

DS 65917009 94804

DSRB0664

C0189411



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 07234
TECHN.PROTOCOL № 210-06 SPEC.№6042/PO L28442
ASTM A182/A182M-05;ASME SA-182/SA-182M-04;ASTM A276-04;
ASTM A479/A479M-04;ASTME SA-479/SA-479M-04;ASTM A484/A484M-05; AMS-QQ-S-763A-03
Cond.A;NACE MR 0175-2003;AMS 564BK-02;AMS 5653F-02; ASTM A193/A193M-04c GR B8M,CL1
ASME SA-193/SA-193M-04GR B8M,CL1

EN10204/3.1

Sheets:6 Sheet: 6
QUALITY CERTIFICATE Nr.232170
PLANT ORDER № 8072346042

CUSTOMER „DSS INTERNATIONAL SA“ Switzerland Commodity code RB6L1500/DS	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 15.000in/381.00 mm L=4.48m/14.69ft Grade: 316L/F316/316L/F316L	QUANTITY: (number of pcs) 1bund Q-9171 lb/4160 kg Delivery condition solution annealed :1900-2010° F(1040-1100° C)/water термообработка:закалка в воду
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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 № 94804	.030	.33	1.32	.037	.021	16.66	10.22	2.05	.007	.23	.04	.07	.005	.07	.01	.056

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation A ₅ %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	30(205)	75 (515)	45	50	140-223	100
EFFECTIVE	48.2(328)	86.7(590)	58	77.5	174	216

TECHNICAL REQUIREMENTS:
Macrostructure - GOOD
GRAIN SIZE: 4 to 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 2.0 1.5 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- 7.8:1

Mechanical properties tested in state of delivery

US - testing	yes	Results: SEP 1921, 3/ Cc - O.K.
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Radiation free; mercury free. No Weld or Weld repair.

Manufacturer: JSC DNEPROSPETSSTAL
Date: 19.04.10 Signed: *[Signature]*
V. Kapaiev
Zaporozhye
Made in Ukraine.

