




**PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE**

	Contract No.: 20002 TECHN.PROTOCOL № 210-11 SPEC.№ 6992/PO L50896 ASTM A 182/A 182M-13a; ASME SA-182/SA-182M-10; ASTM A276-13a; ASTM A314-13a; ASTM A479/A479M-13b; ASME SA-479/SA-479M-10; ASTM A484/A484M-13a; AMS-QQ-S-763C-13 Cond.A; AMS 5648L-11; AMS 5653H-12; ASTM A193/A193M-12b GR B8M, CL1 (EXC PAR 6.2); ASME SA-193/SA-193M-10GR B8M, CL1 (EXC PAR 7.3) ANSI/NACE MR 0175/ISO 15156-03-09; NACE MR 0103-12	Sheets:3                      Sheet: 3 INSPECTION CERTIFICATE EN10204/3.1 Nr.294863 PLANT ORDER № 8023416992
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 GMS Certified	CUSTOMER <b>DSS INTERNATIONAL SA</b> Switzerland  Commodity code RB6L0616/DS	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии «Ландграф». <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 6.250m/158.75mm L=4.38-4.44m/14.361-14.557ft; L=4.64m/ 15.213ft; L=4.38m/ 14.361ft; L=4.38m/ 14.361ft; L=4.38-4.46m/14.361-14.623ft; L=4.62m/ 15.148ft; L=5.48-5.50m/17.967-18.033ft Grade: 316/316L/316L/F316L	1bund Q-3157 lb/1432 kg 1bund Q-3131 lb/1420 kg QUANTITY: 1bund Q-1653 lb/750 kg 1bund Q-3148 lb/1428 kg (number of pcs) 1bund Q-3135 lb/1422 kg 1bund Q-3302 lb/1498 kg 1bund Q-3924 lb/1780 kg  Delivery condition solution annealed: 1900-2010° F(1040-1100°C)/water 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 <sub>2</sub>		
REQUIRED	<.030	<1.00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A02026	.022	.40	1.25	.040	.021	17.27	10.25	2.10	.058	.22	.05	.07	.005	.07	.01	.024		

<b>MECHANICAL PROPERTIES</b>	Yield Strength Ksi(N mm <sup>2</sup> ) Re (R <sub>eL</sub> )	Tensile Strength Rm,ksi (N mm <sup>2</sup> )	Elongation A <sub>5</sub> %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J	<b>TECHNICAL REQUIREMENTS:</b> 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	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																				
REQUIRED	30(205)	75 (515)	45	50	140-223	100																	
EFFECTIVE	43.3(299)	82.3(568)	61	78	163	242																	
Mechanical properties tested in state of delivery																							
US - testing	yes	Results: SEP 1921,group 3/class Dd - OK					Manufacturer: PJSC DNIPROSPETSSTAL Date: 20.04.15 Manager of quality assurance department - V. Kapaieva Signed: 																
Radiation free; mercury free. No Weld or Weld repair.							Zaporozhye Made in Ukraine.																