

MTR#: DSRB0460 Customer#: ASAALB PO#: P021485 SO#: LGRO28  
 Item#: RB6L1300 Bundle#: DS64940006 Heat#: 94601

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MILL TEST REPORT

94601. 13" C 007 796

DS64940006 DSRB 0460



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

OHS Certified

Contract No.: 07234 TECHN.PROTOCOL № 210-06 SPEC.№5198/L27611 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 B3M, CL1; ASME SA-193/SA-193M-04GR B8M, CL1	EN10204/3.1 Sheets: 4 Sheet: 3 QUALITY CERTIFICATE № 229810 PLANT ORDER № 8072345198
Commodity code RB6L1300/DS	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> СПОСОБ ВЫПУСКА: Электроплавка+АКР Round 13.000in/330.20 mm L=5.46m/17.90ft Grade: 316/F316/316L/F316L
<b>QUANTITY:</b> (number of pcs) 1bund Q-8455 lb/3835 kg <b>Delivery condition</b> solution annealed: 1900-2010° F(1040-1100° C)/water термическая обработка: закалка в воду	

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N <sub>2</sub>
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
<b>HEAT</b> № 94601	.028	.31	1.36	.038	.020	17.02	10.16	2.06	.028	.23	.05	.07	.031	.07	.01	.035

MECHANICAL PROPERTIES	Yield Strength, ksi (N/mm <sup>2</sup> ) R <sub>e</sub> (R <sub>eL</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	100
EFFECTIVE	45(311)	84.3(581)	63	79	170	298

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.

**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	2.0	1.5	1.0
0.0	0.0	1.0	1.0

 KCC-ASTM A262-02a(Method E)-test: O.K.  
 „Dimension/surface defects test, anti-mixing test - O.K.“  
 Ratio of reduction- 4,15:1

Manufacturer: JSC DNEPROSPETSSTAL  
 Date: 08.02.10 Signed:   
 Zaporozhye  
 Made in Ukraine.



6/8/2010