

96436



DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

0038347

EN10204/3.1

Contract No.: 50005
 TECHN. PROTOCOL №210-11 SPEC. №2798/PO24122-ED
 ASTM A182/A182M-10; ASME SA-182/SA-182M-10; ASTM A276-10; ASTM A314-08; ASTM A479/A479M-10; ASME SA-479/SA-479M-10; ASTM A484/A484M-10; AMS-QQ-S-763B-06 Cond. A; AMS 5648K-07; AMS 5653F-07; ASTM A193/A193M-10 GR B8M; CL 1 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8M; CL 1 (EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10

Sheets: 6 Sheet: 3
 QUALITY CERTIFICATE Nr. 248300
 PLANT ORDER № 8014902798

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионно-стойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСІБ ВИПІЛІВКИ: Електродугова печі+АКР
 Round ϕ 2.50in/133.35 mm L= 11.15-18.03 ft/3.40-5.50m
 Grade: 316/F316/316L/F316L

QUANTITY: 1bund O-3893 lb/1766 kg
 (number of pcs) 1bund O-2571 lb/1166 kg
Delivery condition
 solution annealed : 1900-2010^o F (1040-1100^o 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 № 96436	.023	.62	1.40	.033	.022	17.00	10.02	2.00	.065	.23	.05	.08	.074	.08	.01	.036		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation A, %	Reduction of area, Z, %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	41.0(279)	85.5(582)	60	75	170	194

TECHNICAL REQUIREMENTS:
 Macrostructure - GOOD
 GRAIN SIZE: 5 to ASTM E 112-96(2004)
 Nonmetallic inclusions: ASTM E 45-05 (Method A)

	A	B	C	D
	thin	thick	thin	thick
	3.0	2.0	3.0	2.0
	0.0	0.0	1.0	1.0

 ICC-ASTM A262-08(practice E)-test: O.K.
 „Dimension/surface defects test, anti-mixing test - O.K.“
 Ratio of reduction- 20,8:1

Mechanical properties tested in state of delivery

US - testing	yes	Results: SEP 1921, group 3/class Dd - OK
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Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 09.06.11 Signed:

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

Zaporozhye
 Made in Ukraine.

