

On approval of the Instruction for the operation of military property of the Armed Forces of the Republic of Kazakhstan (hoisting mechanisms, boilers and pressure vessels)

Invalidated Unofficial translation

Order of the Minister of Defense of the Republic of Kazakhstan No. 55as of January 28, 2019. Registered with the Ministry of Justice of the Republic of Kazakhstan on January 31, 2019, No. 18256. Abolished by Order of the Minister of Defense of the Republic of Kazakhstan dated October 14, 2022 No. 916

Unofficial translation

Footnote. Abolished by Order of the Minister of Defense of the Republic of Kazakhstan dated October 14, 2022 No. 916 (effective after ten calendar days after the date of its first official publication).

In accordance with subparagraph 19-62) of paragraph 21 of the Regulation on the Ministry of Defense of the Republic of Kazakhstan approved by Decree of the Government of the Republic of Kazakhstan No. 1074 as of August 16, 2001, I hereby **ORDER:**

1. To approve the appended Instruction for the operation of military property of the Armed Forces of the Republic of Kazakhstan (hoisting mechanisms, boilers and pressure vessels).

2. In accordance with the procedure established by the legislation of the Republic of Kazakhstan, the Center for Metrological Support and Standardization of the Ministry of Defense of the Republic of Kazakhstan shall:

1) ensure state registration of this order with the Ministry of Justice of the Republic of Kazakhstan;

2) within ten calendar days of the state registration of this order, send its copy in Kazakh and Russian to the Republican State Enterprise with the Right of Economic Management “Republican Center of Legal Information” of the Ministry of Justice of the Republic of Kazakhstan for its official publication and inclusion into the Reference Control Bank of Regulatory Legal Acts of the Republic of Kazakhstan;

3) place this order on the website of the Ministry of Defense of the Republic of Kazakhstan after its first official publication;

4) within ten working days of the state registration of this order, submit information on the implementation of measures, provided for in subparagraphs 1), 2),

and 3) of this paragraph, to the Legal Department of the Ministry of Defense of the Republic of Kazakhstan.

3. The control over the execution of this order shall be assigned to the vice-minister of defense of the Republic of Kazakhstan, Major General M.M.Altynbaev.

4. This order shall be brought to the notice of officials to the extent it is applicable to them.

5. This order shall take effect ten calendar days after its first official publication.

*Minister of Defense of
the Republic of Kazakhstan*

N.Yermekbayev

Approved by
Order № 55 of the Minister
of Defense of the
Republic of Kazakhstan
as of January 28, 2019

Instruction for the operation of military property of the Armed Forces of the Republic of Kazakhstan (hoisting mechanisms, boilers and pressure vessels)

Chapter 1. General provisions

1. This Instruction for the operation of military property of the Armed Forces of the Republic of Kazakhstan (hoisting mechanisms, boilers and pressure vessels) (hereinafter referred to as the Instruction) specifies the organization of operation of hoisting mechanisms, boilers and pressure vessels.

2. The basic concepts used in this Instruction are as follows:

1) certification of legal entities for the right to operate in the field of industrial safety - official recognition by the authorized body for industrial safety of the legal entity's eligibility for performing works in the field of industrial safety;

2) authorized body for industrial safety - the central executive body exercising the leadership and intersectoral coordination, development and implementation of the state policy in the field of industrial safety;

3) industrial safety requirements - special technical and social conditions established by the legislation of the Republic of Kazakhstan in order to ensure industrial safety.

3. The commanders of military units shall keep hoisting mechanisms, boilers and pressure vessels in good working order and ensure safe operating conditions through the organization of proper technical examination, inspection, repair and maintenance. For these purposes, in accordance with the requirements of Article 40 of the Law of the Republic of Kazakhstan as of April 11, 2014 "On Civil Protection", it is necessary to conduct industrial control in the field of industrial safety of the operation of hazardous technical devices.

4. Organization of production control for safe operation of lifting mechanisms, boilers and pressure vessels is assigned to the Boiler Inspection and Lifting Mechanisms Department of the Center for Metrological Support and Standardization of the Ministry of Defense of the Republic of Kazakhstan (hereinafter - the Boiler Inspection Department).

Footnote. Paragraph 4 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

5. Hazardous technical devices include;

1) technical devices operating under a pressure greater than 0.07 MPa or at a water heating temperature greater than 115 degrees Celsius, except for heat networks;

2) hoisting mechanisms, escalators, cable cars, funiculars, elevators;

3) steam and hot water boilers operating at a pressure greater than 0.07 MPa and (or) at a water heating temperature greater than 115 degrees Celsius, vessels operating at a pressure greater than 0.07 MPa, hoisting mechanisms, escalators, cable cars, funiculars, elevators of objects of the housing and public utility sector.

Chapter 2. Organization of the production control over the operation of hazardous technical devices

6. In military units and institutions of the Armed Forces of the Republic of Kazakhstan (hereinafter referred to as military units), production control in the field of industrial safety of the operation of hazardous technical devices is conducted on the basis of the order of the commander of a military unit and this Instruction.

7. The order on the production control in the field of industrial safety over the operation of hazardous technical devices of a military unit specifies:

1) trained and certified personnel for the maintenance and operation of hazardous technical devices (hereinafter referred to as maintenance personnel);

2) an official supervising the technical condition and operation of hazardous technical devices of a military unit (hereinafter referred to as the supervising person);

3) persons responsible for the working order and safe operation of hazardous technical devices appointed from among the engineering staff, with entries in the passports of each device indicating the number and date of the order of the appointment and signatures of the appointed persons (hereinafter referred to as the person responsible for operation);

4) persons responsible for the safe performance of the movement of cargo by cranes (hoisting mechanisms) (hereinafter referred to as work managers);

5) a permanent commission chaired by the deputy commander (chief engineer) of a military unit regularly checking the knowledge of industrial safety requirements and guidelines;

6) the timing of preventive examinations, repairs and tests, which ensure the working order of hazardous technical devices;

7) the training and regular check of the maintenance personnel's knowledge of industrial safety requirements;

8) those responsible for the development and implementation of the schedule for maintenance and inspection of hazardous technical devices;

9) the timing required to prepare and conduct technical examination by the types of hazardous technical devices, the necessary premises (sites), materials, equipment and devices;

10) measures for the prevention of accidents and incidents during the operation of hazardous technical devices.

8. For the purposes of good-quality organization of production control over the operation of hazardous technical devices, the planning of maintenance and examination of hazardous technical devices, military units annually develop schedules for the maintenance and examination of hazardous technical devices, which prescribe:

1) expert appraisal of industrial safety of hazardous technical devices of a military unit;

2) internal inspection and hydraulic test of a high-pressure boiler under its working pressure - after each cleaning of the inner heating surfaces or boiler elements;

3) maintenance and repair of the boiler and auxiliary equipment - within the time frames set by the manufacturer, at least once a year;

4) regular inspection of the boiler in working condition - once a month;

5) initial and regular technical examination of the boiler (internal inspection after the installation and in the future - once every four years);

6) hydraulic test of the boiler under test pressure after installation and in the future - once every eight years;

7) regular inspection of pressure vessels in working condition - once every two months;

8) internal inspection of vessels operating in non-corrosive environment - at least once every two years, and in environment that causes metal corrosion - at least once a year;

9) initial and regular technical examination of pressure vessels (internal inspection before commissioning and in the future - once every four years, hydraulic test with test pressure before commissioning and in the future - once every eight years);

10) maintenance and repair of vessels - at least once a year;

11) regular inspection of the technical condition, storage, filling, transportation, examination and operation of high-pressure cylinders - at least once every two months;

12) examination of cylinders at test points - within the time frames specified in the cylinders' passports, in any case at least within the time frames specified in Order of

the Minister of Investment and Development of the Republic of Kazakhstan No. 358 as of December 30, 2014 “On approval of the Rules for ensuring industrial safety when operating pressure equipment” (registered in the State Registration Register of Regulatory Legal Acts under No. 10303) (hereinafter referred to as the Rules for ensuring industrial safety when operating pressure equipment);

13) full technical examination - during installation and reconstruction of the elevator, before its commissioning;

14) regular technical examination of elevators and hoisting devices - at least once a year;

15) partial technical examination of elevators and hoisting devices - after the replacement of newly installed and repaired elements;

16) checking the operation of the protective and locking devices of elevators and hoisting devices - once every six months;

17) regular inspection of hoisting machines - once a month;

18) partial examination of hoisting machines - once a year;

19) full technical examination of hoisting machines - once every three years;

20) maintenance of hoisting mechanisms - within the time frames stipulated by the manufacturer’s instruction and Order of the Minister of Investment and Development of the Republic of Kazakhstan No. 359 as of December 30, 2014 “On approval of the Industrial Safety Rules when operating hoisting mechanisms” (registered in the State Registration Register of Regulatory Legal Acts under No. 10332) (hereinafter referred to as the Rules for ensuring industrial safety when operating hoisting mechanisms);

21) measurement of insulation resistance of electrical equipment, electrical wiring, ground resistance - once a year for bridge and travelling cranes, overhead cranes, electric hoists;

22) external inspection, repair of fittings and metal structures of steam and hot water pipelines - at least once a year;

23) technical examination of steam and hot water pipelines - at least once every three years;

24) external inspection and hydraulic test of steam and hot water pipelines - before commissioning after installation, repair using welding, after their preservation for more than two years;

25) checking of the observance of technical conditions (technological and technical capabilities of a workshop, test point) for the maintenance (repair) of hazardous technical devices - at least once every two months. The list of equipment, tools, devices and documents of the cylinder test point is given in Appendix 1 to this Instruction;

26) checking of instrumentation in the laboratory of measurement technique - at least once a year;

27) external inspection, checking the operation, maintenance of pressure chambers - at least once a year;

28) technical examination of pressure chambers - at least once every two years.

9. Military units annually, by November 30, analyze and send reports on the maintenance and operation of hazardous technical devices to the boiler inspection department in the form, in accordance with Appendix 2 to this Instruction.

Footnote. Paragraph 9 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

Chapter 3. Organization of operation of hoisting mechanisms, boilers and pressure vessels

10. To organize the safe operation of hoisting mechanisms, boilers and pressure vessels classified as hazardous technical devices, officials and personnel operating hazardous technical devices are admitted to such works only after training and obtaining uniform certificates in accordance with the form in Appendix 2 to Order No. 1100 of the Minister of Investment and Development of the Republic of Kazakhstan as of November 25, 2015 “On approval of the Rules for passing exams by heads of legal entities declaring industrial safety, as well as by members of permanent examination commissions of these legal entities” (registered in the State Registration Register of Regulatory Legal Acts under No. 12479).

11. Specialists involved in works with hazardous technical devices are trained and their knowledge is checked at educational institutions certified for the training, retraining of specialists, employees in the field of industrial safety.

12. In accordance with the requirements of Article 73 of the Law of the Republic of Kazakhstan as of April 11, 2014 “On Civil Protection”, hazardous technical devices are subject to expert appraisal of industrial safety.

13. When operating high-pressure boilers in stationary boiler rooms, it is necessary:

1) to develop parameter tables indicating the frequency of blowing, norms and quality of feed water, the timing of boilers’ shutdown for cleaning and washing, with account of recommendations of the manufacturer (specialized organizations);

2) to appoint chiefs and shift engineers (officials with appropriate qualifications);

3) to develop and approve the technology regulations for persons supervising the working order and safe operation of high-pressure boilers of stationary boiler rooms in accordance with the requirements of the Rules for the operation of pressure equipment, approved by Order No. 358 of the Minister of Investment and Development of the Republic of Kazakhstan as of December 30, 2014.

14. When operating hoisting mechanisms and elevators, it is necessary:

1) to provide hoisting mechanisms with serviceable auxiliary load-gripping mechanisms and devices;

2) to equip sites for inspection and technical examination of hoisting mechanisms with test loads in accordance with Appendix 3 to this Instruction (it is allowed to have one site equipped per one garrison);

3) to check and test tools protecting against electric shock (rubber mats, non-conductive gloves, circuit breakers protecting against electric shock).

15. When operating pressure vessels, it is necessary:

1) to ensure the maintenance of vessels in working order and safe conditions for their storage;

2) to ensure high-quality and timely maintenance and technical examination;

3) to develop and approve the technology regulations for persons supervising the working order and safe operation of vessels in accordance with the requirements of the Rules for ensuring industrial safety when operating pressure equipment.

16. In the event of a threat to the life and health of people, malfunctions, or the emergency state of hoisting mechanisms, boilers and pressure vessels, as well as cases provided for in Appendix 4 to this Instruction, military unit officials immediately stop the operation of hazardous technical devices.

Chapter 4. Recording of hoisting mechanisms, boilers and pressure vessels, obtaining the permission to start operation

17. Recording, obtaining the permission to start the operation of hoisting mechanisms, boilers and pressure vessels are carried out in accordance with the requirements of the Law of the Republic of Kazakhstan as of April 11, 2014 “On Civil Protection”.

18. Lifting mechanisms, boilers and pressure vessels are subject to registration in military units in accordance with Appendix 5 to this Instruction.

Footnote. Paragraph 18 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

19. A military unit sends information about hazardous technical devices to the boiler inspection department to monitor their safe operation in the form, in accordance with Appendix 6 to this Instruction.

Footnote. Paragraph 19 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated September 11, 2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

20. After the registration (registration) of lifting mechanisms, boilers and pressure vessels, the following information is indicated in the passport (form):

1) account (registration) number;

2) results of technical examination.

Footnote. Paragraph 20 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

21. Excluded by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

Chapter 5. Organization of technical examination of hazardous technical devices

22. In accordance with the requirements of the manufacturer's operating instructions, and also in accordance with the requirements of the Rules for ensuring industrial safety when operating hoisting mechanisms, the Rules for ensuring industrial safety when operating pressure equipment, Order No. 360 of the Minister of Investment and Development of the Republic of Kazakhstan as of December, 30, 2014 "On approval of the Rules for ensuring industrial safety when operating compressor stations" (registered in the State Registration Register of Regulatory Legal Acts under No. 10251) (hereinafter referred to as the Rules for ensuring industrial safety when operating compressor stations), each hoisting mechanism, boiler and pressure vessel is subject to technical examination:

- 1) before commissioning – initial examination;
- 2) during operation - regular examination;
- 3) after repair - extraordinary (premature) examination.

23. Hazardous technical devices kept as emergency stores at arsenals, bases and warehouses are not subjected to regular technical examination during their storage, unless there are additional requirements in the manufacturer's operating instructions.

24. The technical examination of a hazardous technical device shall confirm:

- 1) the compliance of a hazardous technical device with its passport data;
- 2) the serviceability of a hazardous technical device ensuring its safe operation;
- 3) the compliance of the organization of safe operation of a hazardous technical device with industrial safety requirements.

25. If there is no procedure for technical examination of a hazardous technical device in the manufacturer's operating instructions, the technical examination is carried out in accordance with the requirements of the Rules for ensuring industrial safety when operating hoisting mechanisms, the Rules for ensuring industrial safety when operating pressure equipment and the Rules for ensuring industrial safety when operating compressor stations.

26. Technical examination before commissioning, regular and extraordinary technical examinations of a hazardous technical device are carried out in accordance with the requirements of the Rules for ensuring industrial safety when operating hoisting mechanisms, the Rules for ensuring industrial safety when operating pressure

equipment and the Rules for ensuring industrial safety when operating compressor stations.

27. Technical examination of cylinders, vessels is carried out at the point of testing cylinders, vessels, in accordance with the requirements of the Rules for ensuring industrial safety when operating pressure equipment and the Rules for ensuring industrial safety when operating compressor stations. The results of the technical examination of cylinders, vessels are recorded in the cylinder test log in accordance with the form in Appendix 7 to this Instruction.

28. It is not allowed to operate a hazardous technical device at the time of its technical examination prescribed by its passport. All cases of the decommissioning of a hazardous technical device, including the expiration of the established service life, the deadline for technical examination, repair, deregistration, storage are carried out by order of the military unit commander.

29. A hazardous technical device is considered prepared for technical examination if:

- 1) there are no critical defects or damages affecting its safe operation;
- 2) technical examination means are available and in good working order;
- 3) necessary consumables have been prepared;
- 4) there are documents confirming the presence of certified personnel (numbers of sections, crews) servicing hazardous technical devices.

30. A person responsible for operation shall be present at technical examination of a hazardous technical device.

31. The technical examination works are managed by an official for whom a hazardous technical device is reserved. The work manager arranges for maintenance personnel to carry out technology operations in accordance with the requirements of the Rules for ensuring industrial safety when operating hoisting mechanisms, the Rules for ensuring industrial safety when operating pressure equipment, the Rules for ensuring industrial safety when operating compressor stations and to observe safety measures during the technical examination of hazardous technical devices.

32. If during the technical examination of a hazardous technical device, defects beyond the rejection rate or violations of industrial safety requirements are detected, the supervisor reports to the military unit commander of suspension of the operation of the hazardous technical device.

33. It is advisable to combine the technical examination of a hazardous technical device with the scheduled maintenance and repair of weapons and military equipment (hereinafter referred to as the WME). The need for technical examination of a hazardous technical device is planned in long-term, annual and monthly plans for the WME operation with account of training plans.

34. The technical examination materials are attached to the passport (form) of a hazardous technical device. If a hazardous technical device arrived at a military unit after repair with a full technical examination, then before putting the hazardous technical device into operation, a technical examination specialist checks the hazardous technical device in terms of the functioning of the mechanisms, equipment and safety devices and enters the control check results in the passport of a hazardous technical device.

35. Hazardous technical devices kept as emergency stores at arsenals, bases, and warehouses are subject to extraordinary technical examination prior to commissioning.

36. The results of technical examination of a hazardous technical device, the possibility of its further operation with permitted technical characteristics and operating parameters, the timing of the next technical examination, identified defects and violations of technical requirements are entered in the passport (form) of a hazardous technical device by the specialist who conducted the technical examination.

37. Extension of the service life of hazardous technical devices that have served the designated deadlines is carried out by a certified organization that has the right to engage in this type of activity in the manner prescribed by the Rules for ensuring industrial safety in the operation of lifting mechanisms, the Rules for ensuring industrial safety in the operation of equipment operating under pressure and the Rules for ensuring industrial safety during the operation of compressor stations.

Footnote. Paragraph 37 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

38. Based on the results of technical examination of hazardous technical devices, an official for supervision of a military unit makes an entry in the register of examinations and inspections of hazardous technical devices in the form in accordance with Appendix 8 to this Instruction and sends a report to the boiler inspection department in accordance with paragraph 9 of this Instruction.

Footnote. Paragraph 38 - as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

Appendix 1
to the Instruction for the operation
of military property of the Armed
Forces of the
Republic of Kazakhstan
(hoisting mechanisms, boilers and
pressure vessels)

The list of equipment, tools, devices and documents of the cylinder test point

Item №	Name	Quantity (pcs)	Note
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1	Hydraulic press (pump)	1-2	
2	Metal fencing of the cylinder test site at least 2 m high	1	Made of sheet steel at least 2 mm thick
3	Tool and accessories cabinet	1	
4	Water tank (metal bath) with air feed for pneumatic testing (only for leak testing by immersion in a water tank)	1	
5	Machine (stand) for turning valves out	1	
6	Machine (stand) or device for cleaning the inner surface of cylinders	1	
7	Fitter's bench	1	
8	Racks for (to be) tested cylinders (or places equipped with devices that prevent the falling of vertically stored cylinders)	1	
9	150 kg scales with weighing accuracy up to 100 g	1	
10	Tools (devices) for moving cylinders during their examination (trolleys, grips, slings)	By the number of simultaneously tested cylinders	
11	12 V portable lamp for internal inspection of cylinders	1	
12	Air hoses (metal tubes) and adapters for connecting tested cylinders to a hydraulic press	1 set	
13	Rubber hoses with tips for flushing and filling cylinders with water	1	
14	Set of fitter's tools (wrenches and gas wrenches, hammer, chisel, cross-cut chisel)	1 set	
15	1500 mm long ruler	1	
	Set of brands: 1) a 12 mm-diameter round one with the assigned code		

1	Steam boilers							
2	Vessels							
3	Hoisting machines							
4	Elevators							
5	Cylinders							
6	Stations (points) for filling and testing cylinders							
	Total							

The officer responsible for the supervision of the safe operation of hazardous technical devices of military unit 00000: _____

(military rank surname and initials signature)
Weapons (logistics) officer of military unit 00000

(military rank surname and initials signature)

Note:

1. Each column of the report, except for the lines “Cylinders” and “Stations (points) for filling and testing cylinders”, shall be filled in as a fraction, where the numerator indicates the objects registered in the boiler supervision department, and the denominator indicates unregistered objects (subject to registration in the military unit).

2. The report is submitted together with a brief explanatory note drawn up in any form.

3. The report does not cover works carried out by the boiler supervision department

Appendix 3
to the Instruction for the operation
of military property of the Armed
Forces of the Republic of
Kazakhstan (hoisting mechanisms,
boilers and pressure vessels)

Technical characteristics of the site for technical examination of self-propelled hoisting cranes (except for bridge, travelling and tower ones)

1. The requirements for equipping a site for technical examination of self-propelled hoisting cranes are as follows:

1) the size of the site must allow for free entry and exit of equipment;

2) the surface of the site must be hard (concrete, asphalt, stone-gravel), the slope - less than 30;

3) the presence of drains for rain and melt water;

4) the perimeter fence preventing possible entry of various vehicles in the site when no crane examination works are performed on the site.

2. The site shall be equipped with:

1) a set of loads for static and dynamic testing of cranes for the testing of all autocranes available in the military unit.

It is required to have the following set of loads: 25 kg - 1 pc.; 50 kg - 1 pc.; 100 kg - 1 pc.; 250 kg - 1 pc.; 500 kg - 1 pc.; 750 kg - 1 pc.; 1000 kg - 1 pc.; 2500 kg - 2 pcs.; 5000 kg - 2 pcs.; 10000 kg - 1 pc. Loads must have devices enabling their lifting by slinging;

2) a frame for load consolidating, restraining and hanging on a hook of a hoisting machine using a standard four-leg sling;

3) a set of gaskets for crane outriggers;

4) four- and two-leg slings – 2 pcs.;

5) metal shields with safety instructions, the procedure for static and dynamic testing, checking brakes and safety devices, load sling schemes, hand signals, rope rejection standards.

Appendix 4
to the Instruction for the operation
of military property of the Armed
Forces of the Republic of
Kazakhstan (hoisting mechanisms,
boilers and pressure vessels)

The list of malfunctions and cases when hoisting mechanisms, boilers and pressure vessels are not admitted to work and must be stopped

1. With regard to hoisting machines:

1) a hoisting machine is not registered with the territorial division of the authorized body for industrial safety and the boiler supervision department;

2) the required technical documentation is missing;

3) a hoisting machine is operated by non-certified crane operators, slingsmen, and there are also no persons responsible for the safe operation or managers of works on safe movement of loads;

4) multiple malfunctions indicating the lack of supervision of the technical condition of a hoisting machine;

5) a strand of a boom or load rope is torn off, there are local damages, corrosion or wire breaks exceeding the value specified in the “standards for rejecting steel ropes” of

the Rules for ensuring industrial safety when operating hoisting mechanisms approved by Order No. 359 of the Minister of Investment and Development of the Republic of Kazakhstan as of December 30 2014;

6) brake parts of boom lifters, hoisting mechanisms, and steering drives are damaged, oil enters the brake pulleys;

7) cracks, deformations and breakages in metal structures and crane mechanisms were detected;

8) hoisting mechanisms, boom lifters and load-limiting devices are either absent or defective;

9) additional supports are either damaged or incomplete, rail grips of tower and railway cranes and stabilizers of autocranes are either damaged or missing;

10) safety devices and signal equipment are either absent or malfunctioning;

11) places of crane works are insufficiently illuminated, in case of heavy snowfall or fog, and when the driver does not distinguish well the slingsman's signals or moving load;

12) removable load-gripping devices (pull ropes, chains, traverses, slings, containers) are faulty and have no plate marks;

13) signalmen are absent (they are needed when the service area is not completely overlooked from the cab and at the same time there is no communication between the driver and the slingsman or hookman);

14) jib cranes have incomplete counterweight or ballast;

15) mechanisms and bare live parts of electrical equipment are not fenced;

16) cotter pins are absent in the boom suspension elements (links, tractions), the number of clamps at the points of rope attachment or attachment loosening is insufficient;

17) there are cracks and hairlines in the throat and the outer part of the shank, and the locking device on the hook is out of order;

18) a thunderstorm is approaching, a strong wind is beginning, the speed of which exceeds the permissible one for the crane's operation; in this case, it is necessary to follow the manufacturer's instructions for preventing the crane's being driven away by the wind;

19) overcurrent or thermal protection is often triggered, and fuse fillers burn out;

20) the deadline has expired for checking the insulation resistance of electrical wiring, the windings of electric motors and the ground resistance of metal parts of electrical equipment, which normally are not located, but may be exposed to electric current;

21) load pulley block ropes are twisted;

22) when the crane turns, the counterweight can touch the protruding parts of a building, forests and other structures;

23) the crane way slumps.

The crane is not admitted to work or its operation is suspended in the presence of other conditions or malfunctions that do not ensure the safe operation of the crane (insufficient dimensions, non-compliance with the norms of a crane working near power lines, slopes and ditches, requirements of the rules for the order of movement of hazardous loads).

2. With regard to pressure vessels:

1) the pressure rises above the permitted one, despite the observance of all the requirements specified in the maintenance instruction;

2) safety valves are malfunctioning, unacceptable corrosion and holes are found on the surfaces of vessels;

3) leaks appeared in riveted joints and breaks - in gaskets;

4) orders to eliminate deficiencies and malfunctions have not been fulfilled;

5) defective pressure gauges have been installed;

6) insufficient number of fasteners for covers and hatches or they are defective;

7) a pressure vessel is threatened by a fire;

8) there is no trained and certified maintenance personnel;

9) cracks, tears, unacceptable corrosion, bulges, buckles and holes, as well as defects in welds were found on the surfaces of the vessel.

3. With regard to tanks and barrels:

1) the deadline for a scheduled or regular examination has expired;

2) the case or bottom is damaged (cracks, noticeable change in shape, severe corrosion, wormholes);

3) a tank has no passport or tanks and barrels have no required brands and inscriptions;

4) required fittings are either missing or faulty, the airtightness is broken;

5) color is improper;

6) tanks and barrels are filled with the gas for which they are not intended, or tanks and barrels are contaminated with foreign objects or substances;

7) the running gear of the tank is faulty;

8) a gas leak was detected while filling the tank or barrel;

9) there is no trained and certified maintenance personnel.

4. With regard to cylinders with compressed, liquefied and dissolved gases:

1) the deadline for regular examination has expired;

2) brands are either made on the cylindrical part of the cylinder or are missing;

3) cylinders are served by persons not appointed by order of the unit commander;

4) valves are faulty;

5) the case is damaged: there are cracks, scabs, holes, hollows, bulges, the cylindrical part of the cylinder is curved, there are shells and risks with a depth of more

than 10% of the nominal wall thickness of the cylinder, tears and jaggings in the neck thread;

- 6) shoes are either damaged, or obliquely or weakly fitted;
- 7) the hoop on the neck of the cylinder is loosely mounted;
- 8) color and inscriptions do not meet the requirements of boiler supervision rules.

5. With regard to elevators:

- 1) the deadline for scheduled technical examination has expired;
- 2) the shaft guard is damaged;
- 3) door locks of the shaft are either missing or faulty, as well as the contacts of the doors of the shaft and the cabin, limit switches, underground contacts, contacts for loosening ropes and other safety interlock devices;
- 4) in the cabin door shaft, there are lugs and pockets, the dimensions of which do not comply with the rules;
- 5) there are no brackets in the lower part of the doors of the shaft of passenger elevators with a moving floor of the cabin;
- 6) the signal lamp burned out;
- 7) light and sound alarms are faulty;
- 8) the insulation resistance of the wiring and equipment is lowered;
- 9) there are cases of spontaneous movement of the cabin;
- 10) there are no trained and certified electricians and elevator operators;
- 11) the worn-out state of ropes exceeds the established norms;
- 12) the cabin does not automatically stop at the required floor;
- 13) the cabin is set in motion when the elevator is started with the shaft doors open, and if there are people in the cabin - with the cabin doors open;
- 14) the elevator failed to pass static and dynamic tests;
- 15) the machine room, shaft and cabin are not illuminated, as well as a site in front of the shaft doors;
- 16) there is no trained and certified maintenance personnel necessary for supervision and maintenance;
- 17) the signal lamp of elevators with a moving floor goes out when there are passengers in the cabin, and also when all passengers leave the cabin with the shaft door open;
- 18) the shaft door opens from the outside in the absence of a cabin on this floor;
- 19) the electrical insulation of the wiring or electrical equipment of the elevators is found to be in poor condition ("shock") when touching the metal parts of the elevator, the smell of burning insulation is felt;
- 20) the STOP button is faulty;;

21) other elevator malfunctions were noticed (unusual noise, knocking, creaking, jerking or jumping during the movement of the cabin, rope breakage, counterweight stepping out of the guides, inaccuracy of the cabin stopping at the floor areas).

6. With regard to boilers:

1) the deadline for the next regular technical examination has expired, and there is no trained and certified personnel;

2) there are ruptures in boiling and wall tubes;

3) all boiler-feed systems are malfunctioning or broken down;

4) both water-gauge glasses are defective or out of order;

5) at least one safety valve is found to be malfunctioning or broken down;

6) the steam line or fittings on it are damaged;

7) the pressure gauge is faulty and there is no possibility to replace it;

8) water is lost from the boiler;

9) despite the increased feeding of the boiler, the water level drops rapidly;

10) the water level has risen above the upper visible edge of the water-gauge device (glass) and the blowing does not help lower it;

11) the pressure in the boiler rises above normal and continues to go up despite a decrease in traction, blasting and increased feeding of the boiler;

12) check plugs have melted;

13) there are cracks in the envelope posing the threat of collapse;

14) cinder and soot in the flues are burning;

15) unusual noise, knocks, hammering were noticed in the course of the boiler's operation;

16) a fire threatens the boiler;

17) cracks, bulges, leaks and gaps in the welds are found in the main elements of the boiler (drum, manifold, chamber, flue, firebox, furnace cover, tube array, external separator, steam line), breaks in two or more nearby connections;

18) the power supply was stopped during artificial traction, as well as the elements of the boiler and its envelope were damaged endangering the maintenance personnel or posing the threat of boiler destruction.

Appendix 5
to the Instruction for the operation
of military property of the Armed
Forces of the Republic of
Kazakhstan (hoisting mechanisms,
boilers and pressure vessels)
Form

REGISTER
of hoisting mechanisms, boilers and pressure vessels

(military unit)

Registration number	Object's data	Frequency (in years) of technical examination (TE) according to the factory documentation of			
	1. Index of the object. 2. Name, serial number of the object. 3. The object's manufacturer, date of manufacture. 4. Number of the opinion on compliance with the requirements, issued by, date of issue. 5. Work parameters: loading capacity/pressure (allowed/working). 6. The service life of hoisting mechanisms, vessels.	hoisting devices		vessels	
		Partial (PTE)	Full (FTE)	Internal inspection (II)	Hydrotesting (HT)
Sample of how to fill					
15/C	1. 15.G95 2. Tank, № 18347 3. OOO Vypel, 14.05.2010. 4. № B 01-000, CMSS MD RK, 11.07.2018. 5. Working pressure 5 kgf/cm ² 6. 20 years	-	-	4	8
9/G	1. 8T028 2. Traverse, № 3856 3. OOO Salyut, 17.09.2012. 4. № B 01-001, CMSS MD RK, 04.11.2018. 5. Loading capacity 300 kg	1	3	-	-

	6. 25 years			-	
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Table continued

Month and year of conducted and scheduled TE of							
hoisting devices				vessels			
PTE		FTE		II		HT	
conducted	scheduled	conducted	scheduled	conducted	scheduled	conducted	scheduled
Sample of how to fill							
-	-	-	-	05.2010	05.2014	05.2010	05.2018
11.2012	11.2013	11.2012	11.2015	-	-	-	-

Appendix 6
to the Instructions on organization
of operation of military property of
the Armed Forces of the
Republic of Kazakhstan
(lifting mechanisms,
boilers and pressure vessels)

Footnote. Appendix 6 as amended by order of the Minister of Defense of the Republic of Kazakhstan dated 11.09.2020 No. 437 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

Form
To the Head of the Center for
metrological support and
standardization of the Ministry of
Defence of the
Republic of Kazakhstan

Nur-Sultan, Manas str.15

I submit information on dangerous technical devices of a military unit:

№	Name (index) of the object	Factory number	Year of issue	Date of last examination
1	2	3	4	5

By order of the commander of the unit No. ___ dated "_____" 20___. responsible persons have been appointed:

The following personnel (service personnel) have been assigned to service these facilities:

№	Military rank, full name (if any).	Position	Name of the educational institution. Date of issue of the certificate	Date of last knowledge check
1	2	3	4	5

_____ are in good working order and comply with the Industrial Safety Requirements

Commander of military unit 00000

(military rank, surname and initials, signature)

Attached to the letter:

Copies of the passport for hazardous technical devices certified in office work.

Appendix 7
to the Instruction for the operation of
military property of the Armed Forces of
the Republic of Kazakhstan (hoisting
mechanisms, boilers and pressure vessels)
Form

Cylinder test log

Item №	Manufacturer and type of the cylinder	Serial № of the cylinder	Date (month, year) of		Results of external and internal inspections	Weight, kg	
			manufacture	Production and scheduled examination		stamped	actual
1	2	3	4	5	6	7	8

Table continued

Capacity, l.		Pressure, kgf/cm ²		Operational, transferred to a lower group, rejected	Inspector's signature	Signature of the representative of the military unit	Note
stamped	actual	Working (P)	Test (II)				
9	10	11	12	13	14	15	16
Item №	Date of filling	Cylinder's number	Date of examination	Cylinder's capacity	Ultimate gas pressure during filling	Weight of (bottled) gas	Signature of the person who filled the cylinder
1	2	3	4	5	6	7	8

Appendix 8
to the Instruction for the operation of
military property of the Armed Forces of
the Republic of Kazakhstan (hoisting
mechanisms, boilers and pressure vessels)
Form

Register of examinations and inspections of hazardous technical devices of the military unit

Hoisting machines, loose load-handling devices

Registration number assigned by the military unit (boiler supervision department)	Name (index) of a hoisting machine, hoisting device, loose load-handling device	Installation site	Serial number and year of manufacture	Loading capacity, kg		Date and results of cranes' inspections conducted by the supervising officer	Technical examination			
				design	allowed		conducted	scheduled	conducted	scheduled

2. Vessels, tanks, barrels, cylinders

a) registered by the boiler supervision department

Name of the object and its characteristics (type, brand, purpose, environment)	Installation site	Serial number and year of manufacture. Registration number assigned by the boiler supervision department	Pressure, kgf/cm ²		Capacity, l	Date and results of vessels' inspections conducted by the supervising officer
			design	allowed		

Table continued

Technical examinations conducted and scheduled by							
The military unit – the object's owner				The boiler supervision department			
Internal inspection		Hydrotesting		Internal inspection		Hydrotesting	
Conducted (month, year)	scheduled	conducted	scheduled	conducted	scheduled	conducted	scheduled

б) not registered by the boiler supervision department

Name of the object and its characteristics (type, brand, purpose, environment)	Installation site	Serial number and year of manufacture. Number assigned by the unit	Pressure, kgf/cm ²		Capacity, l	Date and results of inspections conducted by the supervising officer	Technical examinations conducted and scheduled by the military unit – the object's owner			
			design	allowed			Internal inspection		Hydrotesting	
							conducted	scheduled	conducted	scheduled

3. Filling stations

Item №				Pressure, kgf/cm ²		Date and results of inspections

	Name of the station	Installation place	Serial number and year of manufacture	design	allowed	conducted by the supervising officer
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Note. The station's vessels and cylinders are recorded in Section 2 of the Register.

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