



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

	Contract No. : 20002 TECHN.PROTOCOL № 390-11 SPEC.№3642/PO51840 DIN EN 10088-3-05,DIN EN 10272-08,DIN EN 10222-5-00;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 B8,CL1;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 коррозионностойких (нержавеющих) сталей кованные, отбеченные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ:Электродуговая печь+АКР</b> Round 13.000in/330.20 mm L=11.000 ft/3.290m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) <b>1bund Q-5071 lb/2300 kg</b>  Delivery condition solution annealed :1922 <sup>o</sup> F(1050 <sup>o</sup> C)water 30minutes 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) 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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-6.0:1  Date: 03.10.2021 Manager of quality assurance 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									
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											
				A5 % L Q	In 2 inches (50mm) or 4D,min,% L			L	Q										
REQUIRED	205	240	515-690	45 35	40	50	140-217	100	60										
EFFECTIVE	288	334	569	63 52	60	79	167	247 247 247	61 61 61										
Mechanical properties tested in state of delivery																			
US - testing	yes	Results: ASTM A388/A388M-FBH1/5";EN 10228-4 type 1a;class 3:OK																	
Radiation free; mercury free. No Weld or Weld repair.																			

P.O.#6107 Part # 10-FOE-60/xs Desc: 10" CPA 50E S-60/xs 316 s/s

ANS