

NPS4-40

CO21505

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DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 50005
 ECHN.PROTOCOL № 210-06 SPEC.№0431/PO21944
 ASTM A182/A182M-05; ASME SA-182/SA-182M-04; ASTM A276-04;
 ASTM 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)
 ASME SA-193/SA-193M-04GR B8M,CL1(EXC PAR 6.3);

EN10204/3.1

Sheets: 11 Sheet: 8
 QUALITY CERTIFICATE Nr.238155
 PLANT ORDER № 8014900431

95292

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+AOP
 Round 6.250in/158.75 mm L=3.40-5.50m/11.15-18.03ft
 Grade: 316/F316/316L/F316L

QUANTITY: 1bund Q-1645 lb/746 kg
 (number of pcs) 1bund Q-3492 lb/1584 kg
Delivery condition
 solution annealed :1900-2010° F(1040-1100°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
HEAT № 95292	.020	.54	1.34	.035	.021	17.06	10.10	2.04	.068	.25	.05	.09	.11	.07	.011	.028

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{0.2})	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	43.7(298)	85.2(580)	56	75	167	184	

Mechanical properties tested in state of delivery

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

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

TECHNICAL REQUIREMENTS:
 Macrostructure – GOOD
 GRAIN SIZE : 6 to ASTM E 112
 Nonmetallic inclusions ASTM E 45 (Method A)

A	B	C	D
thin	thick	thin	thick
2.5	2.0	2.0	1.5
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-12.6:1



Manufacturer: JSC DNEPROSPETSSTAL
 Date: 28.09.10 Signed: *[Signature]*
 Zaporozhye
 Made in Ukraine.

