



C311182

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 3880/PO52069 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; 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 B8M, CL 1; NACE MR 0175-03; NACE MR 0103-10	<b>INSPECTION CERTIFICATE EN10204/3.1 Nr. 376539</b> PLANT ORDER № 8014903880
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 <p>QMS Certified</p>	<b>CUSTOMER</b> <b>DSS INTERNATIONAL</b> <b>SA Switzerland</b>	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 8.500in/215.90 mm L=4.440/14.557ft L=4.475/14.672ft <b>Grade: 316/316L/1.4401/1.4404</b>	<b>QUANTITY:</b> <b>1bund Q-2963 lb/1344kg</b> (number of pcs) <b>1bund Q-2976 lb/1350kg</b>  Delivery condition solution annealed :1900 <sup>0</sup> F(1040 <sup>0</sup> C)water 30minutes 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	Sn	B
REQUIRED	<.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> № A10642	.024	.46	1.31	.040	.026	16.72	10.32	2.04	.077	.25	.04	.04	.005	.12	.011	.027	.0075	.0024

DIN EN 10002-1, ASTM A370-09										<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 3.0 2.0 2.0 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-6.9:1								
MECHANICAL PROPERTIES	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										
	L	Q		A5 %	In 2 inches (50mm) or 4D, min, % L			L	Q									
REQUIRED	205	240	515-690	45	35	40	50	140-217	100									
EFFECTIVE	287 290	323 325	559 561	61	54 60	53 59	79 78	163 163	211 211 211 207 207 207	62 62 62 61 61 61								

Mechanical properties tested in state of delivery		US - testing		yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK	Date: 31.12.2021 <b>Manager of quality assurance</b> department - V. Kapaieva Signed: Zaporozhye Melted and Produced in Ukraine. MELTED and MANUFACTURED PrJSC " Dnipropetsstal" Phone number +380612834255 e-mail: info@dss.com.ua http://www.dss-ua.com	
Radiation free; mercury free. No Weld or Weld repair.						