



C229104


PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№0111/PO44618 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	Sheets:2 Sheet: 2 INSPECTION CERTIFICATE EN10204/3.1 Nr.337662 PLANT ORDER № 8014900111
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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=4.820m/15.803ft L=4.690m/15.377ft Grade: 316/316L/1.4401/1.4404	QUANTITY: 1bund Q-3232 lb/1466 kg (number of pcs) 1bund Q-3139 lb/1424 kg Delivery condition solution annealed :1922° F(1050° 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 № A06323	.019	.44	1.36	.040	.027	16,86	10.30	2.09	.071	.36	.05	.05	.005	.12	.01	.026	.014	.0027

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) <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>2.0</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 Ratio of reduction-8.3:1										A	B	C	D	thin	thick	thin	thick	3.0	2.0	2.0	1.0
A	B	C	D																												
thin	thick	thin	thick																												
3.0	2.0	2.0	1.0																												
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation A5% L Q In 2 inches (50mm) or 4D,min,% L		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J L Q																							
REQUIRED	205	240	515-700	45	35	40	50	140-217	100	60																					
EFFECTIVE	283	304	557	58	48	57	73	163	190 190 190	65 65 65																					
Mechanical properties tested in state of delivery																															

US - testing	yes	Results: ASTM A388/A388M-FBH1/5"; EN 10228-4 type 1a; class 3:OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 07.09.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			

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