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ion
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**TECHNICAL
REGULATIONS OF THE CUST
OMS UNION**

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On the safety of machinery and equipment

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Foreword

1. This technical regulation was developed in accordance with the Agreement on common principles and rules of technical regulation in the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation dated November 18, 2010 No.

2. This technical regulation has been developed with the aim of establishing, in the unified customs territory of the Customs Union, uniform requirements for machines and (or) equipment, mandatory for application and fulfillment during the development (design), manufacture, installation, adjustment, operation, storage, transportation, sale and disposal, ensuring the free movement of machines and (or) equipment released into circulation on the single customs territory of the Customs Union.

3. If in respect of machines and (or) equipment will be taken other technical regulations of the Customs Union technical regulations of the Eurasian Economic Community (hereinafter - EurAsEC), establishing requirements for machines and (or) equipment, the machines and (or) equipment must meet the requirements these technical regulations of the Customs Union, EurAsEC, which apply to them.

Article 1. Field of application

1. This technical regulation applies to machines and (or) equipment manufactured in circulation in the common customs territory of the Customs Union.

2. This Technical Regulation establishes the minimum essential safety requirements of machines and (or) equipment in the development (design), manufacture, installation, commissioning, operation, storage, transportation, sale and disposal in order to protect the life or health of the person, property, protection of the surrounding environment, life and health of animals, prevention actions, introducing to mislead consumers.

3. This technical regulation applies to machines and (or) equipment for which the types of hazard have been identified and identified, the requirements for the elimination or reduction of which are established in accordance with Appendices No. 1 and No. 2.

4. This technical regulation does not apply to the following types of machines and (or) equipment:

- machines and (or) equipment related to ensuring the integrity and stability of the functioning of communication networks and the use of the radio frequency spectrum;

- machines and (or) equipment used for medical purposes and used in direct contact with the patient (X-ray, diagnostic, therapeutic, orthopedic, dental, surgical equipment);

- machine and (or) equipment, specially designed for application in the field of use of atomic energy. On the machine and (or) equipment for general purpose, used in the field of use of atomic energy, the action of the technical regulations apply to the extent not inconsistent with the requirements to ensure nuclear and radiation safety;

- wheeled vehicles, except for machines and (or) equipment installed on them ;

- sea and river vehicles (ships and floating vehicles, including machines and (or) equipment used on them);

- flying and space vehicles;

- railway rolling stock and technical means specially designed for use in railway transport, and the subway;

- attractions;

- weapons and military equipment;

- machine and (or) equipment intended for operation by persons with limited physical abilities;

- agricultural and forestry tractors and trailers, except for machines and (or) equipment installed on them ;

- drilling platforms, except for machines and (or) equipment used on them .

5. This technical regulation applies to machines and (or) equipment used at hazardous production facilities.

6. If the risks caused by machines and (or) equipment are fully or partially established in other technical regulations of the Customs Union, EurAsEC, then the machines and (or) equipment must comply with the requirements of the technical regulations of the Customs Union, EurAsEC, which apply to them .

7. When identifying machines and (or) equipment , the compliance of specific machines and (or) equipment with a sample or their description is established, which can be used as the standards specified in paragraph 1 of Article 6 of this technical regulation, classifiers, specifications and drawings, technical conditions , operational documentation.

8. Additional safety requirements for certain categories of machinery and equipment are established in accordance with Appendix No. 2.

Article 2. **Definitions**

1. In the present technical regulations apply the following terms and their definitions:

"accident" - the destruction of or damage to the machine and (or) equipment, the emergence in the course of operation of machines and (or) equipment uncontrolled explosion and (or) release of hazardous and noxious substances;

"acceptable risk" - the value of the risk from the use of a machine and (or) equipment, based on the technical and economic capabilities of the manufacturer, corresponding to the level of safety that must be ensured at all stages of the product life cycle ;

"life cycle" - the period of time from the beginning of the design of the machine and (or) equipment to the completion of the disposal, which includes interconnected stages (design, manufacture, storage, installation, commissioning, operation, in fact including modernization, repair, maintenance and after-sales service);

"incident" - failure of a machine and (or) equipment, deviation from the mode of the technological process;

"critical failure" - failure of a machine and (or) equipment, the possible consequences of which are harm to human life or health, property, environment, life and health of animals and plants;

"Machine" - a number of interconnected parts or components, of which at least one portion or one node moves from via respective drives circuits control the sources of energy, combined together for the particular application (e.g., handling, processing, movement or packaging material);

"mobile power equipment" - tractors, universal power equipment, self-propelled chassis ;

"assigned resource" - the total operating time, upon reaching which the operation of the machine and (or) equipment must be terminated regardless of their technical condition;

"operating time" - the duration or volume of work of the machine and (or) equipment;

"assigned service life" - the calendar duration of the machine and (or) equipment operation, upon reaching which the operation must be terminated regardless of their technical condition;

"assigned storage period " - the calendar duration of storage of a machine and (or) equipment, upon reaching which their storage must be terminated regardless of their technical condition;

"use of the machine for its intended purpose" - the use of the machine and (or) equipment in accordance with the purpose specified by the manufacturer in the operating documents;

"safety case" - a document containing a risk analysis, as well as information from design, operational, technological documentation on the minimum necessary safety measures, accompanying machines and (or) equipment at all stages of the life cycle and supplemented by information on the results of risk assessment at the stage operation after overhaul ;

"equipment" - a technical device applied independently or installed on a machine, necessary to perform its main and (or) additional functions, as well as to combine several machines into a single system;

"refusal" - an event consisting in the breach of an efficient condition of the machine and (or) equipment due to structural disturbances during the design, non-compliance with the established process of manufacturing or repair, default rules or manuals (instructions) for operation;

"limiting state" - the state of the machine and (or) equipment in which their further operation is unacceptable or impractical, or the restoration of their operable state is impossible or impractical;

"Join machine" - mobile, trailers, semitrailer, tractor-mounted, semi-mounted or mounted on a mobile energy means machine designed to perform operations on the production and primary processing of agricultural products, etc.;

"developer" (designer) - a legal or natural person carrying out the process of creating a new type of machinery and equipment, development of technical documentation on the prototype sample and production of prototype sample;

"system developer (designer)" - a legal entity or individual performing the process of creating design documentation for systems of machines and (or) equipment (technological lines interconnected by the production cycle);

"agricultural machine-tractor unit" - a complex, which is a combination of a mobile power tool with a trailed, semi- trailed or mounted machine (or machines), and is designed to perform technological agricultural operations;

"system" - a set of machines and (or) equipment, combined structurally and (or) functionally to perform the required functions;

"danger" - a potential source of damage to human life and health, property, environment;

"danger zone" - a space in which a person is exposed to hazards emanating from a machine or equipment;

"risk" - a combination of the probability of harm and the consequences of this harm to the life or health of the person, property, environmental protection, life or health of animals and plants.

Article 3. **Rules of circulation on the market**

1. Machines and (or) equipment produced for circulation in the market when they are under this technical regulation, as well as other technical regulations of the Customs Union, the Eurasian Economic Community, the action of which on their spread and when the condition that they underwent the procedure confirm compliance, established by the present technical regulations , as well as

other technical regulations of the Customs Union, the Eurasian Economic Community, the action of which on their spread.

Machines and (or) equipment, the compliance of which with the requirements of this technical regulation has not been confirmed, must not be marked with a single mark of product circulation on the market of the Member States of the Customs Union and are not allowed to be released into circulation in the common customs territory of the Customs Union.

Article 4. **Ensuring the safety of machines and (or) equipment during development (design)**

1. When developing (designing) a machine and (or) equipment, possible types of hazard should be identified at all stages of the life cycle.

2. For the identified types of hazard , a risk assessment should be carried out by calculation, experimental, expert method or according to the data of operation of similar machines and (or) equipment. Risk assessment methods can be established in the standards specified in paragraph 1 of Article 6 of this technical regulation.

3. During the development (design), the admissible risk for the machine and (or) equipment must be determined and established . At the same time, the level of security corresponding to the established risk is ensured by:

- completeness of research and development work;
- carrying out a set of necessary calculations and tests based on methods verified in the established order ;
- choice of materials and substances used in certain kinds of machinery and (or) equipment in dependence on the parameters and conditions of use;
- the establishment by the developer (designer) of the criteria for limit states;

- the establishment of a developer (designer) designated by the terms of service, assigned resources, maintenance dates, maintenance and disposal.

- identification of all hazards associated with the possible predictable incorrect use of the machine and (or) equipment;
- restriction in the use of machines and (or) equipment.

4. In case if the estimated risk of the above permissible, for its reduction should be changed car design and (or) equipment, while avoiding the interference of the personnel in all operating modes of the machine and (or) equipment (if intervention is not provided guidance (instructions) for operation).

5. If it is impossible to achieve the technical characteristics of the machine and (or) equipment that determine the permissible risk by changing the design, as well as if it is economically inexpedient , the operating manual (instruction) contains information that restricts the conditions for using this machine and (or) equipment or warns of the need for the adoption of measures to ensure safety.

6. When designing (design) machines and (or) the equipment must be installed levels of physical factors (the level of noise, infrasound, air and contact ultrasound, local and general vibration of electromagnetic fields), and the levels of release of hazardous and harmful substances, providing security at their exploitation.

7. When developing (designing) a machine and (or) equipment , a safety case should be developed .

The original rationale of security machines and (or) the equipment is stored in the developer (designer), and copy - at the manufacturer of machines and (or) equipment and organization, operating the machine and (or) equipment.

8. Development of a manual (instruction) for operation is an integral part of the development (design) of a machine and (or) equipment. The operating manual (instruction) includes:

- information about the design, principle of operation, characteristics (properties) of machines and / or equipment;
- instructions for installation or assembly, adjustment or adjustment, maintenance and repair of the machine and (or) equipment;
- guidance on the use of the machine and (or) equipment and measures to ensure the security, which must be taken when using the machine and (or) equipment, including start-up, the use of purpose, maintenance services, all kinds of repairs, periodic diagnostics, testing, transportation , packaging, preservation and storage conditions;
- assigned parameters (designated period of storage, a designated period of service and (or) assigned to the resource) in dependence of the design features. At the end of the designated indicators (assigned resource, the period of storage, service life) machine and (or) equipment shall be withdrawn from service, and adopted a decision on the direction of their in repairs on disposal of inspection and the establishment of new nominated performance (assigned resource, the term storage , the term of service);
- a list of critical failures, possible erroneous actions of personnel that lead to an incident or accident;
- actions of personnel in the event of an incident, critical failure or accident;
- criteria of limiting states;
- indication of the conclusion of the operation , and recycling.
- information about the qualifications of the service personnel.

9. In case if the machine and (or) equipment designed to operate not by professional users manual (instruction) on the operation should take into account the knowledge, skill and experience of users.

Article 5. Ensuring the safety of machines and (or) equipment during manufacture, storage, transportation, operation and disposal

1. When manufacturing a machine and (or) equipment, their compliance with the requirements of the design (construction) documentation and this technical regulation must be ensured .

2. In the manufacture of machines and (or) equipment manufacturer has to perform all the complex measures for ensuring safety, a certain project (design) documentation, when it should be provided with the opportunity to monitor the implementation of all technological operations from which depends the safety.

3. In the manufacture of a machine and (or) equipment , the tests provided for by the design (construction) documentation must be carried out .

4. When manufacturing a machine and (or) equipment , the safety requirements established by the design (construction) documentation in accordance with this technical regulation, taking into account the applied technological processes and control systems, must be met . The manufacturer conducts a risk assessment of machines and (or) equipment before release into circulation.

5. Deviations from the design (design) documentation in the manufacture of a machine and (or) equipment must be agreed with the developer (designer). The risk from the use of a machine and (or) equipment manufactured according to the agreed design (construction) documentation should not be higher than the permissible risk established by the developer (designer).

6. The manufacturer of the machine and (or) equipment must provide the machine and (or) equipment with a manual (instruction) for operation.

7. The machine and (or) equipment must have clear and indelible warning notices or signs about the types of danger.

8. Machine and (or) the equipment should be well distinguishable clear and indelible identification label, comprising:

- manufacturer's name and (or) its trademark ;
- name and (or) designation of the machine and (or) equipment (type, brand, model (if any));
- month and year of manufacture.

9. If the information given in paragraph 8 of this article cannot be applied to the machine and (or) equipment, then they can be indicated only in the manual (instructions) for operation attached to this machine and (or) equipment . In this case, the name of the manufacturer and (or) his trademark, the name and designation of the machine and (or) equipment (type, brand, model (if any)) must be applied to the packaging.

10. The information specified in paragraph 8 of this article should be contained in the manual (instructions) for operation. In addition, the management (manual) operation must contain the name and address of the manufacturer (authorized by the manufacturer faces), the importer, the information for communication with them.

11. Guidelines (instructions) Operating performed in Russian and in the state (s) language (s) of the Member State of the Customs Union with the presence of the relevant requirements in the law (s) state (in) - a member (s) of the Customs Union.

The operation manual (instruction) is carried out on paper . For it can be applied a set of operational documents on electronic media. The manual (instruction) for operation included in the set of the machine and (or) equipment for non- domestic purposes, at the option of the manufacturer, can be executed only on electronic media .

12. Materials and substances used for packaging machines and (or) equipment must be safe.

13. Transportation and storage of machines and (or) equipment, their components and parts should be carried out with taking into account the requirements of security provided for the project (design) and operational documentation.

14 P When carrying out maintenance, repair and inspection of the machine and (or) equipment must be adhered to the requirements set by the leadership (instruction) of operation, the program of maintenance or repair during the whole period of these works.

15. Changes in the design of a machine and (or) equipment arising during their repair must be agreed with the developer (designer).

16. After carrying out major repairs of the machine and (or) equipment must be carried out assessment of the risk, the value of which does not should be higher than allowable. If necessary, develop technical and organizational measures aimed at achieving the values of permissible risk.

17. For the refurbished machines and (or) equipment, do not meet the requirements of the project (design) documentation should be developed measures of security established in the justification of the safety value of risk with regard taken to the organization of technological processes and systems of control.

18. The manual (instructions) for operation must contain recommendations for the safe disposal of the machine and (or) equipment.

19. When designing a machine and (or) equipment in the user manual (instructions) for use shall be determined by measures to prevent the use of the machine are not intended and (or) equipment after reaching the designated resource or a designated period of service.

Article 6. Ensuring compliance with safety requirements

Compliance of machines and (or) equipment with this technical regulation is ensured by the fulfillment of its requirements directly or the fulfillment of the requirements of interstate standards, and in the absence of them (before the adoption of

interstate standards) - national (state) standards of the Member States of the Customs Union, as a result of which on a voluntary basis based provided compliance requirements

Technical Regulations Customs Union, and standards containing rules and practices research (test) and measurements, in fact including rule selection of samples required for the application and performance requirements of the Technical Regulations of the Customs Union and of evaluation (confirmation) of conformity (hereinafter - standards) for the corresponding types of machines and (or) equipment.

Performing on e of brovolnoy based on the requirements of these standards demonstrates a compliance of machines and (or) equipment requirements of security of these technical regulations.

Article 7. **Conformity assessment**

1. Machines and (or) equipment e, issued in circulation on the single customs territory of the Customs Union, subject to the assessment of compliance requirements of the present technical regulations.

Conformity assessment with the requirements of this technical regulation is carried out in the form of conformity confirmation and in the form of state control (supervision).

Used machines and (or) equipment, or manufactured for their manufacturers ' own needs, as well as components and spare parts for machines used for repair (maintenance) of machines and (or) equipment, are not subject to confirmation of compliance with the requirements of this technical regulations.

Article 8. **Confirmation of conformity**

1. Confirmation of conformity of machines and (or) equipment is carried out in accordance with unified procedures approved by the Commission of the Customs Union.

2. Confirmation of compliance of machines and (or) equipment with the requirements of this technical regulation is carried out in the form of:

certification by an accredited body for certification (assessment (confirmation) of conformity) (hereinafter - the body of certification), included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union;

declaration of conformity on the basis of their own evidence and (or) obtained with the participation of the body of certification or an accredited testing laboratory (center) included in the Unified Register of bodies on certification and test laboratories (centers) of the Customs Union (hereinafter - accredited testing laboratory (center)).

3. Certification is carried out in respect of machines and (or) equipment included in the List of objects of technical regulation, subject to confirmation of compliance with the requirements of the technical regulation of the Customs Union "On the safety of machinery and equipment" in the form of certification, given in Appendix No. 3.

4. Declaration of conformity is carried out by the applicant in relation to machines and (or) equipment included in the List of objects of technical regulation, subject to confirmation of compliance with the requirements of the technical regulation of the Customs Union "On the safety of machinery and equipment" in the form of a declaration of conformity, given in the appendix No. 3.

5. By the decision of the applicant, instead of a declaration of conformity in respect of machines and (or) equipment included in the List specified in paragraph 1 of clause 4 of this article, certification may be carried out according to certification schemes equivalent to the declaration of conformity schemes provided for machines and (or) equipment the present technical regulations, in that those with the absence or deficiency in the applicant's own evidence confirming compliance with the requirements of the present technical regulations.

6. Declaration of Conformity or Certificate of Conformity is the only document confirming the compliance of the machine and (or) equipment with the requirements of this technical regulation.

7. Declaration of conformity and certificate of conformity have equal legal force and effect on the common customs territory of the Customs Union in respect of machines and (or) equipment, manufactured in circulation in the single customs territory of the Customs Union in the time of action of declaration of conformity or the certificate of conformity and respect to each unit (the machine and (or) equipment) to within its term of service.

8. Information about the declaration of conformity or the certificate of conformity must be indicated in the passport of the machine and (or) equipment.

9. When carrying out the confirmation of conformity, the compliance of machines and (or) equipment with the requirements of this technical regulation, specified directly, or established in the standards specified in article 6 of this technical regulation, is checked.

10. When carrying out the conformity assessment of machines and (or) equipment, the applicant forms a set of documents for machines and (or) equipment, confirming compliance with the safety requirements of this technical regulation, which includes:

safety justification; technical conditions (if any); operational documents; list of the standards referred to in Article 6, the requirements of which must correspond to the data of the machine and (or) equipment (if their application by the manufacturer); contract (the contract on delivery) (for the party, a single product) or shipping documentation (for the party, a single product); manufacturer's management system certificate (if any); information about the studies carried out (if any);

test reports of the machine and (or) equipment carried out by the manufacturer, seller, person performing the functions of a foreign manufacturer and (or) testing laboratories (centers) (if any);
 certificates of conformity on materials and components products or protocols of tests (if any);
 certificates of conformity to the data of the machine and (or) equipment obtained from foreign authorities for certification (if any);
 other documents directly or indirectly confirming the compliance of machines and (or) equipment with the safety requirements of this technical regulation (if any).

Article 9. The procedure for declaring the conformity of machines and (or) equipment

Declaration of conformity of machines and (or) equipment is carried out according to the following schemes:

Scheme 1d for serially produced machines and (or) equipment includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8; carries out production control and takes all necessary measures to ensure that the production process ensures the compliance of machines and (or) equipment with the requirements of this technical regulation; conducts tests of samples in a testing laboratory or an accredited testing laboratory (center), accepts and registers a declaration of conformity.

Scheme 2d for a batch of machines and (or) equipment (single item) includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8;
 conducts sample tests in a testing laboratory or an accredited

testing laboratory (center), accepts and registers a declaration of conformity.

The 3d scheme for mass-produced machines and (or) equipment includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8; carries out production control and takes all necessary measures to ensure that the production process ensures the compliance of machines and (or) equipment with the requirements of this technical regulation; conducts tests of samples in an accredited testing laboratory (center), accepts and registers a declaration of conformity.

Scheme 4d for a batch of machines and (or) equipment (single item) includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8; conducts tests of samples in an accredited testing laboratory (center), accepts and registers a declaration of conformity;

Scheme 5d is used for machines and (or) equipment: used at hazardous production facilities;

when the impossibility of carrying out tests in the full amount to install them on - site service;

when the applicant, when confirming compliance, does not apply the standards specified in paragraph 1 of Article 6 of this technical regulation, including for innovative products.

Includes the following actions:

the applicant forms a set of documents specified in paragraph 10 of Article 8; carries out production supervision and takes all necessary measures to order to the process of production ensures conformity of machines and (or) equipment requirements of the technical regulations and guides in on body certification application to conduct studies such as;

Body on certification conducts research type with regard received from the applicant's documents. In case if the applicant does not applied the standards specified in paragraph 1 of Article 6 of the present technical regulation, body certification assesses the possibility of replacing the requirements of these standards stated requirements. Type research, depending on the documents submitted by the applicant , is carried out in one of the following ways:

examination of the sample, as a representative of all subsequently produced machines and (or) equipment;

study of the submitted documents, testing of a sample or determining (critical) components of machines and (or) equipment;

in case of positive results of the type studies carried out, the certification body draws up a type certificate in a uniform form approved by the decision of the Commission, and issues it to the applicant. Certificate on type is an integral part of the declaration of conformity, and it contains the stated requirements for the machine and (or) equipment, recognized sufficient evidence of its compliance with the requirements of these technical regulations, used at inspections carried out by bodies of state control (supervision) on compliance with the present technical regulations ;
the applicant accepts and registers the declaration of conformity.

Scheme 6d for serially produced machines and (or) equipment, if the manufacturer has a certified management system, includes the following steps:

the applicant produces a set of documents referred to in paragraph 10 of Article 8, in the composition of which is included certificate to system management (copy of the certificate of conformity) issued by the authority for the certification of systems of management, included in the Unified Register of bodies on certification and test laboratories (centers) of the Customs Union; carries out production control and takes all necessary measures to ensure that the production process ensures the conformity of machines and (or) equipment

the requirements of this technical regulation; conducts tests of samples in an accredited testing laboratory (center), accepts and registers a declaration of conformity.

When declaring conformity according to schemes 1d, 3d, 5d, 6d, the applicant may be a legal entity or an individual registered in accordance with the legislation of a member state of the Customs Union on its territory, as an individual entrepreneur, either being a manufacturer, or performing the functions of a foreign manufacturer on the basis of agreement with him, in terms of ensuring the compliance of the supplied products with the requirements of this technical regulation and in terms of liability for non-compliance of

the supplied products with the requirements of this technical regulation of the Customs Union (a person performing the functions of a foreign manufacturer).

When declaring conformity according to schemes 2d, 4d, the applicant may be a legal entity or an individual registered in accordance with the legislation of a member state of the Customs Union on its territory, as an individual entrepreneur, or being a manufacturer or seller, or performing the functions of a foreign manufacturer on the basis of an agreement with him, in terms of ensuring the compliance of the supplied products with the requirements of this technical regulation and in terms of liability for non-compliance of the supplied products with the requirements of this technical regulation of the Customs Union (a person performing the functions of a foreign manufacturer).

Article 10. The composition of the evidentiary materials that are the basis for the adoption of the declaration of conformity

1. As the evidentiary materials that are the basis for the adoption of a declaration of conformity on the basis of their own evidence used documents referred to in paragraph 10 of article 8 of the technical

regulations, as well as the standards specified in article 6 of this technical regulation.

2. The following may be considered as conditions for the application of these documents :

1) for test reports :

the presence in the test reports of values of indicators confirming compliance with all the requirements established in this technical regulation, which apply to a specific declared product;

distribution of test reports to the declared machines and (or) equipment;

2) certificates of conformity, declarations of conformity or test reports for raw materials, materials, components - if they determine the safety of the final product subject to confirmation of conformity;

3) certificates for the production quality management system - if they apply to the manufacture of the declared machines and (or) equipment;

4) other documents directly or indirectly confirming the compliance of machines and (or) equipment with the established requirements, certificates of conformity for the declared machines and (or) equipment issued during voluntary certification (provided that all necessary requirements were confirmed during voluntary certification).

3. The declaration of conformity is drawn up in a unified form approved by the decision of the Commission of the Customs Union.

The declaration of conformity is subject to registration in accordance with the procedure approved by the Commissions of the Customs Union. The validity of the declaration of conformity begins from the day of its registration. The validity period of the declaration of conformity is no more than 5 years.

4. The applicant must keep the declaration of conformity and the evidential materials in over ten years, with the moment of the end of the term of action of declaration of conformity.

A set of documents confirming compliance must be provided to the state control (supervision) bodies according to their requirements.

Article 11. Procedure for certification of machines and (or) equipment

1. Certification of machines and (or) equipment is carried out according to the schemes:

Scheme 1c for mass-produced machines and (or) equipment includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8 and submits a request to the certification to the body of certification;

the certification body takes samples from the applicant for testing;

accredited testing laboratory (center) included in the Unified Register of bodies on certification and test laboratories (centers) of the Customs Union (hereinafter - the accredited testing laboratory (center)) carries out testing of samples of machines and (or) equipment;

the certification body analyzes the state of production of the manufacturer and the results of tests carried out on samples of machines and (or) equipment and, if the results are positive, issues a certificate of conformity to the applicant ;

the certification body conducts inspection control of certified machines and (or) equipment by testing samples in an accredited testing laboratory (center) and (or) analyzing the state of production.

Scheme 3c for a batch of machines and (or) equipment (single item) includes the following steps:

the applicant forms a set of documents specified in paragraph 10 of Article 8 and submits a request to the certification to the body of certification;

authority for certification or an accredited testing laboratory (center) conducts the selection of samples from the applicant for carrying out the tests;

accredited testing laboratory (center), conducts tests of samples of machines and (or) equipment;

the certification body analyzes the test results of samples of machines and (or) equipment and, if the results are positive, issues a certificate of conformity to the applicant ;

Scheme 9c for a batch of machines and (or) equipment of limited volume, intended for equipping enterprises on the common territory of the Customs Union, includes the following actions:

the applicant forms a set of documents specified in paragraph 10 of Article 8 and submits a request to the certification to the body of certification;

Body on certification conducts an analysis submitted by the applicant a set of documents and with positive results gives the applicant a certificate of conformity.

Applicant with certification of schemes 1c, 9c may be registered in accordance with the legislation of the Member State of the Customs Union on its territory a legal entity or natural person to an individual entrepreneur, or being the manufacturer, or performs the functions of a foreign manufacturer on the basis of a contract with them, in part ensuring the compliance of the supplied products with the

requirements of this technical regulation and in terms of liability for non-compliance of the supplied products with the requirements of this technical regulation of the Customs Union (a person performing the functions of a foreign manufacturer).

An applicant for certification according to the 3c scheme can be a legal entity or an individual registered in accordance with the legislation of a member state of the Customs Union on its territory as an individual entrepreneur, either being a manufacturer or seller, or performing the functions of a foreign manufacturer on the basis of an agreement with him, in part ensuring the compliance of the supplied products with the requirements of this technical regulation and in terms of liability for non-compliance

supplied products to the requirements of this technical regulation of the Customs Union (a person performing the functions of a foreign manufacturer).

2. The applicant may apply to the application to certification in any body of certification available in the field of accreditation of the machine and (or) equipment included in the list of machines and equipment, subject to confirmation of compliance with the requirements of technical regulations of the Customs Union "On the safety of machinery and equipment" in the form of certification, approved by the Commission of the Customs Union.

Application to conduct the certification issued by the applicant and must contain:

name and location of the

applicant; manufacturer's name and location ;

information about the machine and (or) equipment (its composition) and its identifying features (name, code according to the foreign economic activity classifier of the Customs Union, the document according to which the machine and (or) equipment was manufactured (interstate or national standard, enterprise standard , technical conditions and etc.), form of issue - serial production or batch, details of the agreement (contract) , etc.);

the standard (s) used, referred to in paragraph 1 of Article 6 of this technical regulation;

certification scheme .

3. The certification body examines the application and makes a decision on the possibility of certification.

If a positive decision authority for certification concludes an agreement with the applicant on carrying out of works on certification.

Authority of Certification conducts work according to the scheme of certification, is preparing a decision and if so will issue the applicant a certificate of conformity.

4. In case of a negative result of certification, the certification body sends the applicant a reasoned decision to refuse to issue a certificate of conformity.

5. Tests of a type sample (type samples) or a single product of a machine and (or) equipment are carried out by an accredited testing laboratory (center) on behalf of the certification body, which is issued a test report .

6. Analysis of the state of production is carried out by the manufacturer 's certification body . The results of the analysis are documented in an act.

When available at the manufacturer's certified system of management of quality of production or the development and production of machines and (or) equipment body for certification assesses the possibility of the system to ensure a steady release of certified machines and (or) equipment, the relevant requirements of the present technical regulations.

7. When the positive results of the checks provided for by the scheme certification body for certification makes out the certificate of conformity and gives it to the applicant.

The certificate of conformity is drawn up in a unified form approved by the decision of the Customs Union Commission.

Information about the issued certificate of conformity body of certification reports in the Unified Register of issued certificates of conformity and registered declarations of conformity, designed for a single form.

8. The validity period of the certificate of conformity is established for the manufactured machines and (or) equipment of serial production - no more than 5 years, for the issued batch the period is not established.

9. The certificate of conformity may have an application that contains a list of specific products on which extends its action.

An application is issued if:

is required to detail the composition of the group of homogeneous products manufactured by the applicant and certified by one and the same requirements;

It needs to specify the manufacturing plants, included in a larger association with common conditions of production products.

Article 12. Marking with a single mark of product circulation on the market of the Member States of the Customs Union

1. Machines and (or) equipment

that meet the safety requirements of this technical regulation and have passed the conformity confirmation procedure in accordance with Article 8 of this technical regulation must be marked with a single mark of product circulation on the market of the Member States of the Customs Union.

2. Marking with a single mark of product circulation on the market of the Member States of the Customs Union is carried out before the release of machines and (or) equipment into circulation on the market.

3. Single sign -treatment products on the market of the Member States of the Customs Union is applied to each unit of machines and (or) equipment in any manner that provides crisp and clear image throughout the life of the machine and (or) equipment.

A single mark of product circulation on the market of the Customs Union member states is applied to the product itself .

4. It is allowed to apply a single mark of product circulation on the market of the Member States of the Customs Union only on the packaging and in the attached operational documents, if it cannot be applied directly to the machine and (or) equipment.

5. Machines and (or) equipment are marked with a single mark of product circulation on the market of the Member States of the Customs Union if they meet the requirements of all technical regulations of the Customs Union, EurAsEC,

extending to them and providing for the application of a single mark of product circulation on the market of the Member States of the Customs Union.

Article 1 3. **Safeguard clause**

1. The Member States of the Customs Union are obliged to take all measures to restrict, prohibit the release into circulation of machines and (or) equipment in the common customs territory of the Customs Union, as well as withdraw from the market machines and (or) equipment that do not meet the requirements of this technical regulation.

Appendix No. 1
to the technical regulations of the Customs Union
"On the safety of machinery and equipment"
(TR CU 010/2011)

BASIC SAFETY REQUIREMENTS FOR MACHINES AND (OR) EQUIPMENT

1. It must be ensured the possibility of the adjustment and maintenance of the machine and (or) equipment, without compromising staff dangers in the conditions stipulated by the manufacturer.

2. When developing (designing) and manufacturing machines and (or) equipment, the responsible persons must:

eliminate or reduce the hazard; take measures to protect against danger;

inform consumers of protective measures, indicate if special training is required, and determine the need for technical protective measures.

3. In the development (design) and manufacture of machines and (or) equipment, as well as in the development of manuals (instructions) for the operation of a machine and (or) equipment, it is necessary to take into account the permissible risk in the operation of machines and (or) equipment.

4. If, as a result of unacceptable operation, a hazard may arise, the design of the machine and (or) equipment must impede such operation. If this is not possible, the manual (instructions) for operation draws the consumer's attention to such situations.

5. When developing (designing) and manufacturing a machine and (or) equipment, it is necessary to use ergonomic principles to reduce the effect of discomfort, fatigue and psychological stress of personnel to the lowest possible level.

6. When the development (design) and manufacture of machinery and (or) equipment must take into account the limitations imposed on the activities of the operator when using the means of individual protection.

7. Machine and (or) the equipment must be staffed in accordance with the operating instructions necessary devices and tools to implement safe adjustments, technical service and intended use.

8. The machine and (or) equipment must be designed (designed) and manufactured so that the raw materials, materials and substances used in their manufacture and operation do not threaten the safety of human life or health, property, environment, life or health of animals.

When using liquids and gases, the dangers associated with their use must be excluded.

9. It is necessary to provide additional lighting for the safe operation of the machine and (or) equipment.

Internal parts and the area of the machine and (or) equipment, requiring frequent inspection, adjustment and technical maintenance should be light, providing safety.

When operating a machine and (or) equipment, it is necessary to exclude the formation of shaded areas, areas that create interference, glare and stroboscopic effect.

10. Machine and (or) equipment or each of their parts must be packed so that they can be stored safely and without damage, have sufficient stability.

11. If the weight, size or shape of the machine and (or) equipment or their various parts do not allow them to be moved manually, the machine and (or) equipment or each part of them must:
be equipped with devices for lifting a mechanism;

have such a configuration that can be had to apply standard lifting means.

12. In the event that the machine and (or) equipment or one of their parts will be moved manually, they must be easy to move or equipped with devices for lifting.

It is necessary to provide special places for the safe placement of tools, parts and assemblies required during operation.

13. Control systems of the machine and (or) equipment must ensure the safety of their operation in all envisaged modes of operation and under all external influences stipulated by the operating conditions .

Control systems must exclude the creation of dangerous situations with possible logical errors and due to violation of control actions by personnel .

In Depending on the complexity of the management and control mode of operation of machines and (or) equipment systems management should include means of an automatic control mode of operation and means of the automatic stop, if a violation of the mode of operation may be the cause of creating a dangerous situation.

14. The machine and control systems (or) equipment must include a means of warning alarm , and other means of warning about violations of the functioning of the machine and (or) equipment, leading to the occurrence of dangerous situations.

Means of warning about malfunctions of machines and (or) equipment must ensure the error-free, reliable and quick perception of information by personnel.

15. The controls of the machine and (or) equipment must be:

easily accessible and freely distinguishable, labeled, symbolized or otherwise indicated ;

designed and placed so as to exclude their involuntary movement and ensure reliable, confident and unambiguous manipulation of them;

positioned considering the required movement forces, sequence and frequency of use, and the importance of functions;

made so that their shape and size correspond to the method of gripping (fingers, brush) or pressing (finger , palm, foot);

located outside the danger zone for excluding bodies management functionality that requires finding personnel in the danger zone, and when it accepted additional measures on ensuring security.

16. In the event that it is envisaged to manage several different actions by one control body , the action performed should be displayed by means of control and be verifiable.

17. Start the machine and (or) equipment, as well as re- start after a stop (regardless of the reasons for the stop) must be carried out only starting the management body. This requirement does not apply to the restarting of the production equipment, operating in automatic mode, if the re- start after a stop provided by this regime.

If the system of machines and (or) equipment has several controls that start the system or its individual parts, and a violation of the sequence of their use can lead to the creation of dangerous situations, the control should provide for devices that exclude a violation of the sequence.

18. Each system of machines and (or) equipment must be equipped with a control by means of which it can be completely stopped safely . Machine and (or) equipment stop control must take priority over start control .

After stopping the machine and (or) equipment from the power source drives the machine and (or) equipment must be turned off, for the exception of the cases,

when the disconnection of energy sources could lead to a hazardous situation. Control systems of the machine and (or) equipment (except for portable machines with manual control) must be equipped with emergency braking and emergency stop (shutdown) means, if the use of these systems can reduce or prevent the danger.

19. The emergency stop control must:

be clearly identifiable and easily accessible;

stop the machine and (or) equipment quickly, without creating a

hazard; be, after putting it into action, in a position corresponding to stopping until it is returned by the user to its original position; back in its original position, not leading to the commissioning of the machine and (or) equipment;

be red color, different shape and sizes of the other organs of management.

20. Control of the system of machines and (or) equipment should exclude the occurrence of danger as a result of their joint functioning, as well as in the event of failure of any part.

Management system of machines and (or) equipment must allow staff when necessary to block the launch of the system, as well as to carry out its stop.

21. The remote control system of machines and (or) equipment must provide the opportunity for staff to monitor the lack of staff or other persons in hazardous areas, or management should exclude the operation of the system of machines and (or) equipment with finding staff or other persons in the danger zone. Each start must be preceded by a warning signal, the duration of which allows persons in the hazardous area to leave it or prevent the system from starting.

The control panel for the system of machines and (or) equipment must be equipped with means of displaying information on violations of operation

any part of the system, as well as by means of emergency stop (shutdown) of the system and (or) its individual parts.

22. When there is a switch mode of operation in the management of the machine and (or) equipment each position must correspond to only one mode of operation and securely in place.

23. If in certain operating modes of the machine and (or) equipment increased protection of personnel is required, then switching on these modes by the switch should ensure:
the ability to block automatic control;

movement elements design only at a constant application force to the body motion control;

stopping the operation of the machine and (or) equipment, if their work can cause danger to personnel;

exclusion of the operation of parts of the machine and (or) equipment that are not involved in the implementation of the selected mode;

reducing the speed of movement of parts of the machine and (or) equipment involved in the implementation of the selected mode.

24. The selected control mode shall have priority over all other control modes, with the exception of emergency stop.

25. Full or partial cessation of power supply and its subsequent recovery, but also damage to the control circuit power supply not should lead to the occurrence of dangerous situations, including:

spontaneous start of the machine and (or) equipment upon restoration of power supply;

failure to have issued the command to stop;

falling and throwing away moving parts of a machine and (or) equipment and objects, blanks, tools fixed on them;
decrease in the effectiveness of protective devices.

26. Violation (malfunction or damage) in the control circuit of the machine and (or) equipment should not lead to dangerous situations, including:

spontaneous start of the machine and (or) equipment upon restoration of power supply;

failure to have issued the command to stop;

falling and throwing away moving parts of

a machine and (or) equipment and objects, blanks, tools fixed on them ;

decrease in the effectiveness of protective devices.

27. Machine and (or) the equipment must be resistant to the operating conditions envisaged, providing use without the danger of tipping over drop or sudden movement.

In the manual (instructions) for operation, it is necessary to indicate the use of the corresponding fasteners.

28. Parts of machines and (or) equipment and their connections must withstand the forces and stresses to which they are subjected during operation.

The durability of the materials used must correspond to the intended operation, take into account the appearance of the danger associated with the phenomena of fatigue, aging, corrosion and wear.

29. The manual (instruction) for the operation of machines and (or) equipment must indicate the type and frequency of control and maintenance required to ensure safety. Parts subject to wear and replacement criteria should be specified, if necessary .

30. If, despite the measures taken, the danger of destruction of the machine and (or) equipment remains , protective fences must be installed in such a way that when parts or assemblies of the machine and (or) equipment are destroyed, their fragments can not fly apart.

31. The pipelines must withstand the intended loads, must be securely fixed and protected from external mechanical influences.

Protection measures must be taken against dangerous consequences in the event of destruction, sudden movement of pipelines and high-pressure jets when they are destroyed.

32. It is necessary to take precautions to prevent danger from thrown away by the machine and (or) equipment parts, their fragments, waste.

33. Accessible parts of machines and (or) equipment must not have cutting edges, sharp corners and rough surfaces can cause injury and technologically not related to the performance of the functions of the machine and (or) equipment.

34. In the case when the machine and (or) equipment designed to perform several different operations with the manual movement of the processed object between each operation should be provided an opportunity to use of each separate functional element from other elements, representing a danger to personnel.

35. If the machine and (or) equipment is designed to operate at different modes, speeds, it is necessary to provide a safe and reliable selection and adjustment of these modes.

36. The moving parts of machines and (or) equipment must be placed in such a way to not arisen opportunity getting injured, or if the danger persists, should be used warning signs and (or) label, safety or protective devices in order to avoid such contact with the machine and (or) equipment that could lead to an accident .

37. Care should be taken to prevent accidental blockage of moving parts. In the event that, despite the measures taken, blocking can occur, special tools must be provided for safe unblocking. The procedure and methods of unlocking must be indicated in the operating manual (instructions), and the appropriate designation must be applied to the machine and equipment .

38. Protective and safety devices used to protect against the danger caused by moving parts of the machine and (or) equipment should be selected based on a risk analysis .

39. Protective and safety devices must: have a solid stable structure;

be safe;

be located at an appropriate distance from the hazardous area;

do not interfere with the control of the production process in hazardous areas;

allows to perform works on adjustment and (or) replacement of the tool, as well as for the technical maintenance of machines and (or) equipment.

40. Fixed safety guards must be securely fastened in such a way that access to the fenced area is only possible with the use of tools.

41. Movable protective barriers should:

if possible, remain attached to the machine and (or) equipment when they are open;

have interlocking devices that prevent the operation of the machine or equipment while the guards are open.

42. Movable protective guards and protective devices must be developed (designed) and included in the control system of the machine and (or) equipment in such a way that:

the moving part is not able to be shown in action while they are in the zone of reach of the personnel;

persons exposed to possible exposure were not within reach at the time of inclusion;

They can be installed only with the use of tools; absence or malfunction of one of the components of these devices prevents moving parts from starting or stopping ;

protection from ejected parts was ensured by creating an appropriate barrier.

43. Devices limiting access to those places of the moving parts of machines and (or) equipment, which are necessary for work, must:

installed manually or automatically (depending on the type of work in which they are involved);

installed using tools; limit the hazard from discarded parts.

44. Protective devices must be connected with control systems of machines and (or) equipment in such a way that:

the moving part is not able to be shown in action while they are in the zone of reach of the operator;

Staff not able to be in the range of reach of moving parts of machines and (or) equipment while bringing them into action;

the absence or inoperability of one of the components of the protective equipment excluded the possibility of turning on or stopping the moving parts.

45. Protective devices should be installed (removed) only with the use of tools.

46. In case if a machine and (or) the equipment used electric energy, they must be developed (designed), manufactured and installed so as to prevent the danger of electric shock.

47. In the event that non-electrical energy (hydraulic, pneumatic, thermal energy) is used in machines and (or) equipment, they should be designed (designed) and manufactured in such a way as to avoid any danger associated with these types of energy.

48. Errors in the assembly of the machine and (or) equipment, which may be a source of danger, must be excluded. If this is not possible, it should be applied warnings directly on the machine and (or) equipment.

Information about possible errors during re-assembly shall be provided in the user manual (manual) operation.

49. It is necessary to exclude the danger caused by the mixing of liquids and gases and / or improper connection of electrical conductors during assembly. If this is not possible, this information must be indicated on the tubes, cables and / or on the connecting blocks.

50. Measures should be taken to eliminate the danger caused by contact or proximity to parts of the machine and (or) equipment or materials with high or low temperatures.

It is necessary to assess the risk of ejection of the machine and (or) equipment workers and exhaust substances having a high or low temperature, and when there is the danger must be taken measures for its reduction.

It is necessary to provide protection against injury from contact or close proximity to parts of the machine and (or) equipment, or the use of substances that have a high or low temperature.

The metal surfaces of hand tools, metal handles and valves of machines and (or) equipment must be covered with heat - insulating material. The temperature of metal surfaces of equipment in the presence of a possible (unintentional) contacting the open area of skin with them should be in the range of acceptable values.

51. The machine and (or) equipment must be designed (projected) so that there is no danger of fire or overheating caused directly by the machine and (or) equipment, gases, liquids, dust, vapors or other substances produced or used by the machine and (or) equipment.

The machine and (or) equipment must be designed (projected) so that there is no unacceptable risk from an explosion caused directly by the machine and (or) equipment, gases, liquids, dust,

vapors or other substances produced or used by the machine and (or) equipment, for which it is necessary:

avoid dangerous concentration of explosive substances;

to conduct continuous automatic control over the concentration of explosive substances;

prevent the ignition of a potentially explosive atmosphere; minimize the consequences of an explosion.

52. When developing (designing) machines and (or) equipment, it is necessary to ensure the parameters of noise, infrasound, air and contact ultrasound, which do not exceed the permissible values for the operation of machines and (or) equipment.

53. The manual (instruction) for operation shall establish the parameters of the noise of the machine and (or) equipment and the parameters of uncertainty.

54. When developing (designing) machines and (or) equipment, it is necessary to ensure the permissible parameters of the vibration produced by the personnel.

The design of the machine and (or) equipment must provide for an admissible risk caused by the impact of the produced vibration on the personnel.

55. For manual machines and machines with manual control, as well as machines with a working space for staff in the user manual (instructions) for operation must be specified complete the rms value

of corrected vibration acceleration acting on the staff, and the parameters of the uncertainty assessment of the value.

56. The machine and (or) equipment must be designed (projected) and manufactured so that ionizing radiation does not create a hazard.

57. When using laser equipment, the following should be done:

to prevent accidental radiation;

provided protection against direct, reflected, scattered and secondary radiation;

ensured that there is no danger from optical equipment for observing or tuning laser equipment.

58. When developing (designing) machines and (or) equipment, it is necessary to take measures to protect personnel from the adverse effects of non-ionizing radiation, static electric, permanent magnetic fields, electromagnetic fields of industrial frequency, electromagnetic radiation of radio frequency and optical ranges.

59. Gases, liquids, dust, vapors and other wastes that emit machines and (or) equipment during operation should not be a source of danger to human life and health and the environment.

In the presence of such a hazard, the machine and (or) equipment should be equipped with devices for the collection and (or) removal of these substances, which should be located as close as possible to the source of emission, as well as devices for continuous automatic control of emissions.

60. The machine and (or) equipment must be equipped with means to prevent the closure of personnel inside the machine and (or) equipment, if this is not possible - signaling devices for calling for help.

61. Parts of the machine and (or) equipment, which may be the staff, it is necessary to develop (design) so as to prevent slipping, tripping or falling staff on them or with them.

62. Places of machine and (or) equipment maintenance should be located outside the hazardous areas.

Maintenance should, if possible, be carried out when the machine and (or) equipment is stopped . If for technical reasons, such conditions are not can be observed, it is necessary to ensure that the technical service has been safe.

63. It is necessary to provide the opportunity to install on machines and (or) equipment diagnostic equipment to detect faults.

It is necessary to provide the ability to quickly and safely remove and replace those units of machines and (or) equipment that require frequent replacement (especially if they need to be replaced during operation or they are subject to wear or aging, which may entail a hazard). To carry out these works using tools and measuring devices in accordance with the operating manual (instruction), it is necessary to provide safe access to such elements.

64. It is necessary to ensure the availability of resources (stairs, picture, passages , etc.) to secure access to the working place, to all areas of the technical service.

65. Machines and (or) equipment must be equipped with means for disconnecting from all sources of energy, which are identified by color and size. It is necessary to ensure that they can be blocked if their operation could endanger persons in the area affected by the hazard.

It must be possible to block the means of disconnecting the power supply in the event that personnel, when they are in any place to which they have access, can not check whether the power supply is disconnected .

It must be possible to safely discharge (dissipate) any energy remaining in the circuits of the machine and (or) equipment after a power outage. If necessary, some circuits can remain connected to energy sources to protect information, emergency lighting. In this case , measures must be taken to ensure the safety of personnel.

66. The machine and (or) equipment should be designed (projected) so that the need for personnel intervention was limited, if this is not provided for by the manual (instruction) for operation.

If personnel intervention cannot be avoided, it must be safe.

67. It is necessary to provide for the possibility of cleaning the internal parts of machines and (or) equipment containing hazardous elements, without entering the machine and (or) equipment, as well as unlocking from the outside. Ensure that cleaning is carried out safely.

68. The information required to operate the machine and (or) equipment must be clearly understood by the personnel. The information should not be redundant in order not to overload the personnel during operation.

69. In case if the staff can be exposed to danger due to failures in the operation, the machine and (or) equipment must be equipped with devices that feed a warning acoustic or light signal.

The signals given by the warning devices of machines and (or) equipment must be unambiguously perceived. Personnel should be able to check the operation of warning devices.

70. In case if despite to taken measures there a danger the machine and (or) equipment must be equipped with warning labels (signs), which must be clear and drafted in Russian and in the state (s) language (s) of the Member State of the Customs Union if there are relevant requirements in the legislation (s) of the state (s) - a member (s) of the Customs Union.

Appendix No. 2

to the technical regulations of the Customs Union
"On the safety of machinery and equipment"
(TR CU 010/2011)

ADDITIONAL SAFETY REQUIREMENTS FOR CERTAIN CATEGORIES OF MACHINES AND EQUIPMENT.

Agricultural and other self-propelled and mobile machines

1. Machines, the occurrence of hazards from which is associated with their movement, must additionally comply with the safety requirements specified in this annex.

2. Visibility to the working place of the operator should be sufficient to ensure the safety of the operator and located in a hazardous area personnel in the use of the machine and its working bodies on purpose. Where necessary , the means necessary to eliminate the hazards caused by insufficient visibility shall be provided .

3. The operator, being at the workplace, should be able to bring into action authorities control necessary for operation of the machine. The only exceptions are those types of work that, in order to ensure safety, must be performed using controls located outside the operator's workplace .

4. The steering system of wheeled vehicles must be designed and manufactured in such a way as to reduce the effort on the steering wheel or control levers arising from external influences on the steered wheels.

5. The control for the differential lock must be designed and installed in such a way that when the machine is moving, it was possible to unlock the differential.

If the machine to perform production processes to perform of specified functions is equipped with equipment exceeding its dimensions

(for example, stabilizers, arrows , and so on. d.), the operator must have the opportunity before the start of the movement to ensure in fact that this equipment is in a given position, not creating a hazard when moving the machine.

6. In the process of starting the engine , the possibility of arbitrary movement of the machine must be excluded .

Machines must comply with the requirements for the processes of speed reduction, stopping, braking and keeping stationary in order to ensure safety in the operating modes provided for by the operating documents , the load level , and the speed of movement.

7. The operator with the help of the working body of the management should have the opportunity to make slowing down or complete stop the self-propelled machine. If it is required for safety, in case of failure of the system management or violation of the process of power supply, the machine must be equipped with an emergency device reducing the speed of movement or stop a fully independent and easily accessible body control.

If required for safety reasons, machines should be equipped with a parking brake to ensure complete immobility of the machine.

8. In the event of the need for a remote control machine or system of machines , each unit control must clearly be identified with the machine, for which it is intended.

The remote control system must be designed and manufactured in such a way that it can only control the corresponding machine and (or) certain operations.

A machine equipped with a remote control system must be designed and manufactured in such a way that it only responds to signals from a specific control unit .

9. The movement of the machine, controlled by a nearby operator, should be possible only as a result of continuous influence of the operator on the relevant controls. In the process of starting the engine, the possibility of arbitrary movement of the machine must be excluded .

10. The machine control system that manages a number of running operator, should be designed so as to reduce to the minimum all the risks associated with the random motion of the machine in the direction of the operator.

The speed of movement of the machine should be comparable with the speed of movement of a number of walking operator.

If the machine is equipped with a rotating tool, any possibility of its inclusion in the process of movement of the machine back swing should be excluded, except when the car is driven directly by the data rotating tool. In the latter case, the reverse speed of the machine should not pose a hazard to the operator.

Refusal source energy steering control (if any) does not have to interfere with the management machine on during the entire period of time required for its complete stop.

11. The machine must be designed, manufactured and, if necessary, installed on the chassis in such a way that uncontrolled oscillations of its center of gravity arising during movement do not affect the stability of the machine and do not create excessive loads on its structure.

Self-propelled machine must be designed and manufactured in such a manner that a prescribed operating conditions maintained its stability.

12. If, under the intended operating conditions, there is a risk of overturning the self-propelled machine, it must be equipped with a rollover protection device . When the machine is overturned, the design of this device must provide the operator in the machine with an appropriate amount of deformation limitation .

Seat cars must have an appropriate structure , or be equipped with the holding system, allowing the operator to be held on its site without restrictions necessary actions for managing the machine.

13. If in dependence on the conditions of operation of self-propelled machines there a risk of falling on her various subjects, then it must be equipped with a device to protect against falling objects.

In the event of falling objects, the design of this device must provide the operator in the machine with an appropriate amount of deformation limitation .

14. Machines that are intended to be towed, or are themselves towed, must be equipped with a towing device designed, manufactured and located so as to ensure easy and safe connection or disconnection and to prevent accidental disconnection during operation.

15. Semi -trailed , semi-mounted machines must be equipped with stands with supporting surfaces appropriate to the load and ground conditions .

16. Removable mechanical device selection power, linking self-propelled machinery (tractors) with the first rigid supports towed vehicles must be designed and manufactured in such a way that any mobile in time functioning part was protected on all its length.

The power take -off shaft of a self - propelled machine (tractor), to which a removable mechanical power take-off is connected, must be protected by a special protective guard firmly attached to the self-propelled machine (tractor) or by any other device that provides an equivalent level of protection.

To provide access to removable devices, this power take-off protective guard must have the possibility of opening. When installing the above device, there must be sufficient space to

do not allow in time the movement of self-propelled machinery (tractor) damage to protective fences cardan shaft.

The power receiving shaft of the towed machine must be enclosed in a protective casing fixed on it.

Limiters torque moment or overrunning clutch can be attached to the universal hinge of the PTO shaft only with the part of the towed car. Detachable mechanical device selection power must have appropriate manner deposited on it marking.

17. All towed machines, for the operation of which a removable mechanical power take -off device is required , which connects them to self-propelled machines (tractors), must have such a system of its connection, which, if necessary, the disconnection of machines would protect the device itself and its protective fences from damage arising from as a result of their contact with the ground or with machine parts .

The outer parts of guards must be designed, manufactured and positioned so that they can not rotate simultaneously with the removable mechanical power take-off. The safety guard must cover the propeller shaft until the end of the forks of the inner pivots (in the case of simple universal joints) and at least to the middle of the outer joint in the case of wide-angle universal joints.

If the means of access to the working places in the machine are arranged near a removable mechanical device selection power, then they should be designed and manufactured in such a way to exclude the possibility of the use of protective enclosures driveshaft as steps for excluding the cases when it is provided by design.

18. Designated install rechargeable batteries must be designed and constructed so as to eliminate the danger caused by the hit of the electrolyte operator in case of rollover of the machine and avoid the accumulation of vapors of electrolyte on the working place of the operator.

The machine must be designed and constructed so that the rechargeable battery can be disconnected with the help of a readily available and specifically intended for this purpose the device (circuit breaker).

19. In dependence on the types of hazards machine must be equipped with fire extinguishers located in easily accessible places, and (or) integrated systems, fire extinguishing.

20. The operator must be protected from the risk of exposure to hazardous substances if the main function of the machine is to spray them.

21. Machines equipped with places for operators must be equipped with an appropriate device for transmitting signals from the towed vehicle to the towed vehicle (if necessary).

22. Workplace operators of agricultural machines, which are in the time of operation of the unit outside the cab of the energy resources should be protected from the abandonment of land, technological material, dirt.

23. Folding elements designed to reduce the transport width and (or) height must have mechanical or other means to keep them in the transport position.

24. Self-propelled vehicles and power equipment intended for operation in mountainous conditions must be equipped with indicators of the maximum permissible roll.

25. The safety requirements established for mounted, semi-mounted, trailed, semi-trailed and mounted agricultural machines are assessed during testing as part of a machine-tractor unit from a mounted, semi-mounted, trailed or mounted machine and an energy device (tractor).

26. If the self-propelled machines and power tools are designed for application in hazardous environment or own machines and power tools are the cause of the danger surrounding environment, it should be

Appropriate devices are provided to ensure the normal operation of the operator and to protect him from foreseeable hazards.

27. If the equipment working places of the operator cab, it should allow the operator to quickly leave the car and have at least one emergency exit.

28 of mounted with a power tool of the machine, closing in the transport position and warning devices power tools, as well as self-propelled machinery must be equipped with its own external lighting devices.

Hoisting machines

1. Hoisting machines must be designed and manufactured in such a way that in the course of their operation (in operating and non-operating states), but also on the other stages of the life cycle (manufacture, assembly, testing, disassembly, etc.) they retained the claimed geometrical shape, strength, rigidity, resilience, abrasion - and corrosion resistance, and also - poise (the latter only for certain types of arrows gantry cranes).

The strength, rigidity, stability and balance of the calculated elements of the metal structure, as well as the corresponding safety indicators of the mechanisms of the hoisting machine, taking into account the established operating modes, must be confirmed by calculation.

2. Hoisting machines, moving on a rail path must be equipped with special devices to prevent the risk of their descent from the rail tracks, as well as unauthorized movement under the influence of wind loads.

If, despite to presence of said devices, the risk of descent with rail paths exist, for example, because of possible seismic impact or

breakage of the rail tracks themselves, it is necessary to use additional devices to prevent a possible fall of the equipment.

3. Hoisting machines must be designed and manufactured taking into account the envisaged operating conditions, operating time and operating mode of the mechanisms. Mechanisms for lifting load-lifting machines, intended for maintenance of intensive technological processes must be equipped with registrars developments.

Registrars operating time (with limiters cargo moment) must be fitted and all free - standing lifting cranes jib type.

Materials used for the manufacture of lifting equipment shall be selected with taking into account the envisaged service conditions (operating and inoperative states) such as a temperature, aggressiveness medium explosive fire risk environments and the like The quality of the materials must be confirmed by the manufacturer's certificates .

4. Blocks and drums for steel ropes must have a diameter not lower than that determined by the classification group of the mechanism in which they are installed. The groove of the block and the grooves on the drum must correspond to the diameter of the installed steel rope.

The design force for the selection of a steel rope is determined by the design of the mechanism , taking into account the multiplicity of the chain hoist. The minimum utilization factor (safety factor) of a steel rope must not be lower than the one determined by the classification group of the mechanism in which the rope is installed. Minimum utilization factor (safety factor) of steel rope to each separate branch slings must be not less than 6, with the proviso maximum angle between the branches mnogovetvevyh slings not more than 90 °. The calculated load for each of the branches mnogovetvevyh slings receiving from the condition that the load is suspended by three or fewer number of branches.

Steel ropes intended directly for lifting or holding the load (except for ropeway ropes and ring slings) should not have any splices, except for sealing the ends of the ropes.

The quality of the termination of the ends and the method of fastening the steel ropes are selected to ensure an appropriate level of safety for the mechanism and the hoisting machine as a whole.

5. The dimensions of the sprockets should be selected taking into account the classification group of the mechanism and the chain pitch.

The design force for choosing a chain is determined by the design of the mechanism, taking into account the multiplicity of the chain hoist. The minimum utilization factor (safety factor) of the chain must not be lower than that determined by the classification group of the mechanism in which the chain is installed.

The method of fastening and splicing of the ring chain is selected to ensure an appropriate level of safety for the mechanism and the hoisting machine as a whole.

The minimum utilization ratio (ratio of stock) circuit for each separate branch slings must be not less than 4, with the proviso maximum angle between the branches mnogovetvevyh slings not more than 90° . The calculated load for each of the branches mnogovetvevyh slings receiving from the condition that the load is suspended by three or fewer number of branches.

When textile ropes and belts are used in the construction of slings, the minimum utilization factor (safety factor) of textile rope or tape for each individual branch of the slings must be at least 7, provided the maximum angle between the branches of multi- branch slings is not more than 90° .

Splicing (stitching) of textile ropes and belts should not lead to a decrease in the specified minimum utilization rate of each separate branch of the sling.

6. The devices are intended for the implementation of control over the movement, must operate so that the hoisting machine, on which they are installed, are safe.

Hoisting machine must be designed, manufactured or equipped with special devices which allow to limit the amplitude of movements of the respective components of the machine to set limits. If necessary, a warning signal should be given at the start of operation of these devices .

If the stand-alone and moving by rail lifting machine may accidentally be in close proximity to each from each other, causing

a risk of collision, then they should be equipped with systems that allow to avoid the occurrence of the risk.

Lifting machines must be designed and constructed so as to not allow the dangerous displacement or the free and uncontrolled drop placed on their goods, even if the reason for their occurrence is full or temporary shutdown of energy or stop the machine operator.

When normal conditions of operation of the process of lowering the load by the use of only system of frictional brakes do not have to be the only possible way, with the exception of those vehicles that can not function otherwise.

Cargo restraint system must be designed and constructed so as to exclude any possibility of accidental fall of goods.

7. Operating position hoisting machine should be such as to ensure the maximum possible overview of the trajectory of movement of its moving parts in order to avoid possible collisions with persons, equipment or other vehicles traveling in the same time in close proximity and creating at this particular danger.

Hoisting machines, traveling by rail, the path must be designed and manufactured in such a way to protect people from injury, the occurrence of which is associated with the goods, the transport platforms or counterweights (if available). If necessary, to fulfill this requirement, access to the area of movement of the cargo under normal operating conditions should be excluded.

If, during control or maintenance, there is a risk of crushing between any fixed element and the transport platform of parts of the body of a person below or above it, it is necessary to provide sufficient free space in the form of a shelter or the installation of mechanical devices that block the movement of the transport platform.

8. The movement of the transport platform of the hoisting machine serving fixed platforms must be carried out along rigid guides. Lifting system with the scissors-type are also considered in a system with a rigid guide.

If people have access to the transport platform, the lifting machine should be designed and manufactured in such a way to ensure a stationary state transport platform with access, in particular for loading or unloading.

The hoisting machine must be designed and built so that the difference between the levels of the transport platform and the landing platform it serves does not present a risk of tripping or falling.

9. If there is a risk associated with the fall of the load from the transport platform, the hoisting machine must be designed and manufactured so as to exclude the occurrence of this risk.

10. In places of embarkation / disembarkation (loading / unloading), the risk of people coming into contact with a moving platform or other parts of the hoisting machine in motion must be excluded.

If there is a risk associated with the possibility of people falling in the movement area of the transport platform at the time of its absence at the landing (loading and unloading) site, protective fences must be provided to exclude the possibility of this risk. These safety guards must not open in the direction of the movement area of the transport platform. They must have a safety device to lock, positive action in dependence on the occupied transport platform position and prevents the dangerous transport platform until the guards are closed and locked, and the opening of the protective fence to stop the transport platform at the appropriate landing (loading and unloading) area.

11. To confirm the performance of hoisting machines, they must periodically undergo static and dynamic cargo tests with a load of 1.25 rated carrying capacity (static tests) and 1.1 rated carrying capacity (dynamic tests). The technique of freight testing should be set out in the Guidelines on the operation of lifting equipment.

Newly manufactured hoisting machines (free- standing jib-type cranes) are additionally subjected to tests for overall stability against overturning. The technique of testing should be set out in a manual operating hoisting machine.

12. Control devices for hoisting machines, manually operated, must be with automatic return to its original position. However, when controlling part or all of the movement process, in which there is completely no threat of collision of goods or machines, these control devices can be replaced by special devices that allow automatic stopping at predetermined positions without using a device with an automatic return to its original position.

Rope transport platforms, traction devices must be supported by counterweights or a device that allows you to control the tension.

13. Each piece hoisting chain slings or rope that is not an assembly unit, must be deposited on the marking it, as in the cases when this is not possible, - a ring plate or integral with the indication of the name and address of the manufacturer.

Lifting chains, steel ropes, textile ropes and belts must have a certificate containing the following information:

- name and address of the manufacturer;
- brand of chain, wire rope, textile rope or tape, including nominal size, design and material data ;
- the test method used ;
- minimum breaking (or breaking) load.

The form of this certificate is approved by the Commission of the Customs Union.

14. In all lifting devices must indicate the designation of the material for which they are intended (if this information is needed for safe use) and maximum load capacity.

For lifting devices, applying markings on that is not possible, specified above information must be applied to the plate, is securely attached to them, or be located in a place where there is the least risk of its abrasion (eg, in the result of wear and tear) , or the provision of a negative impact on the strength level lifting devices, and must be clearly distinguishable.

15. Each lifting machine must be marked with its maximum rated lifting capacity, and for jib- type cranes - an additional plate with a load characteristic is installed .

On lifting machinery intended exclusively for lifting loads, equipped with transport platforms, providing for the possibility of access to it people should be well coated with a warning,

prohibiting the rise of people. This warning should be well seen from any place, from which you can access on the transport platform, and stored in during the whole period of car service.

16. Mechanisms for lifting machine should be equipped with brakes normally closed type (except for the brake mechanism of rotation, which can be normally open).

Coefficient reserve braking mechanism for lifting the lifting machine is assigned with considering group classification mechanism, but not below 1.5.

Mechanisms for lifting hoisting machines designed for the lifting and transportation of dangerous goods shall be equipped with two brakes, with this safety factors inhibition of each prescribed basis of ensuring a predetermined security.

17. Lifting bodies lifting machinery must comply with the requirements specified provide security and prevent spontaneous disengagement, fall or rash cargo at the time of its lifting and transport, in that number, when failure management.

Load hooks, with the exception of hooks of special design, must be mounted on thrust rolling bearings .

Attaching the hook on the suspension should fully exclude its unauthorized disconnection from the suspension at the time of operation.

Each hook of the hoisting machine must be equipped with a latch that prevents the sling, ring or eyelet from accidentally falling out of the hook mouth during lifting and transportation of the load.

18. The electrical equipment and control system of the hoisting machine must comply with the requirements for ensuring the specified safety and meet the requirements of the classification groups of the mechanisms installed on it .

The control system of the hoisting machine must at least be equipped with zero and current protection, to exclude the possibility

unauthorized start drive mechanisms, and also possibility of destruction personnel electric shock.

19. The hydraulic equipment of the lifting machine must meet the requirements for ensuring the specified safety, exclude damage to the elements of the hydraulic drive in contact with the elements of the metal structure and exclude spontaneous lowering of the load (boom) in emergency situations.

Each hydraulic circuit must be prevented from exceeding the pressure relief valve adjusted to work with a nominal load, equal to the nameplate load capacity and sealed.

20. Hoisting machines must be equipped with the necessary safety devices : limiters (for example, limiters of working movements, necessary locks of doors to enter the cab, etc.) and indicators (for example, light indication of the presence of supply voltage, indication of weighing devices, sound signaling of the start of lifting and transportation of goods , etc.). The list and the number of necessary constraints and indexes hoisting machine is selected on the basis of its structural characteristics, the degree of responsibility and ensure the required level of security.

21. Apparatus control hoisting machine must be made and installed in such a manner that the control was convenient and not difficult observation of lifting body and the load.

The direction of movement of the handles and levers should, if possible, correspond to the direction of movement of the mechanisms.

22. The internal dimensions of the control cabs for the hoisting machine must meet the ergonomics and safety requirements established for this equipment.

23. Easily accessible, located in the movement of the lifting machine must be closed durable removable barriers, permitting inspection and maintenance mechanisms.

Uninsulated live parts of electrical equipment of hoisting machines located in places, not excluding the possibility of a touch to it, must be protected.

24. Galleries, platforms and ladders of hoisting machines must ensure the specified strength, and their dimensions must comply with the established safety requirements .

25. Welded joints of calculated elements of metal structures of hoisting machines must ensure their safety.

26. A rail track (for lifting machines moving on a rail track) must be designed and manufactured so that during operation (in working and non-working states), as well as at other stages of the life cycle of a lifting machine (installation, testing, etc. .) he kept asserted strength, stiffness, resilience, fatigue, abrasion - and corrosion resistance.

Equipment for handling and processing of

food products, manufacturing cosmetic agents or pharmaceutical preparations

1. The materials in contact with food products, cosmetic agents or pharmaceutical preparations should be suitable for the intended application. Surface materials and their coatings must be resistant to the contacting media and provide the possibility of cleaning and of disinfection without destruction, formation of cracks, chipping, flaking or abrasion.

2. The surfaces of equipment in contact with food, cosmetic agents or the pharmaceutical preparations must be smooth, without protrusions or recesses, contributing to the accumulation of product.

The equipment must be easy to give in to cleaning and disinfection (if necessary when the preliminary removal of easily are shot parts).

The inner surfaces of the equipment should have a radius mating, allowing them to be thoroughly cleaned.

3. It is necessary that there be the possibility of complete removal of the equipment fluids, gases and aerosols, allocated to products, cosmetic agents or pharmaceutical preparations, and also formed in a result of the cleaning and disinfection.

4. Equipment must be designed and constructed so as to prevent the ingress into it of extraneous substances or pests (e.g., insects) and the accumulation of any organic material in inaccessible for cleaning places.

5. The equipment must be designed and manufactured in such a way as to exclude the possibility of contact of auxiliary substances hazardous to health (for example, lubricants) with food, cosmetics or pharmaceuticals.

6. The guide (manual) on the operation of the equipment should contain information regarding the tools and techniques recommended for carrying out cleaning, disinfection and rinsing.

Appendix No. 3

to the technical regulations of the Customs Union
"On the safety of machinery and equipment"
(TR CU 010/2011)

**List of objects of technical regulation subject to confirmation
of compliance with the requirements of technical regulations
Customs Union "On the safety of machinery and equipment"
in the form of certification**

1. Woodworking household machines .
2. Snow and swamp - going vehicles , snowmobiles and trailers to them.

3. The equipment garage for motor means and trailers.
4. Agricultural machines .
5. Means of small mechanization gardening and forestry use of mechanized, in fact those electrical.
6. Machines for livestock, poultry and forage production.
7. Tool mechanized, in fact including electric.
8. Technological equipment for logging, timber yard and timber floating:
 - petrol saws ;
 - electric chain saws .
9. Technological equipment for trade enterprises , public catering and catering units.
10. Equipment for overburden and cleaning works and support of mine workings:
 - Harvesters treatment;
 - mechanized complexes ;
 - mechanized supports for longwalls;
 - pneumatic tool.
11. Equipment for excavation of mine workings:
 - Harvesters sinking of coal and rock;
 - metal lining for preparatory workings.
12. The equipment of stem liftings and mine transport:
 - Conveyors for mines scraping;
 - Conveyors mine tape;
 - mine and mining winches .
13. Equipment for drilling blast holes and wells, equipment for charging and stemming blast holes:
 - pneumatic perforators (drill hammers);
 - pneumatic hammers;
 - rigs for drilling wells in the mining industry;

- drilling rigs.

14. Equipment for ventilation and dust suppression:

- mine fans ;
- means of dust collection and dust suppression;
- oxygen compressors .

15. Hoisting-and-transport equipment, hoisting cranes .

**List of objects of technical regulation subject to confirmation
of compliance with the requirements of technical regulations
Of the Customs Union "On the safety of machinery and equipment" in the form
of a declaration of conformity**

1. Turbines and gas turbine installations .

2. Draft machines .

3. Crushers.

4. Diesel generators.

5. Attachments for lifting operations.

6. Conveyors.

7. hoists electric wire rope and chain.

8. Industrial floor trackless transport .

9. Chemical equipment , oil and gas processing.

10. Equipment for the processing of polymeric materials.

11. Equipment pumps (pumps, aggregates and setting pumping).

12. Cryogenic, compressor, refrigeration, autogenous, gas

cleaning equipment :

- air separation and rare gases installations ;
- equipment for the preparation and purification of gases and liquids, equipment for heat -

and mass transfer cryogenic systems and installations;

- compressors (air and gas driven);
- refrigeration units .

13. Equipment for gas-flame processing of metals and metallization of products.

14. Gas- cleaning and dust-collecting equipment .

15. Pulp and paper equipment .

16. Paper-making equipment .

17. Oilfield equipment , drilling geological exploration.

18. The

equipment technology and equipment for applying paint coatings on engineering products.

19. Equipment for liquid ammonia.

20. Equipment for the preparation and purification of drinking water.

21. Metal-working machines .

22. Press-forging machines .

23. Woodworking equipment (except for woodworking household tanks).

24. Technological equipment for foundry .

25. Equipment for welding and thermal spraying.

26. Industrial tractors .

27. Forklift trucks.

28. Bicycles (except for children).

29. Machines for earthmoving, land reclamation , development and maintenance of quarries.

30. Road machines , equipment for the preparation of building mixtures.

31. Construction equipment and machines .

32. Equipment for the building materials industry .

33. Technological equipment for logging, timber yards and timber rafting (except for gasoline- powered and chain electric saws).
34. Technological equipment for the peat industry.
35. The equipment for laundries , industrial.
36. Equipment for dry cleaning and dyeing of clothes and household products.
37. Machines and equipment for public utilities .
38. Industrial fans .
39. Industrial air conditioners .
40. Air heaters and air coolers.
41. Technological equipment for light industry.
42. Technological equipment for the textile industry.
43. Technological equipment for the production of chemical fibers, fiberglass and asbestos threads.
44. Technological equipment for food, meat and dairy and fish industries.
45. Technological equipment for flour and cereals, feed and elevator industries.
46. Technological equipment for trade enterprises , public catering and catering units.
47. Printing equipment .
48. Technological equipment for glass, porcelain, earthenware and cable industries.
49. Heating boilers operating on liquid and solid fuels.
50. Gas and combined burners (except for block), liquid fuel, built-in equipment intended for use in technological processes at industrial enterprises.
51. Water heating and heating devices operating on liquid and solid fuels.
52. Cutters:
 - cutters with multifaceted carbide inserts;
 - cutting and slotting cutters made of high-speed steel;
 - carbide cutters .
53. Incisors:

- cutters turning with brazed carbide plates
- cutters turning with multi-faceted carbide plates.

54. Saw disk with carbide inserts for machining of wood materials.

55. Bench and assembly tool with insulating handles for work in electrical installations with voltage up to 1000 V.

56. Mills Shaft mounted:

- mills for wood Shaft mounted with relief teeth;
- wood-cutting shell -type cutters with knives made of steel or hard alloy;
- mounted cylindrical cutters assembled.

57. Tools made of natural and synthetic diamonds:

- circles diamond grinding;
- circles diamond cutting.

58. Tool made of synthetic superhard materials based on boron nitride (tool from elbor):

- wheels grinding.

59. Industrial pipeline fittings .

60. Abrasive tools, abrasive materials :

- circles grinding, in fact those for handheld machines;

- cutting circles ;
- polishing discs ;
- circles grinding flap;
- endless grinding belts ;
- drives grinding fiber.