

ASA 1075593
 W05355 12STD
 CPA

S✓

95829 (15.75")

C027224



QMS Certified



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 50005

TECHN.PROTOCOL № 210-06 SPEC.№1462/PO23042

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 5648K-02; AMS 5653F-02; ASTM A193/A193M-04c GR B8M, CL1;

ASME SA-193/SA-193M-04GR B8M, CL1; NACE MR0103

Sheets: 9

Sheet: 9

EN10204/3.1

QUALITY CERTIFICATE Nr.242440

PLANT ORDER № 8014901462

4/18/11

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION

Bars and rods of corrosion-resistant (stainless) steel forged, peeced.
 Прутки из коррозионностойких (нержавеющих) сталей кованные, обработанные.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь + АОР
 Round 15.750in/400.05 mm L=3.91m/12.82ft
 Grade: 316/F316/316L/F316L

QUANTITY:

(number of pcs) 1bund 0-8862 lb/4020 kg

Delivery condition

solution annealed: 1900-2010°F(1040-1100°C)/water 27minutes
 термообработка: выдержка в воде

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂		
REQUIRED	<.030	<1.00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
HEAT № 95829	.025	.38	1.40	.034	.022	16.75	10.26	2.13	.077	.22	.05	.20	.11	.07	.01	.043		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation		Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
			In 2 inches (50mm) or 4D, min, % (ASTM A370)				
REQUIRED	36(248)	75 (515)	45		50	140-223	100
EFFECTIVE	38.5(264)	82.1(564)	59		79	163	198

TECHNICAL REQUIREMENTS:

Macrostructure – GOOD
 GRAIN SIZE: 5 to ASTM E 112
 Nonmetallic inclusions: ASTM E 45 (Method A)

A	B	C	D
thin	thick	thin	thick
3.0	2.5	3.0	2.0
0	0	0	1.0
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- 5.4:1

QA ACCEPTED
 MAR 23 2011
 ASA ALLOYS
 EDINBURGH

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.

Manufacturer: JSC DNEPROSPETSSTAL

Date: 18.01.11 Signed:

Zaporozhye
 Made in Ukraine.

