



C290013

PrJSC DNIPROSPE TSS TAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZH YE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№9684/PO49596 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.367719 PLANT ORDER № 8014909684
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	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=4.590ft/1.400m L=4.656 ft/1.420m Grade: 316/316L/1.4401/1.4404	QUANTITY: 1bund Q-4497 lb/2040 kg (number of pcs) 1bund Q-4541 lb/2060 kg Delivery condition solution annealed :1940 ⁰ F(1060 ⁰ C) water 35minutes 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 № A09131	.020	.43	1.30	.037	.025	17.06	10.15	2.08	.07	.27	.05	.06	.005	.13	.011	.030	.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 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-7.5:1									
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											
				A ₅ % 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	302	347	564	60 53	58	80	163	202 202 202	69 69 69										

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBH1/5"; EN 10228-4 type 1a; class 3: OK	Date: 17.03.2021 Manager of quality assurance department - V. Kapaieva Zaporozhye Melted and Produced in Ukraine. MELTED and MANUFACTURED PrJSC " Dniprospe tstal" Phone number +380612834255 e-mail: info@dss.com.ua http://www.dss-ua.com
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Radiation free; mercury free. No Weld or Weld repair.



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