

95585

CO27212

DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE



Contract No.: 50005
 TECHN.PROTOCOL № 210-06 SPEC.№0713/PO22275-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-04e GR B8M, CL1;
 ASME SA-193/SA-193M-04GR B8M, CL1

EN10204/3.1
 Sheets: 9 Sheet: 9
QUALITY CERTIFICATE Nr.242283
 PLANT ORDER № 8014900713

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged peeled
 Прутки из коррозионностойких (переработанных) сталей ковальные обточенные.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 9.000in/228.60 mm L=3.76m/12.13ft
 Grade: 316/F316/316L/F316L

QUANTITY: 1bund Q-2789 lb/1263kg
 (number of pcs)
Delivery condition
 solution annealed :1900-2010°F(1040-1100°C)/water
 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 № 95585	.020	.36	1.38	.037	.030	16.95	10.17	2.09	.063	.24	.04	.13	.115	.073	.011	.028

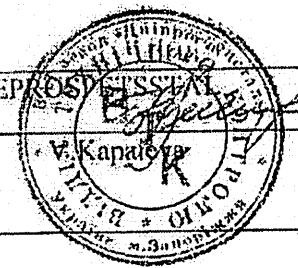
MECHANICAL PROPERTIES „ASTM A370-08a“	Yield Strength, Ksi(MPA)	Tensile Strength, Rm,ksi (N/mm ²)	Elongation in 2 inches (50mm) or 4D, min, % (ASTM A370)	Reduction of area, %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	39,9(274)	83.7(575)	59	75	167	243

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 1.0 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-7.9:1

Mechanical properties tested in state of delivery

US - testing	yes	Results: SEP 1921, 3/ Cc - O.K.
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Manufacturer: JSC DNEPROSPETSSTAL
 Date: 12.01.11 Signed:



Radiation free; mercury free. No Weld or Weld repair.

Zaporozhye
 Made in Ukraine.