

C241976

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 2425/PO45729 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 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8, CL 1 (EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10										<b>Sheets:4</b> <b>Sheet: 1</b>							
											<b>INSPECTION CERTIFICATE EN10204/3.1 Nr. 344841</b> PLANT ORDER № 8014902425							
	<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 коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 3.750in/95.25 mm L=5.580/18.295ft L=5.570m/18.262ft <b>Grade: 316/316L/1.4401/1.4404</b>										<b>QUANTITY:</b> (number of pcs) <b>1bund Q-3558 lb/1614 kg</b> <b>1bund Q-3558 lb/1614 kg</b>					
													Delivery condition solution annealed :1900 <sup>0</sup> F(1040 <sup>0</sup> C) water 30minutes термообработка: закалка в воду					
<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> № A07147	.022	.44	1.33	.035	.027	17.00	10.40	2.07	.073	.25	.04	.06	.01	.08	.01	.034	.0082	.0024
<b>DIN EN 10002-1, ASTM A370-09</b>																		
<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		Reduction of area, Z % L	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) A B C D thin thick thin thick thin thick thin thick 2.5 1.5 1.5 1.0 0.0 0.0 1.0 1.0 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-35.1:1								
				A <sub>5</sub> % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q									
	<b>REQUIRED</b>	205	240	515-690	40 -	40	50	140-217	100									
<b>EFFECTIVE</b>	293 290	332 331	565 566	61 - 61 -	61 60	79 79	167 167	207 207 207 204 204 204	- -									
Mechanical properties tested in state of delivery																		
US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK																
Radiation free; mercury free. No Weld or Weld repair.										Manufacturer: PrJSC DNIPROSPETSSTAL Date: 25.04.19 <b>Manager of quality assurance department - V. Kapaieva</b> Signed: Zaporozhye Made in Ukraine.								

Dec 10/19

ANS