



PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№8367/PO43227 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, CL 1; 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, CL 1; NACE MR 0175-03; NACE MR 0103-10	Sheets: 6 Sheet: 5 INSPECTION CERTIFICATE EN10204/3.1 Nr.332059 PLANT ORDER № 8014908367
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 GMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 18.750in/476.25 mm L=10.295 ft/3.140m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-10022 lb/4546 kg Delivery condition solution annealed :1940° F(1060° C) water 42minutes 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		
CAST № A05798	.019	.40	1.43	.038	.023	16,90	10,25	2,05	.072	.33	.05	.08	.005	.11	.01	.027	.0095	.0022

DIN EN 10002-1, ASTM A370-09										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 2.0 1.5 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									
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	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	278	298	554	59	48	58	73	163	191 191 191	65 65 65									

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBHI/5"; EN 10228-4 type 1a; class 3: OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 30.03.18 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.
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Radiation free; mercury free. No Weld or Weld repair.

