

HT# A01299

C115804

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-06 Cond.A; AMS 5648K-07; AMS 5653F-07; ASTM A193/A193M-10GR B8M,CL1; ASME SA-193/SA-193M-10 GR B8,CL1; 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: 7 Sheet: 4							
											INSPECTION CERTIFICATE EN10204/3.1 Nr.288687 PLANT ORDER № 8014905037							
	CUSTOMER DSS INTERNATIONAL SA Switzerland		PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованы, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 11.000in/279.40 mm L=3.690m/12.098ft Grade: 316/316L/1.4401/1.4404										QUANTITY: (number of pcs) 1bund Q-4083 lb/1852 kg					
													Delivery condition solution annealed : 1940° F (1060° C) water 30minutes 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, R _m , (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) A B C D thin thick thin thick thin thick thin thick 2.5 2.0 2.5 2.0 0.0 0.0 1.0 1.0 ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test – OK								
	REQUIRED	205		240	515-690			A ₅ % L Q										
			EFFECTIVE			280	306	590	59 53									

Mechanical properties tested in state of delivery

US - testing

yes

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: 30.09.14 Manager of quality assurance department - V. Kapaieva
Signed:

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

Zaporozhye
Made in Ukraine.