

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN.PROTOCOL № 390-11 SPEC.№3294/PO46349
 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: 1
 INSPECTION CERTIFICATE EN10204/3.1 Nr.349346
 PLANT ORDER № 8014903294



GMS Certified

CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

PRODUCT DESCRIPTION

Bars and rods of corrosion-resistant (stainless) steel forged, peeled.Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные.

STEEL MAKING PROCESS: EAF+AOD

СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР

Round 18.750in/476.25 mm L=4.623 ft/1.410m L=6.328 ft/1.930m

Grade: 316/316L/1.4401/1.4404

QUANTITY: **1bund Q-4524 lb/2052 kg**
 (number of pcs) **1bund Q-6239 lb/2830 kg**

Delivery condition
 solution annealed :1922^o F(1050^o C)water 42minutes
 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 № A07342	.020	.53	1.36	.040	.026	16,75	10.25	2.10	.08	.31	.05	.06	.005	.10	.011	.033	.010	.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		
	L	Q		A ₅ % 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	294	312	570	60	54	58	79	167	213 213 213	64 64 64

TECHNICAL REQUIREMENTS:

Macrostructure – GOOD

GRAIN SIZE : 6 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	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-7.5:1

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: 13.09.19 Manager of quality assurance department - V. Kapaieva Signed:

Zaporozhye

Melted and Produced in Ukraine.

MELTED and MANUFACTURED PrJSC "

Dnipropetsstal"

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e-mail:info@dss.com.ua

http://www.dss-ua.com

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

P.O.# 5609 Part # 16 - FOE - 40 Description : 16" CPA 50E S-40 316 S/S

ANS