

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 20002
 TECHN.PROTOCOL № 390-11 SPEC.№3083/P931996-842
 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:5 **Sheet: 1**
INSPECTION CERTIFICATE EN10204/3.1 Nr.347744
 PLANT ORDER № 8081903083



QMS Certified

CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

Purchase number 509378

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 8.500in/215.90 mm L=15.836 ft/4.830m L=14.557 ft/4.400m L=14.525 ft/4.430m
Grade: 316/316L/1.4401/1.4404

QUANTITY: **1bund Q-3232 lb/1466 kg**
 (number of pcs) **1bund Q-2967 lb/1346 kg**
1bund Q-2959 lb/1342 kg

Delivery condition
 solution annealed :1920⁰F(1050⁰C)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 № A07302	.021	.46	1.36	.040	.023	17.35	10.23	2.10	.076	.29	.05	.05	.005	.11	.011	.023	.0086	.0025

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J									
	L	Q		As % L	In 2 inches (50mm) or 4D, min, % L			L	Q								
REQUIRED	205	240	515-690	45	35	40	50	140-223	100	60							
EFFECTIVE	288	304	559	58	51	57	73	163	200	200	200	65	65	65	64	64	64

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	2.0
0.0	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-8.3:1

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

Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 26.07.19 Manager of quality assurance department - V. Kapaieva
 Signed:
 Zaporozhye
 Made in Ukraine.

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

R781164
509378
SHIP # 20975

ANS