

95370 · 4" TBL

CO21498



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

MS Certified

Contract No.: 50005

TECHN. PROTOCOL № 210-06 SPEC. № 0431/PO21944

STM A182/A182M-05; ASME SA-182/SA-182M-04; ASTM A276-04;

STM A479/A479M-04; ASTM SA-479/SA-479M-04; ASTM A484/A484M-05; AMS-QQ-S-763A-03

Cond. A; NACE MR 0175-2003; AMS 5648K-02; AMS 5653F-02; ASTM A193/A193M-04c GR B8M, CL1 (EXC PAR 6.3)

SME SA-193/SA-193M-04GR B8M, CL1 (EXC PAR 6.3);

EN 10204/3.1

Sheets: 11

Sheet: 1

QUALITY CERTIFICATE Nr. 238155

PLANT ORDER № 8014900431

CUSTOMER
„DSS INTERNATIONAL SA“
Switzerland

PRODUCT DESCRIPTION

Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные обточенные на линии Ландграф.

STEEL MAKING PROCESS: EAF+AOD

СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР

Round 4.000in/101.60 mm L=3.40-5.50m/11.15-18.03ft

Grade: 316/F316/316L/F316L

QUANTITY: 1bund Q-1698 lb/770 kg
(number of pcs) 1bund Q-1171 lb/1892 kg

Delivery condition
solution annealed : 1900-2010⁰ F(1040-1100⁰ C)/water
термообработка: закалка в воду

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂		
REQUIRED	<.030	<1,00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
ACTUAL № 95370	.028	.32	1.40	.039	.023	16.65	10.15	2.04	.083	.25	.05	.09	.11	.07	.013	.030		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm, ksi (N/mm ²)	Elongation		Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
			In 2 inches (50mm) or 4D, min, % (ASTM A370)				
REQUIRED	36(248)	75 (515)	45		50	140-223	100
EFFECTIVE	43.2(297)	83(570)	56		75	170	196

Mechanical properties tested in state of delivery

S - testing yes Results: SEP 1921, 3/ Dd - O.K.

Radiation free; mercury free. No Weld or Weld repair.

TECHNICAL REQUIREMENTS:

Macrostructure – GOOD

GRAIN SIZE : 5 to ASTM E 112

Nonmetallic inclusions ASTM E 45 (Method A)

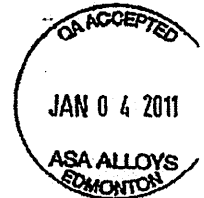
A	B	C	D
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thin	thick	thin	thick	thin	thick	thin	thick
2.0	1.5	2.0	1.0	0.0	0.0	1.0	1.0

ICC-ASTM A262-02a(Method E)-test: O.K.

„Dimension/surface defects test, anti-mixing test – O.K. “

Ratio of reduction- >20:1



Manufacturer: JSC DNEPROSPETSSTAL

Date: 28.09.10 Signed: *[Signature]*

Zaporozhye
Made in Ukraine.