

HT# A01299

C 119357

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN. PROTOCOL № 390-11 SPEC №5037/P034083-ED
 DIN EN 10088-3-05; DIN EN 10272-08; DIN EN 10222-5-00; ASTM A182/A182M-10; ASME SA-182/SA-182M-10; ASTM A276-10; ASTM A314-08; ASTM A479/A479M-10; ASME SA-479/SA-479M-10; ASTM A484/A484M-10; AMS-QQ-S-763B-66
 Cond. A; AMS 5648K-07; AMS 5653F-07; ASTM A193/A193M-10GR B8M/CL1; ASME SA-193/SA-193M-10 GR B8, CL 1; ASTM A320/A320M-08 GR B8M/CL1; ASME SA-320/SA-320M-10 GR B8, CL1; NACE MR 0175-03; NACE MR 0103-10

Sheets: 6
 Sheet: 6
 INSPECTION CERTIFICATE EN10204/5.1 Nr. 289383
 PLANT ORDER № 8014905037



QMS Certified

CUSTOMER
 DSS INTERNATIONAL
 SA Switzerland

ПРОДУКТ DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионноустойчивых (нержавеющих) стальной кованые, обточенные.
 STEEL MAKING PROCESS: EAF+AOD
 СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 15,000in/381,00 mm L=4,580m/15,01 ft
 Grade: 316/316L/1.4401/1.4404

QUANTITY: 1bund Q-9383 lb/4256 kg
 (number of pcs)
 Delivery condition
 solution annealed :1976° F(1080° C) water 38minutes
 термообработка: закалка в воду

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	Sn	B
REQUIRED	<.030	<1,00	1.20-2.00	<.040	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A01299	.022	.50	1.39	.035	.021	17.23	10.20	2.10	.066	.27	.06	.15	.005	.12	.012	.030	.0101	.0011

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R _{0.2} R 1.0%	Tensile Strength, (N/mm ²) R _m	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, K V, J		
			A % L Q	In.2 inches (50mm) or 4D, min. % L			L	Q	
REQUIRED	205	240	51.5-69.0	45-35	40	50	140-223	100	60
EFFECTIVE	280 288	310 314	597 600	59.54 60.53	57 58	73 75	174 174	214 205 210 213 210 208	65 63 64 64 62 63

Mechanical properties tested in state of delivery

US - testing
 Results: ASME SA-388/SA-388M-10(ASTM A 388/A 388M-09)
 FBH1/5" EN 10228-4 type 1a; class 3-OK

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 22.10.14
 assurance department - V. Kapateva
 Signed:
 Zaporozhye
 Made in Ukraine.

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