

SV
 94921 (9")
 PC# 74910
 Flow Conditioner

C015223



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 07149
 TECHN.PROTOCOL № 210-06 SPEC.№6152/P021010
 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

EN10204/3.1
 Sheets: 8 Sheet: 8
 QUALITY CERTIFICATE Nr.234226
 PLANT ORDER № 8071496152

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 9.000in/228.60 mm L=3.87m/12.69ft L=3.49m/11.44ft L=3.56m/11.67ft
 Grade: 316/F316/316L

QUANTITY: 1bund Q-2875 lb/1304 kg
 1bund Q-2610 lb/1184 kg
 (number of pcs) 1bund Q-2668 lb/1210 kg

Delivery condition
 solution annealed : 1900-2010° F(1040-1100°C)/water 14minutes
 термообработка: зажалка 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 № 94921	.025	.35	1.43	.039	.023	16.84	10.26	2.05	.068	.21	.04	.07	.07	.06	.010	.030

ASTM A 370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation in 2 inches (50mm) or 4D,min,% (ASTM A370)	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV.J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	36(249)	81.0(551)	62	75	163	282

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 thin thick thin thick
 2.0 2.0 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- 7.44:1



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: 16.06.10 Signed: *V. Kapaiev*
 V.Kapaiev
 Zaporozhye
 Made in Ukraine.