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ASA PO 77867 WO 5913 CPA 6 FOE 40

98708

(1pc)

076195

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 50005 TECHN.PROTOCOL № 210-11 SPEC.№8163/P028592-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	Sheets:5 Sheet: 5 QUALITY CERTIFICATE EN10204/3.1 Nr.268754 PLANT ORDER № 8014908163
	NACE MR 0175-03;NACE MR 0103-10	

	CUSTOMER DSS INTERNATIONAL SA Switzerland <i>5/21/13</i>	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=3.850m/12.623ft Grade: 316/F316/316L/F316L	QUANTITY: (number of pcs) 1bund Q-2870 lb/1302 kg
			Delivery condition solution annealed :1922 ⁰ F(1050 ⁰ C)/water 25' 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 Heat# № 98708	.020	.35	1.36	.038	.020	16,85	10.16	2.06	.063	.25	.04	.09	.005	.09	.01	.017

ASTM A370

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{a2})	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	39.8(274)	84.1(578)	61	79	170	284

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
2.0	2.0	2.0	1.0
0.0	0.0	0.0	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 “ »
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Radiation free; mercury free. No Weld or Weld repair.

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 27.12.12 Manager of quality assurance department - V. Kapaieva Signed: *[Signature]*
 Zaporozhye
 Made in Ukraine.

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