



C231844


PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№0549/PO44837 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,CL 1; ASTM A320/A320M-08 GR B8M,CL 1; ASME SA-320/SA-320M-10 GR B8,CL1; NACE MR 0175-03; NACE MR 0103-10	Sheets:4 Sheet: 2 INSPECTION CERTIFICATE EN10204/3.1 Nr.339863 PLANT ORDER № 8014900549
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 GMS 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 15.000in/381.00 mm L=15.721 ft/4.795m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-9819 lb/4454 kg
			Delivery condition solution annealed :1922° F(1050° 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 № A06586	.021	.43	1.31	.037	.026	17.00	10.36	2.13	.078	.27	.05	.05	.005	.10	.01	.023	.009	.0018

DIN EN 10002-1, ASTM A370-09										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 3.0 2.0 3.0 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 We acknowledge that the delivered products conform to the requirements of the order/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-6.4:1									
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											
	L	Q		A ₅ %	In 2 inches (50mm) or 4D, min, % L			L	Q										
REQUIRED	205	240	515-690	45	35	40	50	140-223	100										
EFFECTIVE	289	321	577	61	53	59	77	170	199 199 199	71 71 71									

Mechanical properties tested in state of delivery			Manufacturer: PrJSC DNIPROSPETSSTAL Date: 15.11.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.									
US - testing	yes	Results: ASTM A388/A388M)-FBH1/5"; EN 10228-4 type 1a; class 3:OK										
Radiation free; mercury free. No Weld or Weld repair.												

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