



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

	Contract No.: 20002 TECHN.PROTOCOL № 390-1 1 SPEC.№3642/PO51840 DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, 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, CLI; 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, CLI; NACE MR 0175-03; NACE MR 0103-10	INSPECTION CERTIFICATE EN10204/3.1 Nr.374318 PLANT ORDER № 8014903642	
	CUSTOMER <b>DSS INTERNATIONAL</b> SA Switzerland	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионноустойчивых (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=15.000 ft/4.555m <b>Grade: 316/316L/1.4401/1.4404</b>	QUANTITY: (number of pcs) <b>1bund Q-3011 lb/1366 kg</b>  Delivery condition solution annealed : 1940 <sup>o</sup> F(1060 <sup>o</sup> C) water 20minutes термообработка: закалка в воду

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		
CAST № A10353	.023	.43	1.33	.039	.025	16.76	10.22	2.03	.06	.23	.05	.04	.006	.13	.01	.027	.0077	.0022

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) <table border="1" style="width: 100%; text-align: center;"> <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>2.0</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> </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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-8.3:1										A		B		C		D		thin	thick	thin	thick	thin	thick	thin	thick	2.0	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																																				
2.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																				
<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 A <sub>5</sub> % L Q In 2 inches (50mm) or 4D, min, % L		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J L Q																																			
REQUIRED	205	240	515-690	45	35	40	50	140-217	100	60																																	
EFFECTIVE	298	339	557	60	53	58	78	163	207 207 207	67 67 67																																	
Mechanical properties tested in state of delivery										Date: 03.10.2021 <b>Manager of quality assurance</b> department - V. Kapaieva Signed: Zaporozhye Melted and Produced in Ukraine. MELTED and MANUFACTURED PrJSC " Dniprospeetsstal" Phone number +380612834255 e-mail: info@dss.com.ua http://www.dss-ua.com																																	
US - testing	yes	Results: ASTM A388/A388M)-FBH1/8"; EN 10228-4 type 1a; class 3:OK								Radiation free; mercury free. No Weld or Weld repair.																																	

P.O.# 6189 Part # 06-FOE-80 Desc: 6" CPA 50E S-80 316 S/S