

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, 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



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 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°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 № 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

MECHANICAL PROPERTIES	Yield Strength, (N/mm²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		
	L	Q		A, % 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

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	2.0	1.0
1.0	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/Подтверждаем, что поставленная продукция соответствует требованиям заказа

Ratio of reduction-7.5:1

US - testing yes Results: ASTM A388/A388M-FBH1/5"; EN 10228-4 type Ia; class 3:OK

Date: 17.03.2021 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.# 5840 Part # 16-FOE-80 Desc: 16" CPA 50E S-80 316 S/S

ANS