




C220973

1407

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 9728/PO44311 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-10 GR 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, CL1; NACE MR 0175-03; NACE MR 0103-10										<b>Sheets:8</b> <b>Sheet: 2</b> <b>INSPECTION CERTIFICATE EN10204/3.1 Nr. 336112</b> <b>PLANT ORDER № 8014909728</b>																																												
	 GMS Certified	<b>CUSTOMER</b> <b>DSS INTERNATIONAL</b> <b>SA Switzerland</b>		<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 6.250in/158.75 mm L=18.459ft/5.630m L=18.492ft/5.640m <b>Grade: 316/316L/1.4401/1.4404</b>							<b>QUANTITY:</b> <b>1bund Q-2019 lb/916 kg</b> (number of pcs) <b>1bund Q-4048 lb/1836 kg</b>																																												
<b>ANALYSIS, %</b>													C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B																									
<b>REQUIRED</b>													<.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																											
<b>CAST</b> <b>№ A06221</b>													.018	.38	1.35	.040	.024	16,77	10.20	2.07	.068	.32	.05	.06	.068	.13	.01	.026	.011	.0024																									
<b>MECHANICAL PROPERTIES</b>													Yield Strength, (N/mm <sup>2</sup> ) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm <sup>2</sup> )	Elongation A5, % L Q      In 2 inches (50mm) or 4D, min, % L		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J L                      Q		<b>TECHNICAL REQUIREMENTS:</b> Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="1"> <thead> <tr> <th colspan="2">A</th> <th colspan="2">B</th> <th colspan="2">C</th> <th colspan="2">D</th> </tr> <tr> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> </tr> </thead> <tbody> <tr> <td>3.0</td> <td>2.0</td> <td>2.0</td> <td>1.0</td> <td>0.0</td> <td>0.0</td> <td>1.0</td> <td>1.0</td> </tr> </tbody> </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 Ratio of reduction-15.1:1										A		B		C		D		thin	thick	thin	thick	thin	thick	thin	thick	3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0
A		B		C		D																																																	
thin	thick	thin	thick	thin	thick	thin	thick																																																
3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																																
REQUIRED													205	240	515-690	40 -	40	50	140-223	100	-																																		
EFFECTIVE													298 302	336 342	559 553	60 - 59 -	59 58	78 78	163 163	204 204 204 208 208 208	-	-																																	
Mechanical properties tested in state of delivery																																																							
US - testing		yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK															Manufacturer: PrJSC DNIPROSPETSSTAL Date: 23.07.18 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.																																					
Radiation free; mercury free. No Weld or Weld repair.																																																							

ANS