



C 119362


PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 5037/P034083-ED DIN EN 10088-3-05, DIN EN 10272-08, 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 B8M,CL 1; NACE MR 0175-03; NACE MR 0103-10	Sheets: 5 Sheet: 4 INSPECTION CERTIFICATE EN10204/3.1 Nr.290138 PLANT ORDER № 8014905037
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	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.250in/158.75 mm L=5.030m/16.492ft L=5.010m/16.426ft Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-1808 lb/820 kg 1bund Q-1795 lb/814 kg	Delivery condition solution annealed : 1900 ^o F(1040 ^o C) water 30minutes 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 ₂	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 № A01413	.022	.41	1.26	.034	.025	16,80	10.20	2.03	.062	.24	.06	.12	.005	.10	.019	.030	.010	.001

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; border-collapse: collapse;"> <tr> <td style="width:10%;">A</td><td style="width:10%;">B</td><td style="width:10%;">C</td><td style="width:10%;">D</td><td style="width:10%;"></td><td style="width:10%;"></td><td style="width:10%;"></td><td style="width:10%;"></td><td style="width:10%;"></td><td style="width:10%;"></td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>2.5</td><td>2.0</td><td>2.0</td><td>2.0</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td><td></td><td></td> </tr> </table> ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test – OK										A	B	C	D							thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	2.5	2.0	2.0	2.0	0.0	0.0	1.0	1.0		
A	B	C	D																																														
thin	thick	thin	thick	thin	thick	thin	thick	thin	thick																																								
2.5	2.0	2.0	2.0	0.0	0.0	1.0	1.0																																										
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation A ₅ % L Q		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J																																									
									L	Q																																							
REQUIRED	205	240	515-700	40 -	40	50	140-217	100																																									
EFFECTIVE	273 277	291 296	557 559	58 - 58 -	57 57	77 78	163 163	244 244 242 240 240 237																																									

US - testing	yes	Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBH1/8"; EN 10308 type 1a; class 3:OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 12.11.14 Manager of quality assurance department - V. Kapaieva Signed: 
Radiation free; mercury free. No Weld or Weld repair.			Zaporozhye Made in Ukraine.