

Republic of Türkiye, Province of Mersin

**LIST OF MEASUREMENT, TEST, AND CONTROL OBJECTS AND INDICATORS
CONTROLLED BY THEM, OF THE METAL LABOURATORY OF
AKKUYUTSRST CONSTRUCTION AND TEST LABORATORY INDUSTRY
TRADE LIMITED COMPANY**

Measurement, Test, Control Name of objects	Parameter to check	Measuring range, measuring units	Description and name of the document relating to the measurement, test, control procedure (method)
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1. Seamless pipe. 2. Electric welded pipes (common metal and welded connections of metal pipes and pipelines, equipment of power plants, their elements and components (including elements and devices for fixing and assembling equipment, devices, tools, wires and cables, as well as components and materials). 3. Plain metal and welded connections of reinforced concrete structures, steel construction structures and localisation safety systems, including construction structures (metal cladding of localisation systems, gates, manholes, doors, windows, gateways, bypass and safety devices, embedded parts and other elements), which are part of insulating and leakage enclosures, prestressing systems, as well as products installed in	Tensile strength	Between 10 - 1000 N/mm ² (between 10 and 100 kgs/mm ²)	GOST 1497-84 Metals. Stress Control Methods. GOST 10006-80 Metal Pipes. Tensile Test Methods;
	Temporary resistance	Between 10 - 1000 N/mm ² (between 10 and 100 kgs/mm ²)	GOST 28870-90 Steel. Methods of Testing the Stress of Thick Plate in Thickness Direction;
	Fluid limit (physical)	Between 10 - 850 N/mm ² (between 10 - 85 kgs/mm ²)	GOST 10446-80 Phone. Tensile Test Method; GOST 12004-81
	Flow limit (conditional)	Between 10 - 850 N/mm ² (between 10 - 85 kgs/mm ²)	Rebar Hole. Tensile Test Methods; GOST 34028-2016 Reinforcing Bar for Reinforced Concrete Structures. Technical Conditions;
	Relative elongation after rupture	5% to 80%	GOST 23118-2019 General Technical Conditions for Steel Structure Constructions;
	Relative contraction after rupture	5% to 90%	GOST 10884-94 Thermodynamically Hardened Reinforcement Steel for Reinforced Concrete Constructions.
	Fluidity limit at high temperatures	Between 10 - 40 kgs/mm ²	
	Relative elongation after rupture at high temperatures	5% to 40%	
	Relative shrinkage after rupture at high temperatures	5% to 60%	
	Impact energy	0.1 - 450 dB	GOST 34227-2017
Impact resistance	0,1 - 367 J/cm ²	Mechanical Reinforcement Connections for Reinforced Concrete Structures. Test Methods. GOST R 57997-2017 Welded Reinforcement and Embedded Products, Welded Reinforcement Connections and Embedded Products of Reinforced Concrete Structures. General Technical Conditions; STO SRO-S 605429600 00011-2017	

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construction structures of leakage and localisation systems. 4. Forged products. 5. Sheet metal plates. 6. Long rolling products. 7. Casting. 8. Connectors. 9. Shaped parts. 10. Stemmed parts. 11. Profiler. 12. Rolled profile. 13. Reinforcement bars for reinforced concrete structures. 14. Wire. 15. Welded joints, surfacing from steels of various grades: - Alloy and high alloy steels; - Carbon steel and non-alloy cast iron; - Corrosion resistant, heat resistant, wear resistant steels and alloys			Facilities using nuclear energy. Requirements for Mechanical Fittings of Reinforced Concrete Structures during Construction and Design; GOST 9454-78 Metals. Impact Bend Test Method at Low, Ambient and High Temperatures; GOST 4543-2016 Metal Products from Structural Alloy Steel. Technical Conditions; GOST 30456-97 Metal Products, Rolled Sheet and Steel Pipes. Impact Bending Test Methods; NEKN G-7-002-86 Strength calculation norms for equipment and pipelines of nuclear power plants (Appendix 2, m. 5)
	Tensile resistance at high temperatures	Between 10 - 70 kgs/mm ²	GOST 19040-81 Metal Pipes. Tensile Test
	Fluidity limit at high temperatures	Between 10 - 40 kgs/mm ²	Methods at High Temperatures;
	Relative elongation after rupture at high temperatures	5% to 40%	GOST 9651-84 Metals. Tensile test methods at high temperatures.
	Relative shrinkage after rupture at high temperatures	5% to 60%	
	bending angle	10° to 180°	GOST 14019-2003 Metals. Bending Test Method. GOST 3728-78 Piping. Bending Test Method.
	Flattening Gap	From 0.2 mm to pipe wall thickness	GOST 8695-75 Piping. Flattening Test Method;
	crack size	0,1 - 100 mm	
	Hardness value according to Brinell	8 - 450 HB	GOST 9012-59 Metals. Hardness measurement according to Brinell;
	Hardness value according to Rockwell	Between 20 - 100 HRC	GOST 9013-59 Metals and Alloys. Hardness measurement according to Rockwell;
Hardness value according to Vickers	10 to 2000 HV	GOST 2999-75 Metals and Alloys. Hardness measurement according to Vickers.	
Measurement of Mechanical Properties by Hardness Recalculation	8 - 450 HB Between 20 - 100 HRC 10 to 2000 HV	and 1.2.1.02.019.1121-2016 Instructions. Determination of Metal Mechanical Properties of Nuclear Power Plant Equipment	

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			According to Hardness Properties by Non-Example Methods
	Temporary resistance	Between 10 - 1000 N/mm ² (between 10 and 100 kgs/mm ²)	GOST 6996-66 Welded Links. Methods of Determining Mechanical Properties;
	Fluid limit (physical)	10 to 850 N/mm ² (10 to 85 kgs/mm ²)	GOST 9454-78 Metals. Impact Bend Test
	Relative elongation after rupture	5% to 80%	Method at Low, Ambient and High Temperatures;
	Relative contraction after rupture	5% to 90%	GOST 9651-84 Metals. Tensile test methods at high temperatures;
	Impact energy	0.1 - 450 dB	GOST RISO 4136-2019
	Impact resistance	0,1 - 367 J/cm ²	Destructive Testing on Welds of Metallic Materials. Tensile test on specimens cut across the seam
	bending angle (bending until the specified bending angle is reached)	10° to 180°	
		Presence/absence of cracks	
		Length of cracks (if any) from 0.1 to 100mm	
	Bending angle (bending until the edges are parallel)	Reached / not reached	
		Presence/absence of cracks	
		Length of cracks (if any) from 0.1 to 100mm	
	Bending angle (Bending until the edges touch)	Reached / not reached	
		Presence/absence of cracks	
		Length of cracks (if any) from 0.1 to 100mm	
	Flattening until the specified gap is reached	The gap is from 1 to 5 mm.	
		Presence/absence of cracks	
		Length of cracks (if any) 0.1 - 80mm	
Seamless pipes, Electric welded pipes, Ordinary metal, Forged products, Sheet metal, Sheet metal, Long rolling products, Castings, Fasteners, Shaped parts, Bodied parts, Welded joints, Surface coatings from steels of various grades (alloy	Content of ferrite phase	0.1% to 20%	EA HR 1.1.2.19.0199-2010
	Ferrite number	0% to 120%	Determination of Ferrite Phase Content in Deposition Metal of Welding and Surface Coating Materials, Common Metal, Welding Joints of Austenitic Stainless Steels, Anti-Corrosion Coating of NPP Equipment and Pipelines GOST R 53686-2009 Source. Determination of Ferrite Phase Content in Weld Metal of Austenitic and Bi-Phase Ferrite-Austenitic Chromium-Nickel

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and high alloy steels, carbon steel and unalloyed cast iron, corrosion resistant, heat resistant, wear resistant steels and alloys)			Corrosion Resistant Steels RMD 2730.300.08-2003 Determination of Ferrite Phase Content in Austenitic Grade Chromium-Nickel Steels by Magnetic Method; GOST 11878-66 Austenitic steel. Determination Methods of Ferrite Phase Content in Rods;
	microstructure	1 to 10 points	GOST 8233-56 Steel. Microstructure etalons.
	Striping	0 to 5 points	GOST 5640-2020
	Widmanstatten orientation	0 to 5 points	Steel. Metallographic Method for Evaluating the Microstructure of Sheets and Strips
	Contamination with non-metallic inclusions	0 to 5 points	GOST 1778-70 Steel. Metallographic Methods for the Determination of Non-Metallic Inclusions
	Grain size: - main scale; - additional scale 1 to determine the fine grain size; - additional scale 2 to determine the large grain size;	1 to 10 numbers 7 to 14 numbers -3 to 2 numbers	GOST 5939-82 Steel and Alloys. Particle Size Detection and Determination Methods
	macro structure	The presence/absence of cracks, non-welded areas	GOST 10243-75 Steel. Macro Structure Test and Evaluation Method;
	Size of inclusions and deposits	0.2 - 6 mm	and 1.1.3.17.1692-2020 Instructions. Metallographic Control of Metal Condition of Equipment and Pipelines in Nuclear Power Plants
	Distance between any inclusions and accumulations	0.2 - 50mm	ÇD İK 0282-2005 Instruction on Metallographic Control of Metal Condition of Equipment and Pipelines in Nuclear Power Plants.
	Sum of the size of inclusions and accumulations	0.2 - 18mm	
	Depth of the decarbonised layer (by measuring hardness or microhardness)	Decarbonised / non-decarbonised	GOST 1763-68 Steel. Methods for Determining the Depth of the Decarbonised Layer;
Resistance to intergranular corrosion	Resistant / not resistant	GOST 6032-2017 Corrosion Resistant Steels and Alloys Test Methods for Resistance to Intergranular Corrosion;	
Steels and Alloys, Welded Joints	Silicon	0.05% - 7.0 m.d. between	GOST 28033-89 Steel. X-ray Fluorescence Analysis Method;
	Titanium	0.01% to 5.0 m.d.	

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	Vanadium	0.01% to 5.0 m.d.	ÇD 27.18.05.71-2010 Steels and Alloys of NGS Pipelines and Equipment Elements Determination of chemical composition by atomic emission spectral analysis
	Chromium	0.05% to 35.0 m.d.	
	Manganese	0.05% to 20.0 m.d.	
	Cobalt	0.05% to 20.0	
	Nickel	0.05% to 45.0 m.d.	
	Copper	0.01% to 5.0 m.d.	
	Niobium	0.01% to 2.0 m.d.	
	Molibden	0.05% to 10.0 m.d.	
	Tungsten	0.05% to 20.0	
	Carbon	0.002% to 3.0 m.d.	
	Sulfur	0.001% to 0.2 m.d.	
	Phosphorus	0.001% to 0.2 m.d.	
	Silicon	0.002% to 5.0 m.d.	
	Manganese	0.0005% to 35.0 m.d.	
	Chromium	0.001% to 35.0 m.d.	GOST 18895-97 Steel. Photoelectric Spectral Analysis Method.
	Nickel	0.001% to 45.0 m.d.	
	Vanadium	0.001% to 10.0 m.d.	
	Cobalt	0.0005 to 20.0 m.d.	
	Copper	0.001% to 5.0 m.d.	
	Aluminum	0.001% to 10.0 m.d.	
	Arsenic	0.0002% to 0.5 m.d.	
	Molibden	0.0002% to 10.0 m.d.	
	Tungsten	0.002% to 20.0 m.d.	
	Vanadium	0.001% to 10.0 m.d.	
	Titanium	0.001% to 5.0 m.d.	
	Niobium	0.001% to 3.0 m.d.	
	Zirconium	0.001% to 0.5 m.d.	
	Lead	0.001% to 0.5 m.d.	
	Tin	0.0005% to 0.25 m.d.	
	Zinc	0.001% to 0.05 m.d.	
	Antimony	0.001% to 0.05 m.d.	
	Bismuth	0.001% to 0.05 m.d.	
	Nitrogen	0.001% to 0.05 m.d.	
	Magnesium	0.001% to 0.20 m.d.	
	Niobium	0.001% to 3.0 m.d.	ÇD İK 0669-2006 Steels and Alloys of Pipelines and Equipment Elements of Nuclear Power Plants. Determination of chemical composition by atomic emission spectral analysis
	Aluminum	0.001% to 10.0 m.d.	
	Tungsten	0.002% to 30.0 m.d.	
	Lead	0.001% to 0.5 m.d.	
	Chromium	10.0% to 27.0 m.d.	
	Nickel	10.0% to 38.0 m.d.	
	Manganese	5.0% to 8.0 m.d.	
	Molibden	5.0% to 7.0 m.d.	
	Copper	1.9% to 2.5 m.d.	
	Silicon	2.0% - 6.0 m.d.	
Base metal of NGT equipment and pipelines classified and unclassified according to NP-001	Thickness	0.6 - 8000mm	GOST R 50.05.03-2018 Conformity Assessment System in the Field of Nuclear Power Utilisation Conformity Assessment in the Form of Inspection. Combined Methods. Thickness Measurement and

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			Ultrasonic Control of Monometals, Bimetals and Anti-Corrosion Coatings NEKN G-7-031-91 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Ultrasonic control. Part III. Thickness measurement of monometals, bimetal and anti-corrosion coatings; ITTSYa.401171.003D (Tadil No:1) Methodology of Measuring Wall Thickness of Pipelines of Nuclear Power Plants Using Electromagnetic and Acoustic Thickness Gauges
Base metal, welded joints of technical structures	Defects detected during leak testing and their location	Does not leak / leaks	SDOS-07-2012 Methodical Instructions for the Procedure of Monitoring the Impermeability of Technical Devices and Structures Used and Operated in Hazardous Production Facilities (m. 6.5.3, 7.2.2)
Base metal, welded joints and surface coatings of NGT equipment and pipelines classified and unclassified according to NP-001	Tightness	Presence / absence of gas bubbles	GOST R 50.05.01-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Leakage Control; NEKN G-7-019-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Tightness check. Gas and liquid methods.
		Pressure measurement Between 5·10 ⁻¹¹ - 5·10 ⁻¹⁰ m ³ Pa/s	
		Presence/absence of penetrating liquid stains on chalk coating	
	Amplitude of the echo signal, A	1.0 to 110 dB	GOST R 50.05.05-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Ultrasonic Control of Main Materials (Semi-Finished Products); Uniform Inspection Methods for the Inspection of Welding Joints
Equivalent area of defects, S _{equiv}	1.0 to 70.0 mm ²		
Coordinates, nominal length <i>l</i> , nominal height <i>h</i>	2.0 to 1500mm		

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			and Coatings of Base Material (Semi-Finished Product), Equipment and PNAEG-7-031-91 NGT Pipelines. Ultrasonic control. Part III. Thickness Measurement of Monometals, Bimetals and Anti-Corrosion Coatings
	Depth of mechanical, corrosive, erosion damage	0.1 to 5mm	GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for
	Volumetric defects in round or elongated shape	0.1 to 5mm	Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods.
	Minimum span width of conditional defect	2.0 to 25.0 mkm	Visual and Measurement Control; NEKN G-7-016-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; GOST R 50.05.09-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Penetrant Control; NEKN G-7-018-89 Security guide. Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Penetrant Control; RB-090-14 Guide to Safety During the Use of Nuclear Power. Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Penetrant Control; GOST R 50.05.06-2018 2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Magnetic particle inspection. NEKN G-7-015-89

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			Security guide. Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Magnetic particle inspection.
Surface of parts to be joined and edges of welded joints made in preparation for welding of equipment of NGT technological systems and pipelines, classified and unclassified according to NP-001	Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements: - edge bevel angle; - Edge cut; - Edge cut offset, offset of edges to be joined; - Connection gap; - weld joint width, reinforcing coating height, corner weld leg	0° to 45° 0.1 - 5.0 mm 0.3 - 5.0 mm 0.3 - 4.0mm 0.1 to 50mm	GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Visual and Measurement Control; PNAE G-7-016-89 Uniform Inspection Methods for the Inspection of Weld Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines Visual and Measurement Inspection; GOST 2789-73 Surface roughness. Parameters and characteristics; KSD 9701105632-003-2021 Instruction on Measurement and Visual Inspection
The surface of welded joints, anti-corrosion coatings, reinforcing coatings of equipment and pipelines of NGT technological systems classified and unclassified according to NP-001	Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements: - size of surface inclusions, pores (single and accumulated); - slipping of the edges of butt welded joints past the inner and outer surfaces; - the height (depth) of the recesses between the lips and the plow of the surface of the weld joint	0.1 to 5mm 0.1 to 10.0 mm 0.1 to 3.0mm	GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Visual and Measurement Control; NEKN G-7-016-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; KSD 9701105632-003-2021 Instruction on Visual and Measurement Control; GOST R 50.05.09-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Penetrant Control; NEKN G-7-018-89 Security guide. Uniform Control Methods for the Inspection of

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			Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Penetrant Control; GOST 18442-80 Non-Destructive Control. Penetrant Methods. General Requirements
The surface of casting hardware equipment, elements, products, fixtures	Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements: - Dents; - surface defect	0.2 to 5.0mm 0.5 to 5.0 mm	GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Visual and Measurement Control; NEKN G-7-016-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; NEKN G-7-025-90 Steel Casting Products For NGT. Control Rules; KSD 9701105632-003-2021 Instruction on Visual and Measurement Control; KSD 9701105632-003-2021 Instruction on Visual and Measurement Control; GOST R 50.05.17-2019 Conformity Assessment System in the Field of Nuclear Power Use Steel Casting Products for NGT equipment and pipelines. Control Rules; GOST R 50.05.09-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Penetrant Control; NEKN G-7-018-89 Security guide. Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Penetrant Control
Molten metal surface of welded connections of NPP	Non-compliance of the shape and dimensions of the welded joint /		GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for

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safety localisation systems	sheathing with the established requirements: - size of surface inclusions, pores (single and accumulated); - cuts; - breakage in the axles of the connecting parts; - convexity (concavity) of the root of the seam from the inside; - the height (depth) of the recesses between the lips and the plow of the surface of the weld joint	0.1 to 3.0mm 0.1 to 1.0mm 0.1 to 3.0mm 0.1 to 2.5 mm 0.1 to 2.0 mm	Conformity Assessment System in the Field of Nuclear Power Utilisation Visual and Measurement Control; NEKN G-7-016-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; KSD 9701105632-003-2021 Instruction on Measurement and Visual Inspection
Surface of Base Metal and Welding Joints of Pressure Vessels for Nuclear Energy Utilization Facilities,	Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements: - ordinary metal cuts, pores, slags and other inclusions	0.1 - 5.0 mm	RB-089-14 Guide to Safety During the Use of Nuclear Power. Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; GOST R 50.05.08-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Visual and metric control
Surface of Ordinary Metal and Welding Connections of Steam and Hot Water Pipelines for Nuclear Power Utilisation Plants,	Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements: - depth of mechanical damage (dents, indentations, etc.); - deviations in the diameter and ovality of the cross section of the pipe elements; - Displacement (mismatch) of the edges of the welded elements (parts) from the outer part of the weld seam; - Displacement (mismatch) of the element (part) from the	0.5 to 10.0 mm 0.5 to 10.0 mm 0.5 to 10.0 mm 0.5 to 10.0 mm	NEKN G-7-016-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Visual and Measurement Control; KSD 9701105632-003-2021 Instruction on Measurement and Visual Inspection

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	inside of the edges;		
Base metal, welded joints and surface coatings of NGT equipment and pipelines classified and unclassified according to NP-001	Amplitude of the echo signal, A	1 to 110 dB	NEKN G-7-014-89 Uniform Control Methods of Inspection of Welding Joints and Coatings of Main Material (Semi-Finished Product), Equipment and Pipelines of Nuclear Power Plants Ultrasonic control. Control of main materials (semi-finished products);
	Equivalent area of defects, S_{equd}	1 to 70.0 mm ²	. NEKN G-7-030-91
	Coordinates, nominal length, nominal height (x, h, l, h _y)	2 - 1500 mm	Uniform Control Methods of Inspection of Welding Joints and Coatings of Main Material (Semi-Finished Product), Equipment and Pipelines of Nuclear Power Plants Ultrasonic control. 7 Part II Control of Welded Joints and Coatings; NEKN G-7-031-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Ultrasonic control. Part III. Thickness measurement of monometals, bimetals and anti-corrosion coatings; GOST R 50.05.05-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Ultrasonic Control of Main Materials (Semi-Finished Products); GOST R 50.05.02-2018 Conformity Assessment in the Form of Inspection for Conformity Assessment System in the Field of Nuclear Power Utilisation Combined Methods. Ultrasonic Control of Welded Joints and Alloyed Surfaces; GOST R 55724-2013 Non-Destructive Control. Welded Links. Ultrasonic methods.
Base metal, welded joints and surface	Dimensions of surface defect;		GOST 7512-82 Non-Destructive Control.

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coatings of NGT equipment and pipelines classified and unclassified according to NP-001	<ul style="list-style-type: none"> - removal of non-welded areas, pores, inclusions, etc. length, width; - total length of pores, inclusions; - length of cracks 	<p style="text-align: center;">0.1 - 5.0 mm</p> <p style="text-align: center;">0.2 - 90.0 mm</p> <p style="text-align: center;">0.1 to 700 mm</p>	<p>Welded Links. Radiographic method; GOST 23055-78 Non-Destructive Control. Alloy Welding of Metals. Classification of Welded Joints According to Radiographic Control Results. GOST R 50.05.07-2018 Conformity Assessment System in the Field of Nuclear Power Utilisation Conformity Assessment in the Form of Audit. Combined Methods. Radiographic Control; NEKN G-7-017-89 Uniform Control Methods for the Inspection of Welding Joints and Coatings of Base Material (Semi-Finished Product), Equipment and NGT Pipelines. Radiographic Control</p>
Welded Reinforcement and Embedded Products (Seams), Welded Reinforcement Connections and Embedded Products of Reinforced Concrete Structures. Metal constructions	<p>Non-compliance of the shape and dimensions of the welded joint / sheathing with the established requirements:</p> <ul style="list-style-type: none"> - ordinary metal cuts, pores, slags and other inclusions - depth of surface coating metal shrinkage dents; - Amplitude difference of the echo signal 	<p style="text-align: center;">0.1 to 5.0 mm</p> <p style="text-align: center;">0.1 to 3.0mm</p> <p style="text-align: center;">0 to 20 dB</p>	<p>GOST R 57997-2017 Welded Reinforcement and Embedded Products, Welded Reinforcement Connections and Embedded Products of Reinforced Concrete Structures. General Technical Conditions; GOST 10922-2012 Welded Reinforcement and Embedding Products, Mechanical, Welding and Knitted Connections for Reinforced Concrete Structures. General Technical Conditions; GOST 14098-91 Welding Joints of Welded Reinforcement and Embedded Products of Reinforced Concrete Structures. Type, Structure and Dimensions; GOST 23858-2019 Welded Connections of Reinforced Concrete Structures, Butt Connection Parts. Ultrasound quality control methods. Admission Rules</p>