

C297129

1856 - GP

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

Contract No.: 20002  
 TECHN.PROTOCOL № 390-11 SPEC.№2608/PO51243  
 DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, 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

**Sheets: 4**      **Sheet: 4**  
**INSPECTION CERTIFICATE EN10204/3.1 Nr.370940**  
 PLANT ORDER № 8014902608



**CUSTOMER**  
**DSS INTERNATIONAL**  
**SA Switzerland**

**PRODUCT DESCRIPTION**  
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионноустойчивых (нержавеющих) сталей кованные, обточенные.  
**STEEL MAKING PROCESS: EAF+AOD**  
**СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР**  
 Round 9.000in/228.60 mm L=13.492 ft/4.115m L=13.525 ft/4.125m  
**Grade: 316/316L/1.4401/1.4404**

**QUANTITY:**      **1bund Q-3064 lb/1390 kg**  
 (number of pcs)      **1bund Q-3073 lb/1394 kg**

**Delivery condition**  
 solution annealed :1940<sup>0</sup> F(1060<sup>0</sup> 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 № A09974	.018	.43	1.40	.038	.025	16.70	10.34	2.07	.06	.32	.05	.05	.008	.15	.01	.028	.011	.0023

DIN EN 10002-1, ASTM A370-09

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		
	L	Q		A <sub>5</sub> % L	In 2 inches (50mm) or 4D, min, % L			L	Q	
REQUIRED	205	240	515-690	45	35	40	50	140-217	100	60
EFFECTIVE	287	320	559	60	54	59	79	163	201 201 201	63 63 63
	289	323	563	60	53	59	78	163	198 198 198	61 61 61

**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
2.5	2.0	2.0	2.0	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-6.4:1

Mechanical properties tested in state of delivery

US - testing      yes      Results: ASTM A388/A388M-FBH1/8"; EN 10228-4 type 1a; class 3:OK

Date: 18.06.2021 Manager of quality assurance department  
 - V. Kapaieva      Signed:  
 Zaporozhye  
 Melted and Produced in Ukraine.  
 MELTED and MANUFACTURED PrJSC " Dniprospetsstal"  
 Phone number +380612834255  
 e-mail: info@dss.com.ua  
 http://www.dss-ua.com



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

ANS