



87 pcs C2664 19

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 7512/PO48384 DIN EN 10088-3-05, DIN EN 10272-08, AD2000-Merkblatt W2; AD 2000-Merkblatt W10; 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. 356420 PLANT ORDER № 8014907512
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 GMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.250in/158.75 mm L=5.660/18.557ft L=5.660m/18.557ft L=3.730m/12.230ft Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs)	1bund Q-4043 lb/1834 kg 1bund Q-2024 lb/918 kg 1bund Q-1340 lb/608 kg	Delivery condition solution annealed :1900° F(1040° C) water 30minutes 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 № A08442	.022	.50	1.37	.039	.025	17.06	10.20	2.07	.067	.39	.05	.04	.006	.11	.01	.027	.0096	.0024

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		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J	
				As % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q
REQUIRED	205	240	515-690	40 -	40	50	140-217	100	-
EFFECTIVE	309 302	346 341	623 616	64 - 62 -	59 59	77 75	179 179	203 203 207 207 207 207	-

Mechanical properties tested in state of delivery

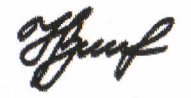
TECHNICAL REQUIREMENTS:
 Macrostructure – GOOD
 GRAIN SIZE : 5 to ASTM E 112-96(2004)
 Nonmetallic inclusions ASTM E 45-05 (Method A)

A	B	C	D
thin	thick	thin	thick
3.0	2.0	3.0	1.0
0.0	0.0	0.0	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
 Ratio of reduction-15.1:1

US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK	Date: 28.04.2020 Manager of quality assurance department - V. Kapaieva 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
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Radiation free; mercury free. No Weld or Weld repair.



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