of the followings: 4:

- (a) in the case of pulling it with the force of the half of its breaking load, the elongation is 0.5 % or less; and
- (b) the value of the tensile strength is 400 N/mm² or more and its elongation is equal to or more than the value listed in the right column of the following table corresponding to the value of tensile strength listed in left column of the same table;

Tensile strength (N/mm ²)	Elongation (%)
400 or more and less than 630	20
630 or more and less than 1000	17
More than 1000	15

- (ii) a chain not falling under the preceding item: 5.
- (2) The safety coefficient set forth in the preceding paragraph is the value obtained from dividing the breaking load of a chain sling by the value of the maximum load applied on the said chain sling.

(Safety Coefficient of Hook, etc.)

Article 214 (1) The employer must not use a hook or a shackle as slinging equipment for a crane, a Mobile Crane or a derrick, unless the safety coefficient is 5 or more.

- (2) The safety coefficient set forth in the preceding paragraph is the value obtained from dividing the breaking load of the hook or the shackle by the value of the maximum load applied on the said hook or the said shackle.

(Prohibition of Use of Inadequate Wire Rope)

Article 215 The employer must not use a wire rope falling under any of the following each item for the slinging equipment for a crane, a Mobile Crane or a derrick:

- (i) a wire rope that 10% or more of element wires (excluding filler wires) are cut in one lay;
- (ii) a wire rope that the decrease in its diameter exceeds 7% of the nominal diameter;
- (iii) a kinked wire rope;
- (iv) a wire rope with remarkable deformation or corrosion.

(Prohibition of Use of Inadequate Lifting Chain)

Article 216 The employer must not use a lifting chain falling under any of the following each item for the slinging equipment for a crane, Mobile Crane or a derrick:

- (i) a lifting chain with the elongation of exceeding 5 % to the original length at the time of manufacturing the said lifting chain;

- (ii) a lifting chain that the decrease in its diameter on the cross section exceeds 10 % of the original diameter on the cross section of the said link at the time of manufacturing the said lifting chain;
- (iii) a lifting chain with cracked links.

(Prohibition of Use of Inadequate Hook, Shackle, etc.)

Article 217 The employer must not use the deformed or cracked metallic implements such as a hook, a shackle, a ring, etc., as slinging equipment for a crane, a Mobile Crane or a derrick.

(Prohibition of Use of Inadequate Fiber Rope, etc.)

Article 218 The employer must not use a fibre rope or a fibre belt falling under any of the following each item as the slinging equipment for a crane, a Mobile Crane or a derrick:

- (i) a fiber rope or a fiber belt with cut strands;
- (ii) a fiber rope or a fiber belt with remarkable damage or corrosion.

(Fitting of Rings, etc.)

Article 219 (1) The employer must not use a wire rope or a lifting chain excluding the endless ones as slinging equipment for a crane, a Mobile Crane or a derrick, unless those are fitted with hooks, shackles, rings or eyes at their both ends.

(2) The eyes set forth in the preceding paragraph are to be of the eye splice or ferrule secured eye, or the one made by the method preserving the strength equal to or more to them. In this case, the eye splice is to be made in the manner to weave all the strands into one another by three times or more, then to cut the half of element wires of each strand and weave again the remaining element wires into one another by two times or more (in case of weaving all strands by four times or more, one or more times).

(Limiting of Range of Use)

Article 219-2 (1) The employer must, when carrying out the sling work using slinging equipment with the magnet system or the vacuum system, a chain block or a chain lever hoist (hereinafter referred to as "slinging equipment" in this paragraph), make use of the said slinging equipment within its working load limit.

(2) The employer must, when carrying out the sling work using a lifting clamp, carry out the sling work corresponding to the purpose of use of the said lifting clamp, and make use of the said clamp within its working load limit.

(Checkup before Commencing Work)

- Article 220 (1) The employer must, when carrying out the sling work using a wire rope, lifting chain, fiber rope, fiber belt or metallic implement such as a hook, shackle and ring (hereinafter referred to as "wire ropes, etc.", in this Article) which are used as the slinging equipment for a crane, Mobile Crane or derrick, check up abnormalities on the said wire ropes, etc. before commencing the work for the day.
- (2) The employer must, when any abnormality is found based on the check up set forth in the preceding paragraph, immediately repair.

Section 2 Limitation on Placement

(Limitation on Placement)

- Article 221 The employer must, as regards the works listed in item (xvi) of Article 20 of the Order (excluding the sling work for a cargo lifting appliance with a limited load of 1 ton or more), place nobody in the said works other than those who fall under any of the following each item:
- (i) a person who has completed the skill training course for sling work;
 - (ii) a person who has completed the training (excluding the one conducted by correspondence) of slinger training course listed in the column of training courses of Appended Table 4 of the Ordinance on the Human Resources Development and Promotion Act (the Ordinance of the Ministry of Labour No. 24 of 1969), among the ability redevelopment training which is the statutory training of paragraph (1) of the Article 27 of the Human Resources Development and Promotion Act (Act No. 64 of 1969);
 - (iii) other person provided by the Minister of Health, Labour and Welfare.

(Special Education)

- Article 222 (1) The employer must, when placing a worker in the sling work for a crane, a Mobile Crane or a derrick with the Lifting Capacity of less than 1 ton, give the special education for the safety related to the said operation to the said worker.
- (2) The special education set forth in the preceding paragraph must be conducted on the following subjects:
- (i) knowledge on cranes, Mobile Cranes and derricks (hereinafter referred to as "cranes, etc.", in this Article);
 - (ii) knowledge on the dynamics necessary for sling works for cranes, etc.;
 - (iii) methods for sling works for cranes, etc.;
 - (iv) related legislation;
 - (v) sling work for cranes, etc.;
 - (vi) signals for operation of cranes, etc.
- (3) In addition to the matters prescribed in Article 37 and Article 38 of the Safety

and Health Ordinance and in the preceding two paragraphs, the Minister for Health, Labour and Welfare prescribes necessary matters related to the special education set forth in paragraph (1).

Chapter IX License and Practical Training

Section 1 Crane/Derrick Operator's License

(Crane/Derrick Operator's License)

Article 223 The crane/derrick operator's license is issued to any of the following person by the Director of the Prefectural Labour Bureau:

- (i) a person who has passed the license examination for crane/derrick operator;
- (ii) a person who passed the academic test of the license examination for crane/derrick operator, those completed the practical training course for crane operation within one year from the day when the said test was conducted;
- (iii) a person who obtained the crane/derrick operator's license limiting the type of machine eligible to operate to the crane that is operated by an operator who is on the floor and moves together with travelling motion of the said crane (excluding the Floor-operated Crane, hereinafter referred to as "Floor-driving Crane"), pursuant to the provisions of paragraph (1) of Article 224-4, those passed the subjects listed in item (i) and (iv) of paragraph (2) of Article 226 (limited to the part pertaining to derrick), of the academic test of the license examination for crane/derrick operator, and completed the practical training course for crane operation (excluding for the one using Floor-driving Crane) within one year from the day when the said test was conducted;
- (iv) a person who obtained the crane/derrick operator's license limiting the type of machine eligible to operate to the crane pursuant to the provisions of paragraph (2) of Article 224-4 and those passed subjects listed in item (i) and (iv) (limited to the part pertaining to derrick) of paragraph (2) of Article 226, of the academic test of the license examination for crane/derrick operator;
- (v) a person who has completed the training of the lifting and transporting machine operation-type crane operation course or the lifting and transporting machine operation-type stevedore course prescribed in the column of training courses of Appended Table 2 of the Ordinance on the Human Resources Development and Promotion Act, or the training (excluding the one conducted by correspondence) of the crane operation course or the stevedore course listed in the column of training courses of Appended Table 4 of the same Ordinance, among the basic training or the ability redeveloping training which are the statutory training of paragraph (1) of Article 27 of the Human Resources Development and Promotion Act,

and underwent the training pertaining to a crane;
(vi) other person provided by the Minister of Health, Labour and Welfare.

(Disqualification for License)

Article 224 A person prescribed by the Ordinance of the Ministry of Health, Labour and Welfare set forth in item (ii) of paragraph (2) of Article 72 of the Act pertaining to the crane/derrick operator's license, is those who are under eighteen years old.

(Person Prescribed by the Ordinance of the Ministry of Health, Labour and Welfare Set Forth in Paragraph (3) of Article 72 of the Act)

Article 224-2 A person prescribed by the Ordinance of the Ministry of Health, Labour and Welfare set forth in paragraph (3) of Article 72 of the Act pertaining to the crane/derrick operator's license, is those who are not able to properly operate the crane or derrick or to properly confirm the surrounding conditions of the crane or derrick necessary for carrying out the work pertaining to the said license, due to the physical or mental handicap.

(Consideration on Measures, etc. Making-up Disablement)

Article 224-3 The Director of the Prefectural Labour Bureau must, in the case finding that the person who has made the application of the crane/derrick operator's license falls under the one set forth in the preceding Article and when deciding whether or not to issuing the license to the said parson, take into consideration on compensating measures used by the said person, or conditions that the disablement is compensated or reduced by medical treatment which the said person is being given.

(Limited License)

Article 224-4 (1) The Director of the Prefectural Labour Bureau may, by limiting the type of machine eligible to operate to the Floor-driving Crane, issue the crane/derrick operator's license to the following persons:

- (i) a person who has passed the subject listed in item (i) of paragraph (2) of Article 226 (limited to the part pertaining to crane), item (ii) and (iii) of the same paragraph, and item (iv) of the same paragraph (limited to the part pertaining to crane) (hereinafter referred to as "successful candidate of limited crane academic test" in this Article), of the academic test of the license examination for crane/derrick operator, and passed the practical skill test using a Floor-driving Crane;
- (ii) a successful candidate of limited crane academic test who has completed the practical training course for crane operation using a Floor-driving Crane within a year from the day when the said test was conducted.

- (2) The Director of the Prefectural Labour Bureau may, by limiting the type of machine eligible to operate to the crane, issue the crane/derrick operator's license to the following persons:
- (i) a successful candidate of limited crane academic test who has passed the practical skill test of the license examination for crane/derrick operator;
 - (ii) a successful candidate of limited crane academic test who has completed the practical training course for crane operation within a year from the day when the said test was conducted;
 - (iii) a person who has obtained the crane/derrick operator's license limiting the type of machine eligible to operate to the Floor-driving Crane pursuant to the provisions of the preceding paragraph, and has passed the subject listed in item (i) of paragraph (3) of Article 226, of the practical skill test of the license examination for crane/derrick operator, or has completed the practical training course for crane operation;
 - (iv) other persons provided by the Minister of Health, Labour and Welfare.

Article 225 The Director of the Prefectural Labour Bureau may issue the crane/derrick operator's license to the physically or mentally handicapped person by limiting the type of machine eligible to operate or adding the necessary conditions on the operation.

(Subjects of Examination)

Article 226 (1) The license examination for crane/derrick operator is conducted on the academic test and the practical skill test.

(2) The academic test is conducted on the following subjects:

- (i) knowledge on cranes and derricks;
- (ii) knowledge on the prime movers and the electricity;
- (iii) knowledge on the dynamics necessary for operation of cranes;
- (iv) related legislation.

(3) The practical skill test is conducted on the following subjects:

- (i) operation of cranes;
- (ii) signals for operation of cranes.

(Exemption from Academic test, etc.)

Article 227 The Director of the Prefectural Labour Bureau may, as regards the person listed in the left column of the following table, within the range of the test or subjects listed respectively in the right column of the same table, exempt the whole or a part of the academic test or the practical skill test of the license examination for crane/derrick operator:

Person eligible to be exempt	Range of exempt tests or subjects
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<p>(i) A person who has completed the practical training course for crane operation (excluding the one conducted by using a Floor-driving Crane) and is within one year since the day of the completion.</p> <p>(ii) A person who has an experience engaged in the operation of a crane with Lifting Capacity of 5 tons or more (excluding a Floor-operated Crane and a Floor-driving Crane) for one month or more at a mine pursuant to the provisions of paragraph (2) and (4) of the Article 2 of the Mine Security Act (Act No. 70 of 1949, hereinafter referred to as "mine").</p>	<p>Whole of the practical skill test</p>
<p>i) A person who passed the academic test of the last license examination for crane/derrick conducted by the Director of the Prefectural Labour Bureau.</p> <p>(ii) A person who has passed the academic test of license examination for crane/derrick operator conducted by the designated examination agency (meaning the designated examination agency set forth in paragraph (1) of Article 75-2 of the Act, the same apply hereinafter.) and is within a year from the date when the said test was conducted.</p>	<p>Whole of the academic test</p>
<p>(i) A person who has completed the practical training course for crane operation using a Floor-driving Crane and is within a year since the day of the completion.</p> <p>(ii) A person who has the experience engaged in the operation of a Floor-driving Crane with the Lifting Capacity of 5 tons or more for one month or longer at a mine.</p>	<p>Of the practical skill test, the subject listed in item (i) of paragraph (3) of the preceding Article (limited to that conducted by using a Floor-driving Crane) and item (ii) of the same paragraph</p>

A person who has obtained the crane/derrick operator's license limiting the type of machine eligible to operate to the Floor-driving Crane pursuant to the provisions of paragraph (1) of Article 224-4	Of the academic test, the subject listed in item (i) of paragraph (2) of the preceding Article (limited to the part pertaining to a crane), item (ii) and (iii) of the same paragraph and item (iv) of the same paragraph (limited to the part pertaining to a crane), and of the practical skill test, the subject listed in item (ii) of paragraph (3) of the same Article
A person who has obtained the crane/derrick operator's license limiting the type of machine eligible to operate to the crane pursuant to the provisions of paragraph (2) of Article 224-4	Of the academic test, the subject listed in item (i) of paragraph (2) of the preceding Article (limited to the part pertaining to crane), item (ii) and (iii) of the same paragraph and item (iv) of the same paragraph (limited to the part pertaining to crane), and whole of the practical skill test
A person who has obtained the mobile crane operator's license or the ship lifting appliance operator's license	Of the academic test, the subject listed in item (iii) of paragraph (2) of the preceding Article, and of the practical skill test, the subject listed in item (ii) of paragraph (3) of the same Article
A person who has completed the skill training course for floor-operated crane operation, light capacity mobile crane operation or for sling work	Of the practical skill test, the subject listed in item (ii) of paragraph (3) of the preceding Article

(Details of License Examination for Crane/Derrick Operator)

Article 228 In addition to the matters prescribed in Article 71 of the Safety and Health Ordinance and in the preceding two Articles, the Minister of Health, Labour and Welfare prescribes necessary matters for implementing the license examination for crane/derrick operator.

Section 2 Mobile Crane Operator's License

(Mobile Crane Operator's License)

Article 229 Mobile crane operator's license is to be issued to any of the following person by the Director of the Prefectural Labour Bureau:

- (i) a person who has passed the license examination for mobile crane operator;
- (ii) a person who has passed the academic test of license examination for mobile crane operator and has completed the practical training course for mobile crane operation within one year from the day when the said test was conducted;

- (iii) a person who has completed the training of the lifting and transporting machine operation-type crane operation course or the lifting and transporting machine operation-type stevedore course prescribed in the column of training courses of Appended Table 2 of the Ordinance on the Human Resources Development and Promotion Act, or the training (excluding the one conducted by correspondence) of the crane operation course or the stevedore course listed in the column of training courses of the Appended Table 4 of the same Ordinance, among the basic training or the ability redeveloping training which are the statutory training of paragraph (1) of the Article 27 of the Human Resources Development and Promotion Act, and underwent the training pertaining to a Mobile Crane;
- (iv) deleted;
- (v) other person provided by the Minister of Health, Labour and Welfare.

(Disqualification for License)

Article 230 The person prescribed by the Ordinance of the Ministry of Health, Labour and Welfare set forth in item (ii) of paragraph (2) of Article 72 of the Act pertaining to the mobile crane operator's license is those who are under eighteen years old.

(Person Prescribed by the Ordinance of the Ministry of Health, Labour and Welfare Set Forth in Paragraph (3) of Article 72 of the Act)

Article 230-2 A person prescribed by the Ordinance of the Ministry of Health, Labour and Welfare set forth in paragraph (3) of Article 72 of the Act pertaining to the mobile crane operator's license is those who are not able to properly operate the Mobile Crane or to properly confirm the surrounding conditions of the Mobile Crane necessary for carrying out the work pertaining to the said license, due to the physical or mental handicap.

(Consideration on Measures, etc. Making-up Disablement)

Article 230-3 The Director of the Prefectural Labour Bureau must, in case finding that the person who has made the application of the mobile crane operator's license falls under the one prescribed in the preceding Article and when deciding whether or not to issuing the license to the said parson, take into consideration on compensating measures used by the said person, or conditions that the disablement is compensated or reduced by medical treatment which the said person is being given.

(Limited License)

Article 230-4 The Director of the Prefectural Labour Bureau may, to the physically or mentally handicapped person, issue the mobile crane operator's

license by limiting the type of Mobile Crane eligible to operate or adding the necessary conditions on the operation.

Article 231 Deleted

(Subjects of Examination)

Article 232 (1) The license examination for mobile crane operator is conducted with the academic test and the practical skill test.

(2) The academic test is conducted on the following subjects:

- (i) knowledge on Mobile Cranes;
- (ii) knowledge on the prime movers and the electricity;
- (iii) knowledge on the dynamics necessary for operation of Mobile Cranes;
- (iv) related legislation.

(3) The practical skill test is conducted on the following subjects:

- (i) operation of Mobile Cranes;
- (ii) signals for operation of Mobile Cranes.

(Exemption from Academic Test, etc.)

Article 233 The Director of the Prefectural Labour Bureau may, as regards the person listed in the left column of the following table, within the range of the test or subjects listed respectively in the right column of the same table, exempt the whole or a part of the academic test or the practical skill test of the license examination for mobile crane operator:

Person eligible to be exempt	Range of exempt tests or subjects
(i) A person who has completed the practical training course for mobile crane and is within one year since the day of the completion. (ii) A person who has the experience engaged in the operation of a Mobile Crane with the Lifting Capacity of 5 tons or more for one month or longer at a mine.	Whole of the practical skill test
(i) A person who has passed the academic test of the last license examination for mobile crane conducted by the Director of the Prefectural Labour Bureau.	Whole of the academic test

(ii) A person who has passed the academic test of the license examination for mobile crane conducted by the designated examination agency, and is within one year from the day when the said test was conducted.	
A person who has obtained the crane/derrick operator's license or the ship lifting appliance operator's license	Of the academic test, the subject listed in item (iii) of paragraph (2) of the preceding Article, and of the practical skill test, the subject listed in item (ii) of paragraph (3) of the same Article
A person who has completed the skill training course for floor-operated crane operation, light capacity mobile crane operation or sling work	Of the practical skill test, the subject listed in item (ii) of paragraph (3) of the preceding Article

(Details of License Examination for Mobile Crane Operator)

Article 234 In addition to the matters prescribed in Article 71 of the Safety and Health Ordinance and the in preceding two Articles, the Minister of Health, Labour and Welfare prescribes necessary matters for implementing the license examination for mobile crane operator.

Section 3 Deleted

Article 235 Deleted

Article 236 Deleted

Article 237 Deleted

Article 238 Deleted

Article 239 Deleted

Section 4 Practical Training

(Subjects of Practical Training Course for Crane Operation)

Article 240 Training subjects of the practical training course for crane operation are as follows:

- (i) basic operation for cranes;
- (ii) applied operation for cranes;
- (iii) basic requirement of signaling for crane operation.

(Subjects of Practical Training Course for Mobile Crane Operation)

Article 241 Training subjects of the practical training course for mobile crane operation are as follows:

- (i) basic operation for Mobile Cranes;
- (ii) applied operation for Mobile Cranes;
- (iii) basic requirement of signaling for Mobile Crane operation.

Article 242 Deleted

(Details of Practical Training)

Article 243 In addition to the matters prescribed in Article 75 and 76 of the Safety and Health Ordinance and Article 240 and 241, the Minister of Health, Labour and Welfare prescribes necessary matters for implementing the practical training course for crane operation and mobile crane operation.

Chapter X Skill Training Course for Floor-operated Crane Operation, Light Capacity Mobile Crane Operation and Sling Work

(Training Subjects of Skill Training Course for Floor-operated Crane Operation)

Article 244 (1) Skill training course for floor-operated crane operation is conducted by the theoretical training and the practical skill training.

(2) The theoretical training is conducted on the following subjects:

- (i) knowledge on Floor-operated Cranes;
- (ii) knowledge on prime movers and the electric;
- (iii) knowledge on the dynamics necessary for operation of Floor-operated Crane;
- (iv) related legislation.

(3) The practical skill training is conducted on the following subjects:

- (i) operation of Floor-operated Cranes;
- (ii) signals for operation of Floor-operated Cranes.

(Training Subjects of Skill Training Course for Light Capacity Mobile Crane Operation)

Article 245 (1) Skill training course for light capacity mobile crane operation is conducted by the theoretical training and the practical skill training.

(2) The theoretical training is conducted on the following subjects:

- (i) knowledge on Light Capacity Mobile Cranes;
- (ii) knowledge on prime movers and the electric;
- (iii) knowledge on the dynamics necessary for operation of Light Capacity

Mobile Crane;

(iv) related legislation.

(3) The practical skill training course is conducted on the following subjects:

(i) operation of Light Capacity Mobile Crane;

(ii) signals for operation of Light Capacity Mobile Crane.

(Training Subjects of Skill Training Course for Sling Work)

Article 246 (1) The skill training course for sling work is conducted by the theoretical training and the practical skill training.

(2) The theoretical training is conducted on the following subjects:

(i) knowledge on cranes, Mobile Cranes, derricks and ship-lifting appliance (hereinafter referred to as "cranes, etc.", in this Article);

(ii) knowledge on the dynamics necessary for sling work for cranes, etc.;

(iii) method of sling work for cranes, etc.;

(iv) related legislation.

(3) The practical skill training is conducted on the following subjects:

(i) sling work for cranes, etc.;

(ii) signals for operation of cranes, etc.

(Details of Skill Training Course)

Article 247 In addition to the matters prescribed in Article 80 to Article 82-2 of the Safety and Health Ordinance and in this Chapter, the Minister of Health, Labour and Welfare prescribes necessary matters for implementing the skill training course for floor-operated crane operation, light capacity mobile crane operation and sling work.

Appended Table

Type of crane, mobile crane, derrick, elevator and lift for construction work			Structural parts
Crane	Overhead travelling crane	Slewing man trolley type	Crane girder and jib
		Shuttle girder type	Crane girder and shuttle girder
		Overhead travelling crane other than with slewing man trolley type and shuttle girder type	Crane girder
	Jib crane	Hammer head crane or tower crane	Jib, tower and jib
		Pillar crane	Pillar and jib
		Low pedestal jib crane or wall crane	Jib

		High pedestal jib crane, semi portal crane or level luffing crane	Jib, frame work and leg
Bridge crane		Jib crane type, level luffing crane type or slewing man trolley type	Crane girder, cantilever, leg and jib
		Jib crane other than jib crane type, level luffing crane type and slewing man trolley type	Crane girder, cantilever and leg
Unloader		Slewing man trolley type or level luffing crane type	Crane girder, cantilever, leg and jib
		Unloader other than Slewing man trolley type and level luffing crane type	Crane girder, cantilever and leg
	Cable crane		Main rope, rail rope, tower, pillar and stay
	Telpher		Travelling beam
Mobile crane	Truck crane, wheel crane, crawler crane or railway crane		Jib or tower
	Floating crane		Jib, frame work, leg or girder
	Mobile crane other than Truck crane, wheel crane, crawler crane and railway crane		Girder, leg or jib
Derrick	Guy derrick		Mast, boom and guy rope
	Stiff leg derrick		Mast, boom and leg
	Derrick other than guy derrick and stiff leg derrick		Mast boom and stay
Elevator	Elevator for civil engineering work, building construction work, etc		Hoist way tower and stay
	Elevator other than for civil engineering work, building construction work, etc.		Cage
Lift for construction work	Tower lift		Hoist way tower, stay and cage
	Lift for construction work other than tower lift		Guide rail, stay and cage