



4M

96914 (6")

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 50005 TECHN.PROTOCOL № 390-11 SPEC.№4079/PU13605-TO DIN EN 10088-3-05, DIN EN 10272-08, 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 5639H-07; AMS 5647H-07; ASTM A193/A193M-10 GR B8, CL1; ASME SA-193/SA-193M-10 GR B8, CL 1; ASTM A320/A320M-08 GR B8, CL 1; ASME SA-320/SA-320M-10 GR B8, CL1; NACE MR 0175-03; NACE MR 0103-10	Sheets: 8 Sheet: 4 QUALITY CERTIFICATE EN10204/3.1 Nr.252440 PLANT ORDER № 8014904079
---	---	--

 GMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.000in/152.40 mm L=3.50-5.50m/11.48-18.03ft Grade: 304/304L/1.4301/1.4307	QUANTITY: (number of pcs) 1bund Q-6755 lb/3064 kg
			Delivery condition solution annealed :1900 ⁰ F(1040 ⁰ C)water 30minutes 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	18.00-19.50	8.00-10.00	<.30	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № 96914	.022	.29	1.54	.033	.026	18,44	8.24	.25	.065	.28	.05	.09	.012	.08	.01	.073	.011	.0011

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J	
	A ₅ %	l. Q		In 2 inches (50mm) or 4D, min, %	L			L	Q
REQUIRED	205	230	515-700	45	40	50	140-223	100	
EFFECTIVE	286 291	320 321	604 610	60 59	54 54	73 70.5	174 174	198 206 200 200 210 203	

Mechanical properties tested in state of delivery

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
 2.0 1.0 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

US - testing	yes	Results: ASME SA-388/SA-388M-10(ASTM A 388/A 388M-09)-FBH/8"; EN 10308 type 1a; class 3:OK
--------------	-----	--

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

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 15.09.11 Manager of quality assurance department - V. Kapaieva
 Signed:
 Zaporozhye
 Made in Ukraine.

