



99812 (8.5")

0095200


PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 50005 TECHN.PROTOCOL № 390-11 SPEC.№1144/P030989-ED DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, AD2000-Merkblatt W2; AD 2000-Merkblatt W10; 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-10GR B8M,CL1; ASME SA-193/SA-193M-10 GR B8,CL 1; ASTM A320/A320M-08 GR B8M,CL 1; ASME SA-320/SA-320M-10 GR B3,CL1; NACE MR 0175-03; NACE MR 0103-10	Sheets:7 Sheet: 4 QUALITY CERTIFICATE EN10204/3.1 Nr.277141 PLANT ORDER № 8014901144
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	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 8.500in/215.90 mm L=3.910m/12.820ft L=4.180m/13.705ft L=3.740m/12.262ft Grade: 316/316L/1.4401/1.4404	1bund Q-2593 lb/1176 kg 1bund Q-2791 lb/1266 kg
			QUANTITY: (number of pcs)
Delivery condition solution annealed :1904 ⁰ F(1040 ⁰ C) water 20minutes термообработка: закалка в воду			

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	Sn	B
REQUIRED	<.030	<1.00	1.20-2.00	<.040	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № 99812	.021	.42	1.33	.035	.025	17.15	10.25	2.07	.069	.28	.04	.12	.005	.08	.013	.030	.011	.0015

DIN EN 10002-1, ASTM A370-09										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 thin thick thin thick 3.0 2.0 2.0 1.5 0.0 0.0 1.0 1.0 ICC-ASTM A262-08 (practice B)-test: O.K. Dimension/surface defects test, anti-mixing test – OK									
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J											
	A ₅ % L	Q		In 2 inches (50mm) or 4D, min, % L	L			L	Q										
REQUIRED	205	240	515-690	45	35	40	50	140-223	100										
EFFECTIVE	303 300	339 332	586 582	59	52	56 57	78 78	170 170	265 261 253 270 268 274	61 61 61 61 61 61									
Mechanical properties tested in state of delivery																			

US - testing	yes	Results: ASME SA-388/SA-388M-10(ASIM A 388/A 388M-09)-PBH1/8"; FN 10228-4 type 1a; class 3:OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 09.10.13 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			