

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 0111/PO44618 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	Sheets: 4 Sheet: 3 INSPECTION CERTIFICATE EN10204/3.1 Nr.336960 PLANT ORDER № 8014900111

 GMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland	<p>PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные.</p> <p>STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: электродуговая печь+АКР Round 13.000in/330.20 mm L=10.262 ft/3.13 m; Grade: 316/316L/1.4401/1.4404</p>	<p>QUANTITY: 1bund Q-4859 lb/2204 kg (number of pcs)</p> <p>Delivery condition solution annealed :1940° F(1060° C)water 30minutes термообработка:закалка в воду</p>

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 № A06284	.018	.45	1.29	.040	.025	16,78	10.30	2.06	.076	.33	.05	.07	.005	.12	.011	.028	.011	.0022

DIN EN 10002-1,ASTM A370-09									
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N /mm ²)	Elongation		Reducti on of area, Z % L	Brinell Hardness HB	Impact strength, KV, J	
				A5% L	Q			L	Q
REQUIRED	205	240	515-690	45 35	40	50	140-217	100	60
EFFECTIVE	276	301	555	58 47	57	75	163	189 189 189	67 67 67
<p>Mechanical properties tested in state of delivery</p> <p>TECHNICAL REQUIREMENTS: 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-6.7:1</p>									

US - testing	yes	Results: ASTM A388/A388M-FBI11/5";EN 10228-4 type 1a;class 3:OK	Manufacturer:PrJSC DNIPROSPETSSTAL Date: 16.08.18 Manager of quality assurance department - V. Kapaeiva Signed: Zaporozhye Made in Ukraine.
--------------	-----	---	--

Radiation free; mercury free. No Weld or Weld repair.