


C249061

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


Contract No.: 20002  
 TECHN.PROTOCOL № 390-11 SPEC.№3294/PO46349  
 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-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

**INSPECTION CERTIFICATE EN10204/3.1 Nr.348117**  
 PLANT ORDER № 8014903294

 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 forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 10.000in/254.00 mm L=16.918 ft/5.160m L=15.574 ft/4.750m <b>Grade: 316/316L/1.4401/1.4404</b>	<b>QUANTITY:</b> <b>1bund Q-4727 lb/2144 kg</b> (number of pcs) <b>1bund Q-4343 lb/1970 kg</b>
			Delivery condition solution annealed :1904° F(1040° C) water 25minutes 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 № A07366	.019	.34	1.42	.040	.027	16.92	10.31	2.09	.071	.31	.05	.05	.005	.12	.01	.030	.0095	.0023

DIN EN 10002-1, ASTM A370-09										TECHNICAL REQUIREMENTS:										
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		Macrostructure – GOOD GRAIN SIZE : 6 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 2.0 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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-6.6:1										
	REQUIRED	205		240	45			35	40											50
EFFECTIVE	273	313	560	59	48	58	80	167	183 183 183											73 73 73
Mechanical properties tested in state of delivery																				

US - testing	yes	Results: ASTM A388/A388M-FBH1/5"; EN 10228-4 type 1a; class 3:OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 06.08.19 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			

June 01/20

ANS