




PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE **C192645**

	Contract No.: 20002 TECHN.PROTOCOL № 210-11 SPEC.№ 4922/PO L63639 ASTM A182/A182M-15;ASME SA-182/SA-182M-13;ASTM A276-15;ASTM A314-15;ASTM A479/A479M-15;ASME SA-479/SA-479M-13;ASTM A484/A484M-15;AMS-QQ-S-763D-15 Cond.A; AMS 5648L-11;AMS 5653H-12;ASTM A193/A193M-15a GR B8M,CL1 ;ASME SA-193/SA-193M-13GR B8M,CL1;ASTM A320/A320M-15a GR B8M,CL 1;ASME SA-320/SA-320M-13 GR B8M,CL 1;ANSI NACE MR0175/ISO 15156-3-15;NACE MR 0103-12	Sheets:4 Sheet: 4 INSPECTION CERTIFICATE EN10204/3.1 Nr.319458 PLANT ORDER № 8023414922
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	CUSTOMER DSS INTERNATIONAL SA Switzerland Commodity code RB6L0832/DS	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=4.320m/14.164ft Grade: 316/F316/316L/F316L	QUANTITY: (number of pcs) 1bund Q-2914 lb/1322 kg  Delivery condition solution annealed :1900-2010 <sup>0</sup> F(1040-1100 <sup>0</sup> 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		
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 № A04502	.023	.38	1.29	.036	.024	16.82	10.28	2.10	.066	.22	.06	.07	.006	.09	.01	.038		

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm <sup>2</sup> ) Re (R <sub>0.2</sub> )	Tensile Strength, Rmksi (N/mm <sup>2</sup> )	Elongation A <sub>5</sub> %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J	TECHNICAL REQUIREMENTS:																								
REQUIRED	30(205)	75 (515)	45	50	140-223	100	Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A)																								
EFFECTIVE	43.3 (298)	83.2(572)	60	79	167	211	<table border="0"> <tr> <td colspan="2">A</td> <td colspan="2">B</td> <td colspan="2">C</td> <td colspan="2">D</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> </tr> <tr> <td>3.0</td><td>2.0</td><td>3.0</td><td>2.0</td><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	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	thin	thick	thin	thick																								
3.0	2.0	3.0	2.0	0.0	0.0	1.0	1.0																								

US - testing	yes	Results: SEP 1921,group 3/class Cc - OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 12.04.17 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			