Customs Union Commission
Decision
of October 18, 2011 N 825

On the adoption of Technical Regulations Customs Union "SAFETY EQUIPMENT FOR USE IN HAZARDOUS ENVIRONMENTS"

(Ver. Decisions Board of Eurasian Economic Commission of 04.12.2012 N 250)

In accordance with Article 13 of the Agreement on common principles and rules of technical regulation in the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation on 18 November 2010, the Commission of the Customs Union (hereinafter - the Commission) has decided:

1. Adopt technical regulations of the Customs Union "On the safety equipment for working in hazardous environments" (TR TC 012/2011) (attached).

2. Approve:

2.1. The list of standards as a result of which, on a voluntary basis, compliance with the technical regulations of the Customs Union "On the safety equipment for working in hazardous environments" (TR TC 012/2011) (attached);

2.2. The list of standards containing rules and methods (tests) and measurements, including the rules of sampling necessary for the application and execution of the technical regulations of the Customs Union "On the safety equipment for working in hazardous environments" (TR TC 012/2011) and the implementation of assessment (confirmation) of products (attached).

3. Set:

3.1. Technical Regulations of the Customs Union "On the safety equipment for working in hazardous environments" (hereinafter - the Technical Regulations) come into force on 15 February 2013;

3.2. Appraisal Documents (confirmation) of compliance with mandatory requirements of the regulations of the Customs Union or law of the State - a member of the Customs Union, issued or adopted for the products to which the technical regulations of the Technical Regulations (hereinafter - the product) before the effective date of the Technical Regulations are valid until the end of their actions, but no later than 15 March 2015. These documents, issued or adopted prior to the date of publication of this Decision shall be valid until the end of their validity.

From the date of entry into force of the Technical Regulations issuance or acceptance evaluation documents (confirmation) of conformity required requirements previously established regulations of the Customs Union, or the law of the state - a member of the Customs Union is excluded

3.3. Until March 15, 2015 allowed the production and introduction of products in accordance with regulatory requirements, the previously established regulations of the Customs Union, or the law of

the state - a member of the Customs Union, in the presence of evaluation documents (confirmation) conformity to the specified mandatory requirements issued or adopted before the effective date of the Technical Regulations.

Said products are marked national conformity (a mark of market) in accordance with the laws of the state - a member of the Customs Union.

Labeling of such products with a mark of one product on the market of - the Customs Union is not allowed;

3.3.1. Until November 15, 2013 allowed the production and issuance of the customs territory of the Customs Union of products that are not subject to the entry into force of the Technical Regulations mandatory assessment (confirmation) mandatory requirements established by normative legal acts of the Customs Union, or the law of the state - a member of the Customs Union Undocumented mandatory assessment(Confirmation) and unmarked national conformity (a mark of market)

(Ver. Decisions Board of Eurasian Economic Commission of 04.12.2012 N 250)

3.4. Handling products released into circulation during the period of evaluation documents (confirmation) specified in subparagraph 3.2 of this Solutions and products referred to in paragraph 3.3.1 of this Decision shall be allowed during the life of products, established in accordance with the laws of the state - a member of the Customs Union.

(Ver. Decisions of the Board of the Eurasian Economic Commission of 04.12.2012 N 250)

4. Secretariat of the Commission with the Parties to prepare a draft plan of action necessary for the implementation of technical regulations and, within three months from the date of entry into force of this Decision provide a submission to the Commission for approval in due course.

5. Russian Party with Parties on the basis of the monitoring results of the application of standards to ensure the preparation of proposals to update the lists standards referred to in paragraph 2 above, and present at least once a year from the date of entry into force of technical regulations in the Secretariat of the Commission for approval by the Commission in the prescribed manner.

6. Parties:

6.1. to the date of entry into force of the Technical Regulations define the state control (supervision), responsible for the implementation of state control (supervision) over compliance with the Technical Regulations, and to inform the Commission thereof;

6.2. ensure that the state control (supervision) over compliance with the Technical Regulations of the date of its entry into force. Members of the Commission of the Customs Union:

From the Republic of Belarus	From the Republic of Kazakhstan	From the Russian Federation
S.RUMAS	U.Shukeyev	IGOR SHUVALOV

The list of standards, Rules for tests and measurement methods, including the right of bidders to those required for application and enforcement requirements of technical regulations customs union "SAFETY EQUIPMENT EXPLOSION PROTECTION" (TR TC 012/2011) and assessment of the PRODUCT

N p / p	**Reaffirms the demands of technical regulations**	**Symbols and national (inter-state) standard**
1	Article 4, paragraph 3	GOST 12.1.011-78 "Occupational safety standards system. Explosive mixtures. Classification and test methods";
		GOST 12.2.059-81. "Occupational safety standards system. Devices electrical explosion for miner. Safety";
		GOST 22782.3-77. "Electrical apparatus with a special type of protection. Specifications and test methods ";
		GOST 51330.0-99 (IEC 60079-0-98). "Electrical apparatus. Part 0. General requirements";
		GOST 51330.1-99 (IEC 60079-1-98). "Electrical apparatus. Part 1. Explosion protection type" flameproof enclosure ";
		GOST 51330.2-99 (IEC 60070-1A-75). "Electrical apparatus. Part 1. Explosion protection type" flameproof enclosure ". Appendix 1. Appendix D. Determination of the maximum experimental safe gap".;
		GOST R 51330.3-99. "Electrical apparatus. Part 2. Filling or purging shell pressurized p";.
		GOST 51330.4-99 (IEC 60079-3-90). "Electrical apparatus. Part 3. Spark test apparatus for testing electrical circuits intrinsically safe";
		GOST 51330.5-99 (IEC 60079-4-75). "Electrical apparatus. Part 4. Determination of ignition temperature";
		GOST 51330.6-99 (IEC 60079-5-97). "Electrical apparatus. Part 5. Powder filling q";
		GOST 51330.7-99 (IEC 60079-6-95). "Electrical apparatus. Part 6. Oil immersion o";
		GOST R 51330.8-99. "Electrical apparatus. Part 7. Protection type e";

		GOST 51330.10-99 (IEC 60079-11-99). "Electrical apparatus. Part 11. Intrinsic safety i";
		GOST 51330.12-99 (IEC 60079-13-82). "Electrical apparatus. Part 13. Design and operation of buildings that are protected pressurized";
		GOST 51330.14-99. "Electrical apparatus. Part 15. Protection type n";
		GOST 51330.15-99 (IEC 60079-16-90). "Electrical apparatus. Part 16. Forced ventilation to protect the premises in which the analyzers set";
		GOST 51330.16-99 (IEC 60079-17-96). "Electrical apparatus. Part 17. Inspection and maintenance of electrical installations in hazardous areas (other than mines)";
		GOST 51330.17-99 (IEC 60079-18-92). "Electrical apparatus. Part 18. Explosion protection type" Encapsulation (m) ";
		GOST 51330.18-99 (IEC 60079-19-93). "Electrical apparatus. Part 19.Repair and inspection of electrical equipment used in explosive gas atmospheres (other than mines or applications involving the processing and production of explosives) ";
		GOST 51330.19-99 (IEC 60079-20-96). "Electrical apparatus. Part 20. Data on combustible gases and vapors, relating to the operation of electrical equipment";
		GOST 51330.20-99. "Electrical mine. Isolation, creepage and clearance distances. Requirements and test methods";
		GOST R 52065-2007 (IEC 62013-1:2005). "Head lamps for use in mines, dangerous on gas. Part 1. General requirements and test methods related to the explosion";
		GOST 52350.1.1-2006 (IEC 60079-11:2002). "Electrical apparatus for explosive gas atmospheres. Part 1-1. Explosion proof" D ". Test method for determining the maximum experimental safe gap";
		GOST R 52350.5-2006 (IEC 600795:2007). "Electrical apparatus for explosive gas atmospheres. Part 5. Powder filling "q";
		GOST R 52350.6-2006 (IEC 600796:2007). "Electrical apparatus for explosive gas atmospheres. Part 6. Oil immersion" o ";
		GOST R 52350.7-2005 (IEC 600797:2006). "Electrical apparatus for explosive gas atmospheres. Part 7.

		Increased protection type" e ";
		GOST R 52350.19-2007 (IEC 6007919:2006). "Explosive atmospheres. Part 19. Repair, check and repair of electrical equipment";
		GOST R 52350.26-2007 (IEC 6007926:2006). "Explosive atmospheres. Part 26. Equipment with a level of protection equipment Ga ";
		GOST R 52350.28-2007 (IEC 6007928:2006). "Explosive atmospheres. Part 28. Protection equipment and transmission systems using optical radiation ";
		GOST 52350.29.1-2010 "Explosive atmospheres. Part 29-1. Analyzers. General technical requirements and test methods for combustible gas detectors";
		GOST 52350.29.2-2010 "Explosive atmospheres. Part 29-2. Analyzers. Requirements for selection, installation, use and maintenance of combustible gas detectors and oxygen gas";
		IEC 60079-0-2007. "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 60079-1-2008. "Explosive atmospheres. Part 1. Equipment with type of protection" flameproof enclosure "d";
		IEC 60079-2-2009. "Explosive atmospheres. Part 2: Equipment protected form filling or purging shell pressurized" p ";
		IEC 60079-10-2-2010 "Explosive atmospheres. Part 10-2. Area Classification. Explosive dust environment";
		IEC 60079-11-2010 "Explosive atmospheres. Part 11. Intrinsic safety" i ";
		IEC 60079-13-2010 "Explosive atmospheres. Part 13. Equipment, secure facilities pressurized";
		IEC 60079-14-2008. "Explosive atmospheres. Part 14. Design, selection and installation of electrical installations";
		IEC 60079-15-2010 "Explosive atmospheres. Part 15. Equipment with type of protection" n ";
		IEC 60079-17-2010 "Explosive atmospheres. Part 17. Inspection and maintenance of electrical installations";

		IEC 60079-18-2008. "Explosive atmospheres. Part 18. Equipment with type of protection" Encapsulation "m";
		IEC 60079-25-2008. "Explosive atmospheres. Part 25. Intrinsically safe systems";
		IEC 60079-31-2010 "Explosive atmospheres. Part 31. Equipment with a view Ex Dust Ignition "t";
		IEC 60079-30-1-2009. "Explosive atmospheres. Distributed resistive heater. Part 30-1. General technical requirements and test methods";
		IEC 60079-30-2-2009. "Explosive atmospheres. Distributed resistive heater. Part 30.2. Guidelines for the design, installation and maintenance";
		IEC 61241-0-2007. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0.General requirements "
		IEC 61241-1-1-99. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 1. Requirements";
		IEC 61241-2-1-99. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2. Test methods. Section 1. Methods for determining the ignition temperature of combustible dust";
		IEC 61241-2-2-99. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2.Test methods. Section 2. Method for determining the electrical resistivity of combustible dust in layers ";
		IEC 61241-2-3-99. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2. Test methods. Section 3. A method for determining the minimum ignition energy of dust-air mixtures";
		IEC 61241-11-2009. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 11. Intrinsically safe equipment" iD ";
		IEC 61241-14-2008. "Electrical equipment used in areas that are dangerous to the presence of combustible dust. Part 14. Select and

		install ";
		IEC 61241-18-2009. "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 18. Protection compound" mD ";
		GOST R EN 1710-2009. "Equipment and components intended for use in potentially explosive atmospheres underground workings of mines";
		GOST R EN 50303-2009. "Equipment Group I, Ma level of protection for use in the environment, dangerous on the ignition of firedamp and / or coal dust";
		GOST R EN 13463-1-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 1. General requirements";
		GOST R EN 13463-2-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 2. Protection shell with limited pass gas" fr ";
		GOST R EN 13463-3-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 3. Protection flameproof enclosure" d ";
		GOST R EN 13463-5-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 5. Protection of structural safety "c";
		GOST R EN 13463-6-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 6. Protection controlled ignition source" b ";
		GOST R EN 13463-8-2009. "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 8. Protection liquid immersion" k ";
		OST 12.28.333-91. "Occupational safety standards system. Mining equipment. Products made of light alloys. Friction intrinsic safety. General technical requirements and test methods ";
		PB 03-538-03 . "Rules of certification of electrical equipment for hazardous areas (in terms of sampling)."

Members of the Coordinating Committee for Technical Regulation, application of sanitary, veterinary and phytosanitary measures and authorized representatives of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	
	VN Roots		RA Satbaev		VY Salamatov
	VM Kazakevich		SS Khasenov		ON Aldoshin
	IA Zastenskaya		NO Sadvakasov		AL Safonov
Executive secretary of the Coordination Committee				MG Chuiko	
The experts of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	

The list of standards as a result of which on a voluntary basis, compliance with technical regulations customs union "SAFETY EQUIPMENT explosion protection" (TR TC 012/2011)

N p / p	**Reaffirms the demands of technical regulations**	**Symbols and national (inter-state) standard**
1	Article 4, paragraphs 1, 2, 7 and 8	GOST 22782.3-77 "electrical apparatus with a special type of protection. Requirements and test methods";
		GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST 51330.1-99 (IEC 60079-1-98) "electrical apparatus. Part 1. Explosion form "Explosion proof";
		GOST R 51330.3-99 "electrical apparatus. Part 2. Filling or purging shell pressurized p";
		GOST 51330.6-99 (IEC 60079-5-97) "electrical apparatus. Part 5. Powder filling q";
		GOST 51330.7-99 (IEC 60079-6-95) "electrical apparatus. Part 6. Oil

		immersion o";
		GOST R 51330.8-99 "electrical apparatus. Part 7. Protection type e";
		GOST 51330.9-99 (IEC 60079-10-95) "electrical apparatus. Part 10. Classification of hazardous areas";
		GOST 51330.10-99 (IEC 60079-11-99) "electrical apparatus. Part 11. Intrinsic safety i";
		GOST 51330.11-99 (IEC 60079-12-78) "electrical apparatus. Part 12. Classification of mixtures of gases and vapors in air for maximum experimental safe gaps and minimum igniting currents";
		GOST 51330.12-99 (IEC 60079-13-82) "electrical apparatus. Part 13. Design and Operations spaces protected by an excess pressure ";
		GOST 51330.13-99 (IEC 60079-14-96) "electrical apparatus. Part 14. Electrical installations in hazardous areas (other than mines)";
		GOST 51330.14-99 "electrical apparatus. Part 15. Protection type n";
		GOST 51330.15-99 (IEC 60079-16-90) "electrical apparatus. Part 16. Forced ventilation to protect the premises, which set analyzers";
		GOST 51330.16-99 (IEC 60079-17-96) "electrical apparatus. Part 17. Inspection and maintenance of electrical installations in hazardous areas (other than mines) ";
		GOST 51330.17-99 (IEC 60079-18-92) "electrical apparatus. Part 18. Explosion protection type" Encapsulation (m) ";
		GOST 51330.18-99 (IEC 60079-19-93) "electrical apparatus. Part 19. Repair and inspection of electrical equipment used in explosive gas atmospheres (other than mines or applications related to the processing and production of explosive substances) ";
		GOST 51330.19-99 (IEC 60079-20-96) "electrical apparatus. Part 20. Data combustible gases and vapors, relating to the operation of electrical equipment";
		GOST R 52065-2007 "head lamp for use in mines, dangerous on gas. Part 1. General requirements. Design and test evaluation explosion";
		GOST R 52066-2007 "head lamp for use in mines, dangerous on gas. Part 2: Performance requirements and other security-related";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements ";

		GOST R 52350.5-2006 "Electrical apparatus for explosive gas atmospheres. Part 5. Powder filling" q ";
		GOST R 52350.6-2006 "Electrical apparatus for explosive gas atmospheres. Part 6. Oil immersion" o ";
		GOST R 52350.7-2005 (IEC 60079-7) "Electrical apparatus for explosive gas atmospheres. Part 7. Increased protection type" e ";
		GOST R 52350.10-2005 "Electrical apparatus for explosive gas atmospheres. Part 10. Classification of hazardous areas";
		GOST R 52350.19-2007 "Explosive atmospheres. Part 19. Repair, inspection and restoration of electric equipment";
		GOST R 52350.26-2007 "Explosive atmospheres. Part 26. Equipment with level EPL Ga";
		GOST R 52350.28-2007 "Explosive atmospheres. Part 28. Protection of equipment and transmission systems using optical radiation";
		GOST 52350.29.1-2010 "Explosive atmospheres. Part 29-1. Analyzers. General technical requirements and test methods for combustible gas detectors";
		GOST 52350.29.2-2010 "Explosive atmospheres. Part 29-2. Analyzers. Requirements selection, installation, use and maintenance of gas analyzers, combustible gases and oxygen ";
		IEC 60050-426-2006 "International Electrotechnical Vocabulary. Part 426. Electrical equipment for explosive atmospheres";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 60079.1-2008 "Explosive atmospheres. Part 1. Equipment with type of protection" flameproof enclosure "d";
		IEC 60079-2-2009 "Explosive atmospheres. Part 2. Equipment with type of protection filling or purging shell pressurized "p";
		IEC 60079-10-1-2008 "Explosive atmospheres. Part 10-1. Area Classification. Explosive gas atmospheres";
		IEC 60079-10-2-2010 "Explosive atmospheres. Part 10-2. Area Classification. Explosive dust environment";
		IEC 60079-11-2010 "Explosive atmospheres. Part 11. Intrinsic safety" i ";

		IEC 60079-13-2010 "Explosive atmospheres. Part 13. Equipment, secure facilities pressurized";
		IEC 60079-14:2008 "Explosive atmospheres. Part 14. Design, selection and installation of electrical installations";
		IEC 60079-15-2010 "Explosive atmospheres. Part 15. Equipment with type of protection" n ";
		IEC 60079-17-2010 "Explosive atmospheres. Part 17. Inspection and maintenance of electrical installations";
		IEC 60079.18-2008 "Explosive atmospheres. Part 18. Equipment with type of protection" encapsulation "m";
		IEC 60079-25-2008 "Explosive atmospheres. Part 25. Intrinsically safe systems";
		IEC 60079-27-2008 "Explosive atmospheres. Part 27. Concept of intrinsically safe fieldbus systems (FISCO)";
		GOST 60079-30-1-2009 "Explosive atmospheres. Distributed resistive heater. Part 30-1. General technical requirements and test methods";
		GOST 60079-30-2-2009 "Explosive atmospheres. Distributed resistive heater. Part 302. Guidelines for the design, installation and maintenance";
		IEC 60079-31-2010 "Explosive atmospheres. Part 31. Equipment with type of protection against ignition of dust" t ";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 1. Requirements";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical equipment, sheathed and limited surface temperature. Section 2. Selection, Installation and Operation ";
		IEC 61241-2-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2. Test methods. Section 1. Methods for determining the ignition temperature of combustible dust";
		IEC 61241-2-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2. Test methods. Section 2.

		Determination of the electrical resistance of combustible dust in layers";
		IEC 61241-2-3-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 2. Test methods. Section 3. A method for determining the minimum ignition energy of dust-air mixtures";
		IEC 61241-3-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 3. Area Classification";
		IEC 61241.10-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 10. Classification of areas where there is or may combustible dusts are present ";
		IEC 61241-11-2009 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 11. Intrinsically safe equipment" iD ";
		IEC 61241-14-2008 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 14. Selection and Installation";
		IEC 61241-17-2009 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 17. Inspection and maintenance of electrical installations in hazardous areas (other than underground workings) ";
		IEC 61241-18-2009 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 18. Protection compound" mD ";
		GOST R EN 1710-2009 "Equipment and components intended for use in potentially explosive atmospheres in underground mines";
		GOST R EN 50303-2009 "Equipment Group I, Category M1, designed for operating in the atmospheres, hazardous gas and / or coal dust";
		GOST R EN 1127-1-2009 "Explosive atmospheres. Prevention and explosion protection. Part 1. Basic Concepts and Methodology";
		GOST R EN 1127-2-2009 "Explosive atmospheres. Prevention and explosion protection. Part 2. Basic concepts and methodology for mining";
		GOST R EN 13463-1-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 1: Basic methods and requirements";
		GOST R EN 13463-2-2009 "Non-electrical equipment intended for use in

		potentially explosive atmospheres. Part 2: Protection of the shell with a limited pass gas 'fr'";
		GOST R EN 13463-3-2009 "Non-electrical equipment intended for use in potentially explosive environments. Part 3: Protection of flameproof "d";
		GOST R EN 13463-5-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 5. Protection structural safety" c ";
		GOST R EN 13463-6-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 6: Protection control ignition source" b ";
		GOST R EN 13463-8-2009 "Non-electrical equipment intended for use in potentially explosive environments. Part 8: Protection of liquid immersion "k";
		GOST R EN 1834-1-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 1. Group II engines for use in environments containing flammable gases and vapors";
		GOST R EN 1834-2-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 2. Group I engines for use in underground mines, dangerous on the ignition of firedamp and / or combustible dust ";
		GOST R EN 1834-3-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 3. Motors Group III for use in areas with combustible dust."
2	Article 4, paragraph 4 and paragraph 5, paragraphs 1 - 8, 12 - 22	GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST R 52065-2007 "head lamp for use in mines, dangerous on gas. Part 1. General requirements. Design and test evaluation explosion";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		GOST 52350.29.1-2010 "Explosive atmospheres. Part 29-1. Analyzers. General technical requirements and test methods for combustible gas detectors";
		GOST 52350.29.2-2010 "Explosive atmospheres. Part 29-2. Analyzers.

		Requirements for selection, installation, use and maintenance combustible gas analyzers and oxygen ";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		GOST 60079-30-1-2009 "Explosive atmospheres. Distributed resistive heater. Part 30-1. General technical requirements and test methods";
		GOST 60079-30-2-2009 "Explosive atmospheres. Distributed resistive heater. Part 302. Guidelines for the design, installation and maintenance";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous to the presence of combustible dust. Part 0. General requirements ";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 1. Requirements";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical and sheathed limited surface temperature. Section 2. Selection, Installation and Operation ";
		GOST R EN 1710-2009 "Equipment and components intended for use in potentially explosive atmospheres in underground mines";
		GOST R EN 50303-2009 "Equipment Group I, Category M1, designed for operating in the atmospheres, hazardous gas and / or coal dust";
		GOST R EN 1127-1-2009 "Explosive atmospheres. Prevention and explosion protection. Part 1. Basic Concepts and Methodology";
		GOST R EN 1127-2-2009 "Explosive atmospheres. Prevention and explosion protection. Part 2. Basic concepts and methodology for mining ";
		GOST R EN 13463-1-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 1: Basic methods and requirements";
		GOST R EN 1834-1-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 1. Group II engines for use in environments containing flammable gases and vapors";
		GOST R EN 1834-2-2010 "internal combustion engines. Safety

		requirements engines for use in potentially explosive environments. Part 2.Group I engines for use in underground mines, dangerous on the ignition of firedamp and / or combustible dust ";
		GOST R EN 1834-3-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 3. Motors Group III for use in areas with combustible dust."
2	Article 4, paragraph 5 subparagraph 10	GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements."
3	Article 4, paragraph 5 subparagraphs 9 and 11	IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical equipment, sheathed and limited surface temperature. Section 1. Technical requirements ";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 2. Choice, installation and operation."
4	Article 4, paragraphs 6, 9, 10 and 15	GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and

		limited surface temperature. Section 1. Requirements";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical equipment, sheathed and limited surface temperature. Section 2. Selection, installation and operation. "
5	Article 4 paragraphs 11 - 14	GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous to the presence of combustible dust. Part 0. General requirements ";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 1. Requirements";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical and sheathed limited surface temperature. Section 2. Selection, installation and operation. "
	Annex I section	GOST 51330.9-99 (IEC 60079-10-95) "electrical apparatus. Part 10. Classification of hazardous areas";
		GOST R 52350.10-2005 "Electrical apparatus for explosive gas atmospheres. Part 10. Classification of hazardous areas";
		IEC 60079-10-1-2008 "Explosive atmospheres. Part 10-1. Area Classification. Explosive gas atmospheres";
		IEC 60079-10-2-2010 "Explosive atmospheres. Part 10-2. Area Classification. Explosive dust environment";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		IEC 61241-3-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 3. Area Classification";
		IEC 61241.10-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 10. Classification of

		areas where there is or may be present combustible dust."
	Appendix Sections II, III and V	GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements ";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		GOST R EN 1710-2009 "Equipment and components intended for use in potentially explosive atmospheres in underground mines";
		GOST R EN 50303-2009 "Equipment Group I, Category M1, designed for operating in the atmospheres, hazardous gas and / or coal dust";
		GOST R EN 1127-1-2009 "Explosive atmospheres. Prevention and explosion protection. Part 1. Basic Concepts and Methodology";
		GOST R EN 1127-2-2009 "Explosive atmospheres. Prevention and explosion protection. Part 2. Basic concepts and methodology for mining";
		GOST R EN 13463-1-2009 "Non-electrical equipment intended for use in potentially explosive environments. Part 1: Basic method and requirements. "
	Annex IV section	GOST 22782.3-77 "electrical apparatus with a special type of protection. Requirements and test methods";
		GOST 51330.0-99 (IEC 60079-0-98) "electrical apparatus. Part 0. General requirements";
		GOST 51330.1-99 (IEC 60079-1-98) "electrical apparatus. Part 1. Explosion protection type" flameproof enclosure ";
		GOST R 51330.3-99 "electrical apparatus. Part 2. Filling or purging shell under excessive pressure p ";
		GOST 51330.6-99 (IEC 60079-5-97) "electrical apparatus. Part 5. Powder filling q";
		GOST 51330.7-99 (IEC 60079-6-95) "electrical apparatus. Part 6. Oil immersion o";
		GOST R 51330.8-99 "electrical apparatus. Part 7. Protection type e";

		GOST 51330.10-99 (IEC 60079-11-99) "electrical apparatus. Part 11. Intrinsic safety i";
		GOST 51330.14-99 "electrical apparatus. Part 15. Protection type n";
		GOST 51330.15-99 (IEC 60079-16-90) "electrical apparatus. Part 16. Forced ventilation to protect the premises, which set analyzers";
		GOST 51330.17-99 (IEC 60079-18-92) "electrical apparatus. Part 18. Explosion protection type" Encapsulation (m) ";
		GOST R 52065-2007 "head lamp for use in mines, dangerous on gas. Part 1. General requirements. Design and test evaluation explosion";
		GOST R 52350.0-2005 (IEC 60079-02004) "Electrical apparatus for explosive gas atmospheres. Part 0. General requirements";
		GOST R 52350.5-2006 "Electrical apparatus for explosive gas atmospheres. Part 5. Powder filling" q ";
		GOST R 52350.6-2006 "Electrical apparatus for explosive gas atmospheres. Part 6. Oil immersion" o ";
		GOST R 52350.7-2005 (IEC 60079-7) "Electrical apparatus for explosive gas atmospheres. Part 7. Increased protection type" e ";
		GOST R 52350.26-2007 "Explosive atmospheres. Part 26. Equipment with level EPL Ga";
		GOST R 52350.28-2007 "Explosive atmospheres. Part 28. Protection of equipment and transmission systems using optical radiation";
		GOST 52350.29.1-2010 "Explosive atmospheres. Part 29-1. Analyzers. General technical requirements and test methods for combustible gas detectors";
		IEC 60079.0-2007 "Explosive atmospheres. Part 0. Equipment. General requirements";
		IEC 60079.1-2008 "Explosive atmospheres. Part 1. Equipment with type of protection" flameproof enclosure "d";
		IEC 60079-2-2009 "Explosive atmospheres. Part 2. Equipment with type of protection filling or purging shell excess pressure "p";
		IEC 60079-11-2010 "Explosive atmospheres. Part 11. Proof system chain "i";
		IEC 60079-13-2010 "Explosive atmospheres. Part 13. Equipment, secure

		facilities pressurized";
		IEC 60079-15-2010 "Explosive atmospheres. Part 15. Equipment with type of protection" n ";
		IEC 60079.18-2008 "Explosive atmospheres. Part 18. Equipment with type of protection" encapsulation "m";
		IEC 60079-25-2008 "Explosive atmospheres. Part 25. Intrinsically safe systems";
		IEC 60079-27-2008 "Explosive atmospheres. Part 27. Intrinsically safe concept fieldbus systems (FISCO) ";
		GOST R 6 0079-30-1-2009 "Explosive atmospheres. Distributed resistive heater. Part 30-1. General technical requirements and test methods";
		IEC 60079-31-2010 "Explosive atmospheres. Part 31. Equipment with type of protection against ignition of dust" t ";
		IEC 61241-0-2007 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 0. General requirements";
		IEC 61241-1-1-99 "Electrical equipment used in areas that are dangerous to the presence of combustible dust. Part 1. Electrical equipment, sheathed and limited surface temperature. Section 1. Technical requirements ";
		IEC 61241-1-2-99 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 1. Electrical sheathed and limited surface temperature. Section 2. Selection, Installation and Operation";
		IEC 61241-11-2009 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 11. Intrinsically safe equipment "iD";
		IEC 61241-14-2008 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 14. Selection and Installation";
		IEC 61241-18-2009 "Electrical equipment used in areas that are dangerous for the presence of combustible dust. Part 18. Protection compound" mD ";
		GOST R EN 1710-2009 "Equipment and components intended for use in potentially explosive atmospheres in underground mines";

		GOST R EN 50303-2009 "Equipment Group I, Category M1 designed to operation in atmospheres to firedamp and / or coal dust ";
		GOST R EN 13463-1-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 1: Basic methods and requirements";
		GOST R EN 13463-2-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 2: Protection of the shell with a limited pass gas 'fr'";
		GOST R EN 13463-3-2009 "Non-electrical equipment intended for use in potentially explosive environments. Part 3: Protection of flameproof "d";
		GOST R EN 13463-5-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 5. Protection structural safety" c ";
		GOST R EN 13463-6-2009 "Non-electrical equipment intended for use in potentially explosive atmospheres. Part 6: Protection control ignition source" b ";
		GOST R EN 13463-8-2009 "Non-electrical equipment intended for use in potentially explosive environments. Part 8: Protection of liquid immersion "k";
		GOST R EN 1834-1-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 1. Group II engines for use in environments containing flammable gases and vapors";
		GOST R EN 1834-2-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 2. Group I engines for use in underground mines, dangerous on the ignition of firedamp and / or combustible dust ";
		GOST R EN 1834-3-2010 "internal combustion engines. Safety requirements for engines intended for use in potentially explosive atmospheres. Part 3. Motors Group III for use in areas with combustible dust."

Members of the Coordinating Committee for Technical Regulation, application of sanitary, veterinary and phytosanitary measures and authorized representatives of the Parties:

From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	
	VN Roots		RA Satbaev		VY Salamatov
	VM Kazakevich		SS Khasenov		ON Aldoshin
	IA Zastenskaya		NO Sadvakasov		AL Safonov
Executive secretary of the Coordination Committee				MG Chuiko	
The experts of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	

TECHNICAL REGULATIONS CUSTOMS UNION
TR TS 012/2011
"The safety of equipment for explosive environments"

Foreword

1. This technical regulation of the Customs Union 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 on November 18, 2010

2. This technical regulation of the Customs Union to establish a common customs territory of the Customs Union, required for the application and performance requirements for equipment for use in hazardous areas in order to ensure the free movement of the equipment put into circulation in the common customs territory of the Customs Union.

3. If, in respect of equipment for explosive environments will be taken other technical regulations of the Customs Union and (or) technical regulations of the Eurasian Economic Community (hereinafter - the EEC), which establish requirements for this equipment other than claims Explosion-proof, it must comply with the requirements of technical regulations Customs Union and (or) the EurAsEC technical

regulations, the action of which they are subject.

Article 1. Sphere of application

1. This technical regulation of the Customs Union establishes requirements for equipment for use in hazardous environments, which ensures that the safety of its use in explosive environments.

2. This technical regulation of the Customs Union adopted in order to protect human life and health, property, prevention of actions misleading, mislead consumers.

3. This technical regulation of the Customs Union with electrical (electrical equipment), including Ex-components, and non-electrical equipment for use in explosive environments.

Identification characteristics of equipment for explosive environments and Ex-components are tools to ensure protection specified in the technical documentation of the manufacturer, and explosion-proof marking painted on the equipment and Ex-components.

4. The effect of this technical regulation of the Customs Union does not apply to:

- products for medical purposes;
- Equipment, the operation of which there is only a risk of explosion due to the presence of explosive and unstable chemical compounds
- equipment for residential and non-industrial use in an environment where an explosive atmosphere is formed as a result of unexpected release of flammable gas
- personal protective equipment;
- ships, ships inland and mixed (river-sea), mobile platforms and drilling rigs to work in marine and inland waters other floating facilities, as well as used in which machinery and equipment;
- Transport vehicles for the transport of passengers and goods by air, land, rail and water transport;
- nuclear weapons research facilities organizations nuclear defense complex, except in their ranks equipment located in hazardous areas.

Article 2. Definitions

This technical regulation of the Customs Union, the following terms and their definitions:

"Emergency mode" - the level at which the characteristics of the equipment for explosive environments beyond the limits specified by the manufacturer in the technical specifications;

"Analysis of the production of the manufacturer" - assessment of the availability of the manufacturer of the necessary conditions to ensure the compliance of the equipment requirements of this technical regulation of the Customs Union

"commissioning" - documented event, fixing equipment availability for use for other purposes;

"type of protection" - special measures provided the equipment for explosive environments to

prevent ignition of the surrounding explosive atmosphere;

"Explosion" - no unacceptable risk of fire surrounding explosive atmosphere associated with the possibility injury and (or) damage,

"Explosion" - measures to ensure explosion protection equipment for working in hazardous environments,

"hazardous area" - part of a closed or open space in which there is or may form an explosive atmosphere in the volume, which requires special protection measures in the design, manufacture, installation and operation of equipment;

"Explosive atmosphere" - a mixture with air, under atmospheric conditions, of flammable substances in the form of gas, vapor, mist, dust, fibers, or volatile particles, which after ignition, self-sustaining flame propagation,

"identification equipment" - the establishment of the identity of the equipment of its essential features,

"manufacturer" - a legal entity or natural person as individual entrepreneurs engaged in its own name production and (or) the implementation of equipment for use in hazardous areas and are responsible for its compliance with this technical regulation of the Customs Union;

"Importer" - a resident of the state - a member of the Customs Union, which is made with non-resident states - members of the Customs Union, the trade agreement for the transfer of equipment for use in potentially explosive atmospheres, is implementing the equipment and be responsible for its compliance with the safety requirements of the technical regulations of the Customs Union;

" component "(Ex-component) - Install (c) equipment explosion technical device, you need to safe functioning of equipment in hazardous environments, but is not intended for independent use;

"Maximum surface temperature" - the highest temperature encountered during the operation on one of the parts or equipment surfaces in violation of established modes of his work contained in the technical documentation of the manufacturer, or damage to, but within the tolerances set for the specific form of protection,

"marking of explosion "- for use on equipment and Ex-components for use in explosive environments and specified in the technical documentation of the manufacturer special character and identity explosion symbols indicators explosion-proof equipment and determining Ex-components for explosive environments,

"normal operation" - mode of operation of the equipment in which the electrical and mechanical characteristics do not exceed the limits specified by the manufacturer in the technical documentation,

"equipment for use in potentially explosive atmospheres" - a technical device (the machine, apparatus, fixed or mobile unit, an element of their systems management, protection, device, providing protection, control and measuring device), which designed to work in hazardous environments, and can have their own potential sources of ignition of surrounding explosive

atmosphere, but its design includes measures to eliminate unacceptable risk of ignition of this environment,

"failure" - an event that is in violation of operational condition of equipment,

"the certificate of conformity of quality management" - document which the certification body of quality management systems confirms that the quality of work and manufacturer's service requirements of ISO 9000;

"Special character Ex" - sign painted on the equipment and Ex-components and certifying that the equipment and Ex-components are explosion-proof,

"the temperature of ignition of explosive gas environment" - the lowest temperature of the heated surface, which in the given conditions to ignite combustible a gas or vapor mixture,

"auto-ignition temperature of the dust layer" - the lowest temperature of the heated surface at which the spontaneous combustion of a given thickness of the dust layer on the surface;

"The technical documentation of the manufacturer" - a system of graphic and text documents used in the design, manufacture and operation of equipment for explosive environments (parts, assemblies, systems, and components), as well as the design, construction and operation of defense;

"level of protection "- the level of protection from explosion, equipment assigned, depending on the risk of becoming a source of ignition and conditions of use in explosive environments.

Article 3. Rules of market

1. Equipment for explosive environments into circulation in the common customs territory of the Customs Union, provided that it has passed the necessary assessment procedures (confirmation), established by the present technical regulation of the Customs Union, and other technical regulations of the Customs Union and the technical rules of the Eurasian Economic Community (hereinafter - the EEC), which apply to the equipment.

2. Equipment for explosive environments, conformity to the requirements of the technical regulations of the Customs Union does not confirmed, no one should be marked with a mark of products on the market states - members of the Customs Union, and is not allowed to be released into circulation in the market.

Article 4. The explosion protection

1. Equipment for explosive environments (hereinafter - the equipment) shall meet the requirements necessary for the safe operation and maintenance of the risk of explosion:

- to mitigate the effects of an explosive atmosphere, which can be created by dedicated hardware combustible substances;

- to prevent ignition of explosive atmospheres, given the nature of each source of explosion initiation

- in accordance with the scope of equipment, levels and types of protection in accordance with Annex 1.

2. Explosion protection equipment shall be ensured under normal operating conditions and within the tolerances set of technical documentation of the manufacturer, subject to the conditions of its application.

3. Equipment for explosive environments must be designed and manufactured in such a way that the application of the intended application and implementation requirements for the installation, operation (use), transportation (transportation), maintenance and repair services provide the following security requirements:

1) explosion-proof equipment should provide for operation over the estimated (calculated) life,

2) equipment must operate in actual or future conditions of the environment;

3) Explosion-proof equipment must maintain in a changing environment and in the presence of external influences (moisture, vibration, pollution, lightning and switching surges, etc.) within the constraints of operating conditions specified by the manufacturer.

Parts of equipment must be designed for the appropriate mechanical and thermal effects and capable of withstanding the impact of existing or proposed aggressive media

4) if the product contains parts that can be ignition sources, it should open in the off or contain only intrinsically safe circuits, or be protected from touching personnel and warnings;

5) if the shells storage charge (capacitors) and heated elements, which can be a source of ignition, the shells must be opened with an exposure time sufficient to discharge built-in capacitors to a safe value of residual energy or to reduce the temperature of heated elements below the maximum surface temperature or temperature class of the equipment.

If the explosion protection equipment by blowing inert gas after power is provided with protective gas purge continued to embedded capacitor discharge or reduce the temperature of the heated elements to the above specifications, the manufacturer must apply to the opening of the warning equipment;

6) the surface temperature of the equipment to the level of protection "special exproof" ("very high") and "Intrinsically Safe" ("high") and (or) the parts should be lower ignition temperature surrounding explosive gas atmosphere and the ignition temperature of the dust layer in the operation (within tolerances set in the technical documentation manufacturer) in these emergency conditions and changing environmental conditions.

Temperature above the ignition of an explosive atmosphere surrounding the operation (within the tolerances set in the technical documentation of the manufacturer) is only allowed if the manufacturer shall take measures to protect the equipment.

Necessary to take into account the increase in temperature due to external sources of heat and

chemical reactions;

7) the surface temperature of the equipment to the level of protection "increased safety explosion" ("high") should not be higher than the maximum surface temperature in normal operation.

design of such equipment does not have parts that are capable of sparks ignites the surrounding explosive atmosphere;

8) Equipment group I should be dustproof and prevent the risk of ignition of coal dust;

9) in equipment group III, including cable entries and compounds, dust (for the size of its particles) should not form an explosive mixture with air or dangerous accumulations inside the equipment,

10) equipment which may release flammable gases or dust, must have a closed design. Available in hardware holes or leaking joints shall be designed so that the gases formed or dust does not have led to an explosive atmosphere from the outside equipment. Openings through which materials are introduced or removed, shall be designed and equipped so as to limit the output of flammable materials during filling or discharge;

11) equipment intended for use on objects and (or) plots involving dust, must be designed so that dust deposited on its surface, is not flammable. Dust deposits should be limited by surface cleaning, the frequency of which is specified in the manual (manual) Manual (Application). The surface temperature of a piece of equipment should be lower ignition temperature of the dust layer. This should provide for a means to limit the surface temperature of a piece of equipment in order to prevent dangerous heat, depending on the thickness of the layer of settled dust;

12) Provide a reliable manual shutdown equipment included in the automated process, in violation of established modes of his work contained in the technical documentation of the manufacturer, if it will not adversely affect safety;

13) for emergency shutdown of equipment accumulated energy must be dissipated to a safe value for time specified on the warning signs placed on the opening lid;

14) equipment must be equipped with the appropriate input device, and if the equipment is to be used in conjunction with another equipment, and their union has to be safe,

15) if the equipment has a detection device or alarm to control an explosive atmosphere, location and condition of their accommodation shall be provided in the technical documentation of the manufacturer;

16) equipment must not contain materials that can release flammable substances that create an explosive Wednesday,

17) within the operating conditions specified in the technical documentation of the manufacturer, it is necessary to exclude the possibility chemical reaction between used materials and substances that make up a potentially explosive environment, which may adversely affect the explosion protection,

18) equipment must not contain material that, when changed its characteristics under the influence of ambient temperature and operating conditions, and also in combination with other materials, reduce the level of protection equipment;

19) Ex-components installed in equipment or replacement parts are used for equipment and protective systems must be operated safely in accordance with the requirements of explosion protection when installed in accordance with the instructions (instructions) Instructions (use) the manufacturer;

20) equipment which may be subjected to external influences, must be provided with the additional protection. Equipment has to withstand external influences without compromising its protection,

21) if the equipment is in a case or a closed container, which are part of the type of protection, such a body or container must be opened only with a special tool or with the use of appropriate protection,

22) to prevent dangerous overloading of equipment must be provided for the use of measuring, regulating and control devices (maximum switches, temperature limiters, differential pressure switches, flow meters, time-delay relays, indicators, speeding and (or) similar types of devices).

4. Equipment design should provide protection against the following potential sources of ignition:

1) sparks (electrical and friction), flame, high temperatures, hot surfaces, electromagnetic, ultrasonic, optical, and ionizing radiation,

2) static electricity (electrostatic charges that can cause dangerous level),

3) the stray current and leakage current, which can lead to the emergence of dangerous corrosion, overheating of surfaces or sparks and create, so the possibility of ignition;

4) overheating due to friction or shock, which may arise between the materials and parts in contact with each other during rotation or penetration of foreign objects;

5) The pressure compensation, which are control devices and can cause shock waves and compression, leading to inflammation,

6) lightning;

7) exothermic reactions, including self-ignition of dust.

This should be taken into consideration all the factors of the risk of explosion and identified sources initiation of igniting explosive environments. In view of the assessment of hazards should be chosen methods of providing EX (species protection) equipment for its use in explosive environments.

5. Devices that protect equipment during emergency conditions, shall meet the following requirements:

1) protection devices must function independently of any required for measuring or control device. Refusal protective device must be detected with the help of technical means provided technical documentation,

2) safety shutdown should directly drive the corresponding control devices without intermediate team of software;

3) Emergency management of protective devices must be equipped with machinery or appliances restart lock. A new start command can be executed and normal operation resumed only after a special release locks to run,

4) used control devices and indicators should be designed to ensure the highest possible level of

safety and security in regard to the risk of explosion;

5) devices with a measuring function must be designed and manufactured to meet the operational requirements and the conditions of their use in hazardous environment and meet the requirements to ensure traceability;

6) should be possible to verify the accuracy of the device and operation with a measuring function,

7) alarm threshold ignition source devices with a measuring function must be below the limiting conditions of an explosion, and (or) registered ignition in explosive atmospheres , subject to a set of technical documentation a safety factor, the working conditions and errors in the measurement system;

8) software to manage their equipment should consider the risks associated with errors in the program.

6. When the supply of equipment to the consumer to be accompanied technical documentation of the manufacturer, which should include:

1) name and (or) the designation of the equipment (type, make, model), its features and characteristics that affect the safety and the name and (or) the trademark of the manufacturer ,

2) information about its purpose,

3) instructions for installation, assembly, commissioning and adjustment;

4) instructions for use of equipment and safety measures to be observed during operation (including start-up, use for its intended purpose, maintenance, and repair of all types of technical examination, remedies to reduce the intensity and localization of the occupational hazards , transportation and storage conditions),

5) the designated service life indicators and (or) the assigned resource;

6) a list of critical failures and possible human error (the user), resulting in emergency mode, the equipment, and actions to prevent these errors,

7) specification limit states,

8) information on the measures to be taken when a fault is detected this equipment;

9) about the need to resupply additional elements (cable glands, etc.)

10) requirements to ensure the preservation of the technical characteristics equipment, causing its explosion safety;

11) packaging, preservation, transportation and storage conditions designated periods of storage, instructions for routine timing re-examination of the state, replacing individual components, parts, assemblies with expired;

12) requirements for the disposal of equipment

13) terms and conditions of storage, transportation and disposal (if necessary - to establish requirements for them),

14) requirements for personnel,

15) location of the manufacturer, information with regard to them;

16) the name and address of the person designated by the manufacturer, importer, information with regard to them;

17) the date of manufacture.

The technical documentation is produced on paper. To it can be attached to the technical documentation for electronic media.

7. The equipment must be marked, which includes:

1) the name of the manufacturer or his registered trademark,

2) the designation of the type of equipment,

3) serial number,

4) number of the certificate of conformity;

5) marking of explosion. Picture special character explosion set out in Annex 2.

8. Marking and technical documentation of the manufacturer made in Russian and in the state (s) language (s) of the State - a member of the Customs Union at have the appropriate requirements in the law (s) of the State - a member of the Customs Union.

9. Marking shall be applied to the surface of the equipment or plate available for inspection without disassembly or the use of tools, and remain for the life of the equipment.

10. According to the decision of the manufacturer or in accordance with the contract (agreement) supply equipment labeling may include additional information that is important for its safe use, including:

1) The rated voltage or rated voltage range;

2) long-term operating voltage,

3) the symbol of the current type (unless the rated frequency),

4) the symbol class of protection against electric shock to persons,

5) the degree of protection provided by enclosures;

6) rated power or utility power or nominal current,

7) mass;

8) overall dimensions

9) the date of manufacture.

Article 5. Compliance with Safety Requirements

1. That the equipment this technical regulation of the Customs Union is ensured by its requirements security directly or performing voluntary international standards requirements, and in their absence - the national (state) standards states - members of the Customs Union, as a result of which, on a voluntary basis, compliance with these technical regulations of the Customs Union and the standards containing rules and methods (tests) and measurements, including the rules of sampling required

for implementation and enforcement of the requirements of the technical regulations of the Customs Union and the implementation of assessment (confirmation) that equipment for explosive environments (hereinafter - the standards).

2. The lists of the standards referred to in paragraph 1 of this Article, the Commission approves the Customs Union (hereinafter - the Commission).

Article 6. Demonstration of Compliance

1. Before the issuance of the common customs territory of the Customs Union, the equipment should be subjected to the procedure of confirmation compliance with the requirements of the technical regulations of the Customs Union.

Confirm that equipment is mandatory and takes the form of certification.

2. Conformity assessment procedures of equipment specified in the technical regulations of the Customs Union requirements implemented by accredited certification bodies (assessment (confirmation)) and accredited test laboratories (centers), included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union.

3. Confirm that the unit is on schemes in accordance with the Regulations on the use of standard evaluation schemes (confirmation) in the technical regulations of the Customs Union, approved by the Commission of the Customs Union:

1) in respect of commercially available equipment:

equipment certification based on prototype test in an accredited testing laboratory (center), and analysis of the production, to the inspection control (Figure 1c);

2) for a limited batch of equipment:

party certification of equipment by testing samples of the equipment of the party (Figure 3c) in an accredited testing laboratory (center)

certification units in an accredited testing laboratory by testing a piece of equipment (Figure 4c).

4. Applicant for certification scheme 1c may be registered in accordance with the laws of the State - a member of the Customs Union at its territory of a legal entity or natural person as an individual entrepreneur or the manufacturer, or performing functions foreign manufacturer under a contract with them, in terms of products supplied comply with the requirements of the technical regulations, and part of the responsibility for non-compliance of delivered products to the requirements of the technical regulations of the Customs Union (the person performing the functions of the foreign manufacturer.)

5. Applicant for certification scheme 3s, 4s can be incorporated under the laws of the State - a member of the Customs Union at its territory of a legal entity or natural person as an individual entrepreneur, or are a manufacturer or seller, or performing the functions of the foreign manufacturer under a contract with them, in terms of products supplied comply with the requirements of the technical regulations, and part of the responsibility for non-compliance of delivered products to the

requirements of the technical regulations Customs Union (the person performing the functions of the foreign manufacturer).

6. With the certification of equipment:

1) manufacturer (person authorized by the manufacturer), the importer provides the certification body (assessment (confirmation)), a set of documents for the equipment, confirming compliance with the requirements of explosion-proof equipment of this technical regulation of the Customs Union, which includes

- technical specifications (if any),
- operational documents;

The list of standards corresponding to the requirements of the equipment from the list of the standards referred to in paragraph 1 of Article 5this technical regulation of the Customs Union (in their application by the manufacturer);

- explanatory note containing a description of the technical decisions and risk assessment, confirm the explosion protection of these technical regulations of the Customs Union, if the standards are not available or not used,
- a compliance certificate for the quality management system of the manufacturer (if any),
- the contract (supply contract) or shipping documentation (for party equipment)

2) Certification Body (assessment (confirmation)):

performs the identification of the presented equipment by establishing the identity of its performance characteristics, defined in Article 1 of this technical regulation of the Customs Union and the provisions established by paragraphs 8 and 9 of Article 4 of the technical regulations of the Customs Union,

Organizes test specimen (s) of equipment in an accredited testing laboratory (center) for compliance with the standards of the List of standards referred to in paragraph 1 of Article 5 of this technical regulation of the Customs Union, and analyzes the report (s) tests. In the test report indicates a list of technical documentation (drawings of explosion protection), confirming that the equipment and the Ex-component requirements of this technical regulation of the Customs Union.

If necessary, caused by specific manufacturing and installation, technical documentation specified by the manufacturer for the manufacturing or assembly, allowed the testing equipment place of manufacture, and (or) installation.

If the standards are not applied by the manufacturer or missing, the certification body (assessment (confirmation)) conducts conformity assessment requirements of the equipment directly explosion of this technical regulation of the Customs Union. To this end, the certification body:

- using the technical documentation and description of the adopted technical solutions and risk assessment, confirm the explosion protection this technical regulation of the Customs Union, in the explanatory note of the manufacturer determines the specific requirements for safety certificated equipment

- setting standards, establishing methods for measuring and testing of the List of standards referred to in paragraph 1 of Article 5 of this technical regulation of the Customs Union, or in their absence defines methods of control, measurement and test equipment to verify its conformity to specific requirements;

- arrange for testing of equipment in an accredited testing laboratory (center);

- Conducts analysis of the production of the manufacturer. In the presence of the manufacturer's certified quality management system of production or design and production estimates of the ability of the system to a stable release of certified equipment that meets the requirements of these technical regulations,

Conformity assessment at lot of equipment (single equipment) analysis of production is not carried out;

- Conducts inspection control (if appropriate certification scheme) for certified equipment for the duration of the certificate compliance through testing samples in an accredited testing laboratory (center) and (or) the analysis of the production (Figure 1c),

Issue a certificate of conformity to a single form, approved by the Commission:

- on a commercially available equipment with a validity of 5 years:

- for a lot of equipment (single equipment) term is not set.

Certificate of components (Ex-components) with the requirements of the technical regulations of the Customs Union shall be issued to implement the procedures specified in this subparagraph, in the same form.

Certificate of conformity must contain the application, including the following information:

- description of the design and means of protection,

- the special conditions of use;

3) manufacturer (person authorized by the manufacturer), the importer:

- in obtaining a certificate of conformity does a single sign of products on the market states - members customs union and the registration number of the certification body (assessment (confirmation));

- generates a set of documents for the equipment, which includes documentation for the equipment listed subparagraph 1 of this paragraph;

- report (s) of testing;

- certificate of conformity,

- shall take all necessary measures:

- the manufacturing process was stable and ensures conformity of the produced equipment requirements of this technical regulation of the Customs Union (Figure 1c).

7. In the event of the manufacturer in the design and (or) technical documentation attesting to the equipment and (or) Ex-component requirements of this technical regulation of the Customs Union, the changes affecting the performance Explosion-proof equipment, it is the certification body (assessment

(confirmation)), certificate of compliance, a description of the changes, technical documentation (drawings of explosion protection), as amended, and the sample for further testing, if the certification body (assessment (confirmation) compliance) considers only an insufficient examination of the technical documentation, as amended, for the decision to appropriate equipment and (Or) Ex-component of this technical regulation of the Customs Union to the changes.

In this case, the certification authority (assessment (confirmation)) examines the technical documentation (drawings of explosion protection), as amended, and if he deems it insufficient, and additional test sample. With the positive results of that work certification authority (assessment (confirmation)) draws decision on the confirmation of the certificate of conformity with the changes or issues a new certificate conformity with a technical regulation of the Customs Union, if changes need to be considered equipment and (or) Ex-component as a new product.

8. On the territory of states - members of the Customs Union, the set of documents to be stored:

the equipment - the manufacturer (the person designated by the manufacturer) for at least 10 years from the date of withdrawal (termination) with the production of this equipment;

for a lot of equipment (single product) - the importer, manufacturer or a person designated by the manufacturer for at least 10 years from the date of implementation of the last product of the party.

The documents and materials, confirming the results of certification, are stored in the certification body that issued the certificate of conformity for at least 5 years after the expiration of the certificate of conformity.

Set of documents should be granted state regulatory bodies on request.

Article 7. Single sign marking of products on the market states - members of the Customs Union

1. Equipment that meets the requirements of this technical regulation of the Customs Union and have undergone conformity assessment in accordance with Article 6 of this technical regulation of the Customs Union shall be marked with a mark of one product on the market states - members of the Customs Union.

Equipment marked with a single sign of products on the market states - members of the Customs Union at its meeting all the technical regulations of the Customs Union and EurAsEC technical regulations, applicable to him and providing for the application of a single sign of products on the market states - members of the Customs Union.

2. Single sign marking of products on the market states - members of the customs union is to produce equipment in circulation in the market.

3. Single sign of products on the market states - members of the Customs Union is applied to each piece of equipment (products) in any manner, providing crisp and clear images over the life of the equipment.

Single sign of products on the market states - members of the Customs Union is applied to the product, as well as given in the literature accompanying the technical documentation of the manufacturer.

4. May be applied as a single sign of products on the market states - members of the Customs Union only on the packaging and the instruction in the literature accompanying the technical documentation of the manufacturer, if the mark cannot be applied directly to the equipment due to the design.

Article 8. Protection clause

1. State - members of the Customs Union shall take all measures to limit, prohibition of issue equipment for explosive environments on a single customs territory of the Customs Union, and withdrawal from the market of equipment that does not meet security of this technical regulation of the Customs Union.

Members of the Coordinating Committee for Technical Regulation, application of sanitary, veterinary and phytosanitary measures and authorized representatives of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	
	VN Roots		RA Satbaev		VY Salamatov
	VM Kazakevich		SS Khasenov		ON Aldoshin
	IA Zastenskaya		NO Sadvakasov		AL Safonov
Executive secretary of the Coordination Committee				MG Chuiko	
The experts of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	

Appendix 1
to the technical regulations
of the Customs Union "On the safety
equipment for working in
hazardous environments "

CLASSIFICATION figures determined intrinsically safe equipment

I. Classification of hazardous areas

1. Classification of hazardous areas is applied to the choice of equipment, according to its level of protection that ensures the safe operation of such equipment in the appropriate hazardous area.

2. Depending on the frequency and duration of the presence of explosive gas or dust environment explosive areas are classified into the following classes:

1) for explosive gas atmospheres - classes 0, 1 and 2, and

2) for explosive dust atmospheres - classes 20, 21 and 22.

II. Equipment classification groups

Depending on the application, the equipment is divided into the following groups:

1) Equipment Group I - equipment intended for use in underground mines and surface structures, dangerous by fire damp and (or)combustible dust. Depending on the design of the equipment I can have one of three levels of protection,

2) equipment group II - equipment intended for use in the field (other than mines and surface facilities), for hazardous explosive gas atmospheres. Depending on the construction equipment group II may be one of three levels of protection. Equipment group II can be divided into subgroups IIA, IIB, IIC, depending on the category of hazardous mixture for which it is intended;

3) Equipment Group III - equipment intended for use in the field (other than mines and surface facilities), dangerous for explosive dust atmospheres. Depending on the design can be one of three levels of protection. Equipment Group III can be divided into subgroups IIIA, IIIB, IIIC, depending on the characteristics of an explosive atmosphere, for which it is intended.

III. Equipment Classification by level of protection

1. Equipment, depending on the risk of becoming a source of ignition and the conditions of its use in explosive environments classified by levels of protection:

1) "special explosion-proof" ("very high"),

2) "Intrinsically Safe" ("high"),

3) "increased safety explosion" ("high").

2. The level of protection "special exproof" ("very high") apply to equipment which is intended to operate in accordance with the manufacturer's operating parameters, the required level of protection, even in the unlikely failure remains functioning in the presence of an explosive atmosphere, in which failure One remedy required level of protection is provided by a second independent means of protection or the appropriate level of protection is provided by two failures of protection, occurring

independently of each other.

equipment this level of protection is intended for use in underground mines and surface structure in which the risk of the presence of mine gas and (or) combustible dust (equipment group I), or on objects and (or)areas (equipment group II and III), in which an explosive environment provided by a mixture with air of flammable substances in the form of gas, vapor, mist or dust, fibers, volatile substances present continuously for long periods or frequently.

3. The level of protection "Intrinsically Safe" ("high") applies to equipment designed for operating in accordance with the manufacturer's operating parameters and the required level of protection and performance in normal operation with one be likely damaged.

Equipment group I of the level of protection must be able to safely turn off when the regulated concentration methane in the environment.

equipment this level of protection is intended for use in underground mines and surface structure, in which there is a probability of the presence of firedamp and (or) of combustible dust (equipment group I), or on objects and (or) their areas (equipment group II and III), which probably an explosive atmosphere in the form of gas, vapor, mist, dust, fibers, or flying particles.

4. The level of protection "increased safety explosion" ("enhanced") applies to equipment designed to operate in accordance with the manufacturer's operating parameters and operate only in a specified manufacturer's normal operation.

Equipment group I of the level of protection that you can safely turn off when the regulated concentrations of methane is in the environment.

Level of protection of the equipment intended for use in underground mines and surface structures (Equipment group I) or at the facilities and (or) their areas (equipment group II and III), which, under normal operating conditions, the presence of methane and (or) of combustible dust or explosive environment created by a mixture with air of flammable substances in the form of gas , steam, mist or dust, fibers, volatile matter, it is unlikely, but if there is an explosive atmosphere, it is only for a short period of time.

IV. Types of EPL

1. Depending on the envisaged special measures to prevent the ignition of an explosive atmosphere surrounding equipment can have one type or combination of types of protection:

1) relating to electrical equipment designed for use in explosive gas atmospheres:

"D" - flameproof;

"e" - Increased protection;

"I" ("IA", "IB", "IC") - Intrinsically Safe (intrinsically safe);

"m" ("ma", "Mb", "MC") - encapsulation;

"NA" - non-sparking equipment;

"NC" - pin device in Flameproof or hermetically sealed unit, or non-incentive, or tight unit;

"nR" - shell with limited pass gas;

"nL" - equipment containing electrical circuits with reduced energy;

"nZ" - pressurized shell;

"o" - an oil immersion;

"P" ("px", "PY", "PZ") - filling or blowing pressurized shell;

"q" - powder filling;

"s" - a special type of protection;

2) relating to electrical equipment designed for use in explosive dust environments:

"T" ("ta", "tb", "tc") - protection of the shell;

"I" ("IA", "IB") - Intrinsically Safe (intrinsically safe);

"m" ("ma", "Mb "," mc ") - encapsulation;

"P" - filling or blowing pressurized shell;

"s" - a special type of protection,

3) in respect of non-electrical equipment intended for use in potentially explosive atmospheres:

"C" - constructional safety ;

"B" - control of ignition source;

"k" - protection of liquid immersion;

"D" - flameproof protection;

"Fr" - shell protection with a limited pass gas;

"P" - protection of high blood pressure,

4) other recognized forms of protection.

2. Types of protection equipment are determined by the specific measures contained in the equipment of different levels of protection to prevent ignition of the surrounding explosive atmosphere:

1) proof enclosure "d" - the type of protection equipment, with which it is often able to ignite an explosive gas atmosphere, are in shell to withstand the pressure of the explosion explosive mixture inside it and prevent the spread of the explosion in the surrounding explosive atmosphere,

2) protection of the shell "t" - the type of protection in which the equipment is protected hull that provides protection against dust, and the means to control the surface temperature,

3) increased protection type "e" - the type of protection, which uses additional measures against the possibility of exceeding the permissible temperature and sparking in normal or in this (emergency) mode;

4) Intrinsic (intrinsically safe) "i" - the type of protection, based on the restriction of electricity (power) in an electric discharge and temperature electrical components to below the level that causes inflammation of arcing or thermal effects,

5) encapsulation "m" - type of protection in which the parts of the equipment which can ignite an

explosive atmosphere by sparking or heating enclosed in a compound to prevent the ignition of an explosive atmosphere in the operation or installation;

6) Type of protection "n" - the type of protection, in which there are additional security measures that exclude the ignition of surrounding explosive gas atmosphere in the normal and the specified (abnormal) operating conditions of electrical equipment;

7) Oil immersion "o" - the type of protection in which the equipment or parts are immersed in a protective liquid, cannot ignite an explosive gas atmosphere, which may be present above the liquid or outside the enclosure;

8) filling or purging shell pressurized "p" - the type of protection, away from the external environment shell or premises by having them cover gas pressure greater than ambient pressure;

9) powder filling "q" - the type of protection in which the parts capable of igniting an explosive atmosphere are fixed in position and completely surrounded by filler, preventing inflammation Foreign surrounding explosive atmosphere;

10) special type of protection "s" - the type of protection, based on the measures of protection than protection measures provided subparagraphs 1 - 9 of this points, but considered sufficient to provide protection during the evaluation or testing;

11) structural safety "c" - the type of protection in which additional measures of protection, can not ignite the surrounding explosive atmosphere from hot surfaces, sparks and adiabatic compression generated by moving parts equipment,

12) controls the ignition source "b" - the type of protection, providing installation in non-electrical equipment device, which eliminates the formation of an ignition source and through which the internal built-in sensors monitor the parameters of components and trigger the automatic protective devices or alarms,

13) protection liquid immersion "k" - the type of protection in which potential ignition sources are safe or separated from explosive atmospheres by full or partial Immersion in a protective liquid, when the dangerous surface permanently covered by a protective fluid such way that an explosive atmosphere that may be above the level of liquid or outside the enclosure of equipment could not be ignited,

14) protection shell with limited pass gas "fr" - the type of protection, in which the flow is limited by the shell surrounding explosive atmosphere in the shell to an acceptable low level, in which the concentration of an explosive atmosphere in the shell below lower flammability limits.

V. Classification of equipment for temperature classes

Depending on the maximum allowable surface temperature of the equipment group II is divided into the following temperature classes:

1) T1 - 450 degrees Celsius,

2) T2 - 300 degrees Celsius

3) T3 - 200 degrees Celsius

4) T4 - 135 degrees Celsius

5) T5 - 100 degrees Celsius

6) T6 - 85 degrees Celsius .

Members of the Coordinating Committee for Technical Regulation, application of sanitary, veterinary and phytosanitary measures and authorized representatives of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		Russian Federation	
	VN Roots		RA Satbaev		VY Salamatov
	VM Kazakevich		SS Khasenov		ON Aldoshin
	IA Zastenskaya		NO Sadvakasov		AL Safonov
Executive secretary of the Coordination Committee				MG Chuiko	
The experts of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		From the Russian Federation	

Annex 2
to the technical regulations
of the Customs Union "On the safety
equipment for operation in
potentially explosive atmospheres "

PICTURE SPECIAL MARK EXPLOSION <*>

<*> - Figure omitted

Image description special character Ex

Picture special character Ex is a combination of two stylized letters of the alphabet "E" and "x", the height of the letter "x" is 5/9 height letter "E", inscribed in a rectangle in the light (Fig. 1) or on a contrasting background (Fig. 2), with a ratio of height to width of 11/8.

Ex stands for Explosion (Explosion-proof).

Dimensions special sign explosion determines the OEM for explosive environments. Base size height of the rectangle must be at least 10 mm. Dimensions special character explosion should

ensure clarity of its elements and visible to the naked eye in general color background equipment or Ex-component.

Members of the Coordinating Committee for Technical Regulation, application of sanitary, veterinary and phytosanitary measures and authorized representatives of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		Russian Federation	
	VN Roots		RA Satbaev		VY Salamatov
	VM Kazakevich		SS Khasenov		ON Aldoshin
	IA Zastenskaya		NO Sadvakasov		AL Safonov
Executive secretary of the Coordination Committee				MG Chuiko	
The experts of the Parties:					
From the Republic of Belarus		Of the Republic of Kazakhstan		Russian Federation	