

98363 ASA PO 77730 WO 5871 CPA 12 FOE 80 (10 pcs)

C068933

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 50005
 TECHN.PROTOCOL № 210-11 SPEC.№7695/P028087-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,CL1; ASME SA-193/SA-193M-10GR B8M,CL1; ASTM 320/A320M-08GR B8M,CL 1; ASME SA-320/SA-320M-10 GR B8M,CL 1; NACE MR 0175-03; NACE MR 0103-10

Sheets: 8 Sheet: 6
QUALITY CERTIFICATE EN10204/3.1 Nr.265849
 PLANT ORDER № 8014907695

CUSTOMER
 DSS INTERNATIONAL SA
 Switzerland
ok 3/6/13

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионноустойчивых (нержавеющих) сталей кованные, обточенные.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 16.000in/406.40 mm L=3.870m/12.689ft
Grade: 316/F316/316L/F316L

QUANTITY:
 (number of pcs) **1bund Q-9087 lb/4122 kg**

Delivery condition
 solution annealed :1922°F(1040°C)/water 30 minutes
 термообработка: закалка в воду

ANALYSIS, %	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
CAST <i>Heat#</i> № 98363	.023	.45	1.32	.035	.024	16.79	10.17	2.10	.084	.28	.04	.13	.005	.09	.01	.025

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{0.2})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation A ₅ %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	37.4(257)	80.1(550)	60	75	163	240

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
2.5	2.0	2.0	1.0
0.0	0.0	1.0	1.0

 ICC-ASTM A262-08 (practice E)-test: O.K.
 Dimension/surface defects test, anti-mixing test – OK

Mechanical properties tested in state of delivery

US - testing yes Results: «ASTM A388 FBH 1/5 "»

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

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 20.09.12 Manager of quality assurance department - V. Kapaieva Signed: *[Signature]*
 Zaporozhye
 Made in Ukraine.

5✓
MC