Accreditation field of the testing laboratory (center) Laboratory of destructive and non-destructive control methods 353 of Central Design Bureau of Machine Building Joint-Stock Company testing laboratory (center) denomination

1. 7, bldg.. 2 Profsoyuznaya St., the town of Sosnovy Bor, Leningrad Oblast 188540

(production building 254, letter V, V1, rooms 72-73, 76, 80, 81-84; south of building 2, prem. 1N - room 1-6)

2. Kirov Plant 47, letter L, Pr. Stachek (prem. 1N - rooms 29-31, prem. 35N - room 9) St. Petersburg 198097 address of the activity site

For conformity to the requirements of

GOST ISO/IEC 17025-2019 General Requirements for the Competence of Testing and Calibrating Laboratories

denomination and details of the interstate or national standard establishing general requirements for the competence of testing laboratories

The sec	Documents establishing rules		ARCP	EAEU					
Item	and research (test) and	Facility denomination	TEA	CN	Characteristic to be determined (indicator)	Measurement range			
N⁰	measurement methods		Code 2	Code					
1	2	3	4	5	6	7			
					snovy Bor, Leningrad Oblast 188540				
	(production building 254, letter V, V1, rooms 72-73, 76, 80, 81-84; south of building 2, prem. 1H - room 1-6)								
1	GOST 10006	Metal seamless, welded,	-	-	Temporary resistance	50-1000 (N/mm ²)			
		bimetal pipes				(5-100 kgf/mm ²)			
					Yield strength	50-1000 (N/mm ²)			
						(5-100 kgf/mm ²)			
					Relative elongation	1-90 (%)			
					Relative reduction	1-90 (%)			
2	GOST 9454	Ferrous and nonferrous	-	-	Impact resistance at room temperature	5-250 (J/cm ²)			
		metals and alloys							
3	GOST 8695	Metal seamless and welded pipes (with an outer diameter of not more than 400 mm and wall thickness of not more than 15% of the pipe outer diameter)	-	-	Presence of visually discovered cracks or ruptures with a metal sheen on the outer and inner surfaces	Discovered/not discovered			
4	GOST 8694	Round section metal seamless and welded pipes (with a wall thickness of not more than 9.0 mm and diameter of not more than 150 mm)							

1	2	3	4	5	6	7
5	GOST 1497 GOST 9651	Ferrous and nonferrous metals and products thereof (with a nominal diameter and the least cross-section size of 3.0 mm)	-	-	Temporary resistance Conditional yield strength Relative elongation after rupture Relative cross-section reduction after	50-1100 (N/mm ²) (5-110 kgf/mm ²) 50-1100 (N/mm ²) (5-110 kgf/mm ²) 1-90 (%) 1-90 (%)
7	GOST 6996 (section 4, section 5, section 7, section 8, section 9)	Deposited metal; weld joints	-	-	ruptureTemporary resistanceConditional yield strengthRelative elongation after ruptureRelative cross-section reduction afterruptureImpact resistanceCracks (for bending test)Crack size	50-1000 (MPa) (5-100 kgf/mm ²) 50-1000 (MPa) (5-100 kgf/mm ²) 1-90 (%) 1-90 (%) 5-90 (J/cm ²) Presence/absence 1-10 (mm)
8	GOST 9012	Metal	-	-	Brinell hardness	8-400 (HB)
9	GOST 9013				Rockwell hardness	20-70 (HRC)
10	GOST 2999				Vickers hardness	50-1500(HV)
11 12	GOST 24507 RNAE G-7-014 (p. 1.5.1; 6.19; 6.20)	Forgings of ferrous and nonferrous metals Forgings, bar iron, casting, sheets, pipes	-	-	Discontinuities Number of discontinuities and their equivalent size Conditional length	Discovered/not discovered Permissible/non- permissible Presence/absence
13	GOST R 50.05.05 (p. 5.4, 7.1.17, 7.3.10, 7.3.16, 7.6.3, 7.6.4)	Forgings, bar iron, casting, sheets, pipes	-	-	Discontinuities Number of discontinuities and their equivalent size Conditional length	Discovered/not discovered Permissible/non- permissible Presence/absence
14	RNAE G -7-030 (p. 4.4.2.5; 4.4.2.5.1; 4.4.2.7)	Weld joints and claddings	-	-	Discontinuities Number of discontinuities and their equivalent size Conditional length	Discovered/not discovered Permissible/non- permissible Presence/absence

1	2	3	4	5	6	7
15	GOST R 50.05.02 (p. 5.1.13, 7.3.1.1, 7.3.1.10, B4.5.1)	Weld joints and claddings	-	-	Discontinuities Number of discontinuities and their equivalent size Conditional length	Discovered/not discovered Permissible/non- permissible Presence/absence
16	RNAE G -7-031 (p. 7.3)	Mono-metals, bimetals, anticorrosive claddings	-	-	Wall thickness, claddings (ultrasonic thickness measurement)	1-1000 (mm)
17	GOST R 50.05.03 (p. 7.2,7.3, 7.4, 7.5)	Mono-metals, bimetals, anticorrosive claddings	-	-	Wall thickness, claddings (ultrasonic thickness measurement)	1-1000 (mm)
18	RNAE G-7-017	Weld joints, claddings	-	-	Internal defects and discontinuities	Discovered/not discovered 0.1-200 (mm)
19	GOST R 50.05.07	Weld joints, fused coatings			Sizes of cracks (T), poor fusions (H), slag (Ш), pores (Π), accumulations (C),	
20	GOST 7512	Weld joints			undercuts (Пдр), tungsten (В)	
21	RB (Safety Guide)-090-14	Base metal, weld joints and deposited surfaces of the equipment and pipelines of nuclear power units	-	-	Discontinuities coming to the surface Number of discontinuities Sizes	Discovered/not discovered Permissible/non- permissible 0.2-10 (mm)
22	GOST R 50.05.09	Base metal, weld joints and deposited surfaces of the equipment and pipelines of nuclear power units	-	-	Discontinuities coming to the surface Number of discontinuities Sizes	Discovered/not discovered Permissible/non- permissible 0.2-10 (mm)
23	RNAE G -7-016	Semi-finished products, parts, assembly units, weld joints, welded surfaces	-	-	Surface discontinuities Linear dimensions Angular dimensions	0.1-20 (mm) 0.01-10.00 (mm) 0-360 (°)
24	RB-089-14	Base metal, semi-finished products, parts, assembly units, weld joints, claddings			Radius Roughness	0.1-600 (mm) Ra 0.2-12.5
25	GOST R 50.05.08	Weld joints and deposited surfaces				

1	2	3	4	5	6	7
26	GOST18895	Metal products of steel	-	-	Carbon	0.010-2.0 (%)
					Sulfur	0.002-0.20 (%)
					Phosphorus	0.002-0.20 (%)
					Silicon	0.010-2.5 (%)
					Manganese	0.050-5.0 (%)
					Chrome	0.010-10.0 (%)
					Nickel	0.010-10.0 (%)
					Cobalt	0.010-5.0 (%)
					Copper	0.010-2.0 (%)
					Aluminum	0.05-2.0 (%)
					Molybdenum	0.010-5.0 (%)
					Tungsten	0.020-5.0 (%)
					Vanadium	0.005-5.0 (%)
					Titanium	0.005-2.0 (%)
					Niobium	0.010-2.0 (%)
					Arsenic	0.005-0.20 (%)
27	GOST R 54153	Metal products of steel		-	Carbon	0.002-3.0 (%)
					Phosphorus	0.001-0.20 (%)
					Silicon	0.001-0.20 (%)
					Manganese	0.002-5.0 (%)
				Chrome	0.0005-35.0 (%)	
ľ					Nickel	0.001-35.0 (%)
					Cobalt	0.001-45.0 (%)
					Copper	0.0005-20.0 (%)
					Molybdenum	0.0002-10.0 (%)
I					Tungsten	0.002-20 (%)
					Vanadium	0.001-10.0 (%)
ſ					Titanium	0.001-5.0 (%)
					Niobium	0.001-3.0 (%)

1	2	3	4	5	6	7
28	ISO 17636-1	Weld joints of sheets and pipes	-	-	Internal defects and discontinuities Sizes of the pore (2011), slag inclusion (301), poor fusions/poor penetrations (401), longitudinal cracks (101), transverse cracks (102), metal inclusions (304)	Discovered/not discovered 0.1-200 (mm)
29	ISO 22825	Weld joints and claddings	-	-	Discontinuities Number of discontinuities and their equivalent size Conditional length	Discovered/not discovered Permissible/non- permissible Presence/absence
30	ISO 17637	Weld joints, products prepared for welding	-	-	Surface discontinuities Linear dimensions Angular dimensions Radius Roughness	0.1-20 (mm) 0.01-10.00 (mm) 0-360 (°) 0.1-600 (mm) Ra 0.2-12.5
31	ISO 3452-1	Base metal, weld joints and deposited surfaces			Non-uniformities coming to the surface Number of discontinuities Dimensions	Discovered/not discovered Permissible/non- permissible 0.2-10 (mm)
		2. Kirov Plant 47, letter Л, Pr. Stach	ek (area 1H	I - rooms 2	29-31, area 35H – room 9) St. Petersburg 198097	
32	RNAE G -7-016	Semi-finished products, parts, assembly units, weld joints, claddings	-	-	Surface discontinuities Linear dimensions Angular dimensions	0.1-20 (mm) 0.01-10,000 (mm) 0-360 (°)
33	RB-089-14	Base metal, semi-finished products, parts, assembly units, weld joints, claddings			Radius Roughness	0.1-600 (mm) Ra 0.2-12.5
34	GOST R 50.05.08	Weld joints and deposited surfaces				

1	2	3	4	5	6	7
35	ISO 17637	Weld joints, products	-	-	Surface discontinuities	0.1-20 (mm)
		prepared for welding			Linear dimensions	0.01-10.00 (mm)
					Angular dimensions	0-360(°)
					Radius	0.1-600 (mm)
					Roughness	Ra 0.2-12.5
36	RNAE G -7-019	Weld joints and Base metal	-	-	Amount of leakage	Conformity/nonconformity
	(p.4.2.1, 4.2.1.1-4.2.1.6,					of the amount of leakage to
	4.2.6)					the air-tightness class (2-5)
37	GOST R 50.05.01	Base metal of weld joints and				
	(7.2.2, 7.2.7.1-7.2.7.2)	fused coatings of the				
		equipment and pipelines of				
		nuclear power units				

CDBMB JSC Deputy Quality Director

V.I. Malyshev