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	SUPERSEDES

STRIPS AND ROD FROM CORROSION RESISTANT STEEL GRADE 2X17H2 Б.Ш of ELECTROSLAG REMELTING.

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The present Technical Conditions are applied to delivery of sectional hot rolled and hammered, steel of grade 2X17H2 Б-III of electroslag remelting.

I. RANGE OF PRODUCTS

1.1 Steel is supplied in the form of strips and rods of round section with diameter upto 25mm and of square section with dimension of side up to 140mm, 1 meter in length.

1.2 Rods and strips should correspond to requirements of the following standards:

a) Hot Rolled - GOST 2590-71; GOST 2591-71; GOST 4405-48;

b) Hammered - GOST 1133-71; GOST 4405-48

NOTE : 1. Deviation over diameter plus 10mm is allowed for hammered rods of round section with diameter beyond 200 upto 250mm.

2. Square hot rolled rods with dimension 100mm and less may be supplied with blunted corners according to GOST 2591-71. Blunting of corners should not exceed 0.15 of square side.

Strips and rods are supplied in accordance with specialization of factory supplier.

2. TECHNICAL REQUIREMENTS

2.1 Chemical composition of steel should meet the requirements of table 1.

TABLE 1

GRADE OF STEEL	CONTENTS OF ELEMENTS %								
	Car-bon	Sili-con	Mang-nose	Chrom	Nick-el	Niob-ium	Copper (maximum)	Sulphur	Phosphe-rus
25X17H2 - III	0.22	0.3	0.3	16.3	2.3	0.05		0.015	
	0.28	0.7	0.7	17.7	2.8	0.1	0.25		0.020

NOTE: The following deviations from specified standards of Chemical composition are allowed:

Carbon ± 0.01%

Chrom ± 0.2%

Nickel ± 0.1%

2.2 Metal should be supplied in thermal treated condition with hardness over diameter of impression of HB 3.5 mm minimum.

2.3 Mechanical properties of steel, determened from drawn out thermally treated samples, should meet the requirements of table No. 2

TABLE No.2

Grade of Steel	Regime of thermal treatment of samples	Mechanical properties, minimum				
		yield point σ_T Kgf/mm²	Tengsile strength σ_B Kgf/mm²	Elonga-tion 0.5%	Reduc-tionof area ψ%	Impact stre-ngth Kgf,@m²
25X17H2 -	Hardening from 1100° in oil, cold treatment at 70°C for 2 hours, tem-pering - at 250-320° for 2 hours	120	150	8	45	4.9

NOTE: Accepted samples should be subjected to heat treatment with allowance for grinding.

2.4 When carrying out check against cross pickled templates there should not be marks of contraction cavity, blisters, cracks, slag inclusions, visible without help of magnifying devices, in macro-structure of steel.

2.5 Impurity of steel with oxides, sulphurs and silicates should not exceed 2.0 points of every type of inclusion, with citrides - 3 points.

2.6 Quality of surface should correspond to requirements of GOST 5949-75.

3. ACCEPTANCE RULES, TESTING PROCEDURE, PACKING MARKING AND EXECUTION OF FORMS

3.1 General acceptance rules, testing procedure, marking, packing and execution of forms are as per GOST 5949-75.

3.2 Check of macro-structure should be carried out as per GOST 10243-62 against cross templates, cut off from rods, corresponding to the head part of ingot. Check of macro-structure of rods with dimension upto 100mm should be carried out against full cross-section and that of rods with dimension beyond 100 mm - against samples hammered upto dimension 90-100 mm.

3.3 Impurity of steel with non-metallic inclusions should be carried out as per GOST 1778-70, according to procedure variant Ш I or Ш 4.

3.4 Analysis of mechanical properties and non-metallic inclusions should be carried out against samples cut off from blanks of diameter 90 to 100 mm. Analysis of mechanical properties and nonmetallic inclusions for rods with dimensions less than 90mm should be carried out against stock produced sort.

3.5 Check of macrostructure, mechanical properties and non-metallic inclusions in intermediate blanks and applications of which check results to smaller profiles is allowed.

In this case factory-manufacturer guarantees properties of steel of stock produced profiles in accordance with requirements of the present technical conditions.

3.6 Designation of profile dimension in symbols of grades is not compulsory.

3.7 Mark steel - 25Х17Н2 Б.ІІІ

3.8 Metal, melted from one initial melting , in one type units, with the use of one standard size mould.