



C185041


PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№3855/PO40040 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-10 GR B8M, CL1; ASME SA-193/SA-193M-10 GR B8, CL 1; ASTM A320/A320M-08 GR B8M, CL 1; ASME SA-320/SA-320M-10 GR B8, CL 1; NACE MR 0175-03; NACE MR 0103-10	Sheets: 5 Sheet: 5 INSPECTION CERTIFICATE EN10204/3.1 Nr.317790 PLANT ORDER № 8014903855
 QMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 16.000in/406.40 mm L=14.148ft/4.315m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-10071 lb/4568 kg Delivery condition solution annealed : 1940° F (1060° C) water 36minutes термообработка: закалка в воду

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	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 № A04388	.020	.39	1.30	.036	.026	16.79	10.17	2.12	.068	.33	.05	.06	.005	.15	.014	.028	.0092	.0026

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		TECHNICAL REQUIREMENTS:									
	L	Q		A5 % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q		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 2.0 1.5 2.0 1.0 0.0 0.0 1.0 1.0								
REQUIRED	205	240	515-690	45	35	40	50	140-223	100	60	ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test – OK We acknowledge that the delivered products conform to the requirements of the order/Подтверждаем, что поставленная продукция соответствует требованиям заказа								
EFFECTIVE	300 302	327 331	572 575	60	54	59	79	167	207 201	207 201	71 69	71 69	71 69						

US - testing	yes	Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBH1/5"; EN 10228-4 type Ia; class 3:OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 27.02.17 Manager of quality assurance department - V. Kaparjeva Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			