

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; 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.370846
 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 16.000in/406.40 mm L=7.393ft/2.255m L=7.213 ft/2.200m

Grade: 316/316L/1.4401/1.4404

QUANTITY: 1bund Q-5291 lb/2400 kg
 (number of pcs) 1bund Q-5163 lb/2342 kg

Delivery condition
 solution annealed :1940°F(1060°C)water 35minutes
 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 № A09969	.024	.44	1.37	.040	.027	16.79	10.25	2.06	.074	.22	.06	.05	.005	.10	.01	.029	.0076	.0023

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		Reducti on of area, Z % L	Brinell Hardness HB	Impact strength, KV, J	
	L	Q		A5% 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	288	320	556	60 54	59	79	163	211 211 211	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
 2.0 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-6.3:1

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: 15.06.2021 Manager of quality assurance department
 - V. Kapaieva Signed:
 Zaporozhye
 Melted and Produced in Ukraine.
 MELTED and MANUFACTURED PrJSC " Dniprospsstal"
 Phone number +380612834255
 e-mail: info@dss.com.ua
 http://www.dss-ua.com

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

P.O. # 6314 Part # 12-FOE-40 Desc: 12" CPA 50E S-40 316 S/S