

96914 (7)

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 50005

TECHN.PROTOCOL № 390-11 SPEC.№4079;P013604-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-10GR 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: 5

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 7.000in/177.80 mm L=3.50-5.50m/11.48-18.03ft

Grade: 304/304L/1.4301/1.4307

QUANTITY:

(number of pcs) 1bund Q-6927 lb/3142 kg

Delivery condition

solution annealed :1900° F(1040° 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 % L	Brinell Hardness HB	Impact strength, KV, J	
	L	Q		A ₅ % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q
REQUIRED	205	230	515-700	45 35	40	50	140-223	100	60
EFFECTIVE	297 293	321 318	600 603	61 55 60 56	53 55	73 73	174 174	197 182 190 188 191 195	61 61 52 61 62 52

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	1.0	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: ASME SA-388/SA-388M-10(ASTM A 388/A 388M-09)-FBH1/8";EN 10308 type 1a;class 3:OK

Manufacturer: PJSC DNIPROSPETSSTAL

Date: 15.09.11 Manager of quality

assurance department - V. Kapaieva

Signed:

Zaporozhye

Made in Ukraine.



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