




PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№2914/PO46181 DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, AD2000-Merkblatt W2; AD 2000-Merkblatt W10; 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	INSPECTION CERTIFICATE EN10204/3.1 Nr.346073 PLANT ORDER № 8014902914
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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 8.500in/215.90 mm L=14.820 ft/4.520m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-3007 lb/1364 kg Delivery condition solution annealed :1922 ^o F(1050 ^o C)water 25minutes термообработка:закалка в воду
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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 № A07302	.021	.46	1.36	.040	.023	17.35	10.23	2.10	.076	.29	.05	.05	.005	.11	.011	.023	.0086	.0025

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																	
				A5% L Q	In 2 inches (50mm) or 4D, min, % L			L	Q																
REQUIRED	205	240	515-690	45 35	40	50	140-223	100	60																
EFFECTIVE	288 290	304 306	559 559	58 51 58 51	57 57	73 73	163 163	200 200 200 198 198 198	65 65 65 64 64 64																
Mechanical properties tested in state of delivery																									
TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table style="width:100%; text-align: center;"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>3.0</td><td>2.0</td><td>3.0</td><td>2.0</td> </tr> <tr> <td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td> </tr> </table> 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-8.3:1										A	B	C	D	thin	thick	thin	thick	3.0	2.0	3.0	2.0	0.0	0.0	1.0	1.0
A	B	C	D																						
thin	thick	thin	thick																						
3.0	2.0	3.0	2.0																						
0.0	0.0	1.0	1.0																						

US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10228-4 type 1a; class 3:OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 04.06.18 Manager of quality assurance department - V. Kaparjeva Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			

Oct 02/20

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