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**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, CL 1; 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	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 8.500in/215.90 mm L=4.820m/15.803ft L=4.690m/15.377ft <b>Grade: 316/316L/1.4401/1.4404</b>	QUANTITY: <b>1bund Q-3232 lb/1466 kg</b> (number of pcs) <b>1bund Q-3139 lb/1424 kg</b>  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	0.030	<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	0.019	.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:																								
MECHANICAL PROPERTIES	Yield Strength (N/mm <sup>2</sup> ) R <sub>0.2</sub> % R 1.0%		Tensile Strength, R <sub>m</sub> , (N/mm <sup>2</sup> )	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="1" style="width: 100%; text-align: center;"> <tr> <th>A</th><th>B</th><th>C</th><th>D</th></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> <tr> <td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td></tr> </table>									A	B	C	D	thin	thick	thin	thick	3.0	2.0	2.0	1.0	0.0	0.0	0.0	1.0
	A	B		C	D																													
thin	thick	thin	thick																															
3.0	2.0	2.0	1.0																															
0.0	0.0	0.0	1.0																															
REQUIRED	205	240	515-700	45 35	40	50	140-217	100	60																									
EFFECTIVE	283 285	304 308	557 560	58 48 58 48	57 57	73 73	163 163	190 190 190 184 184 184	65 65 65 64 64 64																									
Mechanical properties tested in state of delivery										We acknowledge that the delivered products conform to the requirements of the order Ratio of reduction-8.3:1																								

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.			

ANS