

DS65674005

94493 (11 in)

DSRB 0590

CO1765



**DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE**

OHS Certified

Contract No.: 07234

TECHN. PROTOCOL № 210-06 SPEC. № 4796/PO L27211

ASTM A182/A182M-05; ASME SA-182/SA-182M-04; ASTM A276-04;

ASTM A479/A479M-04; ASTM SA-479/SA-479M-04; ASTM A484/A484M-05; AMS-QQ-S-763A-03

Cond. A; NACE MR 0175-2003; AMS S648K-02; AMS S653F-02; ASTM A193/A193M-04c GR B8M, CL1;

ASME SA-193/SA-193M-04GR B8M, CL1

EN10204/3.1

Sheets: 8

Sheet: 4

QUALITY CERTIFICATE № 230902

PLANT ORDER № 8072344796

**CUSTOMER**  
„DSS INTERNATIONAL SA“  
Switzerland  
Commodity code RB6L1100/DS

**PRODUCT DESCRIPTION**

Bars and rods of corrosion-resistant (stainless) steel forged, pecked.

Прутки из коррозионностойких (нержавеющих) сталей кованые, обточены.

STEEL MAKING PROCESS: EAF+AOD

СПОСОБ ВЫПУСККИ: Электроплавная печь+AOP

Round 11.000in/279.40 mm L=11.90i/3.63m

Grade: 316/F316/316L/F316L

**QUANTITY:**

(number of pcs) 1bund Q-4023 lb/1825 kg

**Delivery condition**

solution annealed : 1900-2010° F (1040-1100° C)/water

термообработка: закалка в воду

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N <sub>2</sub>
REQUIRED	<0.30	<1.00	1.25-2.00	<0.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10
HEAT № 94493	.024	.25	1.33	.037	.028	16.79	10.30	2.05	.057	.27	.04	.13	.095	.074	.01	.028

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm <sup>2</sup> ) Re (R <sub>0.2</sub> )	Tensile Strength, Rm, Ksi (N/mm <sup>2</sup> )	Elongation, A <sub>5</sub> %	Reduction of area, Z, %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	30(205)	75(515)	45	50	140-223	118
EFFECTIVE	45.4(309)	82.7(563)	60	75	163	277

Mechanical properties tested in state of delivery

US - testing      yes      Results: SEP 1921, 3/ Cc - O.K.

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

**TECHNICAL REQUIREMENTS:**

Macrostructure - GOOD

GRAIN SIZE: 4 in ASTM E 112

Nonmetallic inclusions ASTM E 45 (Method A)

A		B		C		D	
thin	thick	thin	thick	thin	thick	thin	thick
2.5	2.5	1.5	1.0	0.0	0.0	1.0	1.0

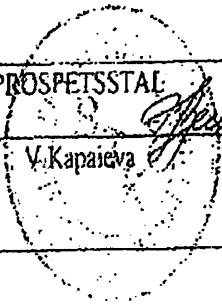
ICC-ASTM A262-02a(Method E)-test: O.K.

Dimension/surface defects test: anti-mixing test - O.K.

Ratio of reduction: 5.6:1

Manufacturer: JSC DNEPROSPETSSTAL

Date: 15.03.10 Signed:



Zaporozhye  
Made in Ukraine.

