

MF Q 99 SFI

96137(11).

0033539



QMS Certified



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 50005
 TECHN.PROTOCOL № 210-06 SPEC.№1882/P023364-ED
 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

EN10204/3.1
 Sheets:8 Sheet: 7
 QUALITY CERTIFICATE Nr.245298
 PLANT ORDER № 8014901882

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 11.000in/279.40 mm L=4.45m/14.59ft
 Grade: 316/F316/316L/F316L

QUANTITY:
 (number of pcs) 1bund Q-4916 lb/2230 kg
Delivery condition
 solution annealed : 1900-2010° F(1040-1100° C)/water 16minutes
 термообработка: закалка в воду

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 № 96137	.026	.50	1.38	.035	.020	16.80	10.20	2.05	.061	.22	.05	.10	.11	.07	.01	.033		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{0.2})	Tensile Strength, Rm,ksi (N /mm ²)	Elongation	Reduction of area, 2. %	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	44.2(304)	84.7(582)	58	75	170	227

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
2.0	1.0	2.0	1.0
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

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: 30.03.11 Signed:
 Zaporozhye
 Made in Ukraine.

