



C193607

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

	<p>Contract No.: 20002          TECHN.PROTOCOL № 210-11 SPEC.№ 4655/P04755          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 5639H-07;AMS 5647J-11;ASTM A193/A193M-15a GR B8,CL1 (EXC PAR 6.2);ASME SA-193/SA-193M-13 GR B8,CL1(EXC PAR 7.3);ANSI/NACE MR0175/ISO 15156-3-15;NACE MR 0103-12</p>	<p><b>Sheets:4 Sheet: 3</b>  <b>INSPECTION CERTIFICATE EN10204/3.1 Nr.319751</b>          PLANT ORDER № 8015204655</p>
 GMS Certified	<p><b>CUSTOMER</b>  <b>DSS INTERNATIONAL SA</b>          Switzerland</p>	<p><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 6.250in/158.75mm L=3.930m/12.885 ft L=3.580-3.890m/11.738-12.754 ft  <b>Grade: 304/F304/304L/F304L</b></p>
		<p>QUANTITY: 1bund Q-4189 lb/1900 kg          (number of pcs) 1bund Q-2659 lb/1206 kg</p>
		<p>Delivery condition          solution annealed :1900-2010° F(1040-1100°C)/water          термообработка:закалка в воду</p>

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	18.00-20.00	8.00-10.50	<.30	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A04562	.023	.46	1.56	.034	.026	18,26	8.20	.24	.062	.23	.05	.09	.008	.07	.011	.069		

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm <sup>2</sup> ) Re (R <sub>0.2</sub> )	Tensile Strength, Rm,ksi (N/mm <sup>2</sup> )	Elongation ASTM A370-09 In2inches (50mm) or 4D	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J	TECHNICAL REQUIREMENTS:																									
							Macrostructure – GOOD	GRAIN SIZE : 5 to ASTM E 112-96(2004)																								
REQUIRED	30(205)	75 (515)	45	50	140-223	100	Nonmetallic inclusions ASTM E 45-05 (Method A)	<table border="0"> <tr> <td></td><td>A</td><td>B</td><td>C</td><td>D</td><td></td><td></td><td></td> </tr> <tr> <td></td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td> </tr> <tr> <td></td><td>2.0</td><td>1.5</td><td>2.0</td><td>1.0</td><td>0.0</td><td>0.0</td><td>1.0</td> </tr> </table>		A	B	C	D					thin	thick	thin	thick	thin	thick	thin		2.0	1.5	2.0	1.0	0.0	0.0	1.0
	A	B	C	D																												
	thin	thick	thin	thick	thin	thick	thin																									
	2.0	1.5	2.0	1.0	0.0	0.0	1.0																									
EFFECTIVE	40.9(281)	82.7(568)	59	73	167	210	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-15.1:1																									

Mechanical properties tested in state of delivery		US - testing		yes	Results: SEP 1921,group 3/class Dd - OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 21.04.17 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.	
Radiation free; mercury free. No Weld or Weld repair.							

