

98530

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 50005
 TECHN.PROTOCOL № 390-11 SPEC.№7839/P021368-TO
 DIN EN 10088-3-05, DIN EN 10272-08; DIN EN 10222-5-00; AD 2000-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:6 Sheet: 1
QUALITY CERTIFICATE EN10204/3.1 Nr.267556
 PLANT ORDER № 8014907839



GMS Certified

CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

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 8.500in/215.90 mm L=4.120m/13,508 ft;
 Grade: 304/304L/1.4301/1.4307

QUANTITY: 1bund Q-2725 lb/1236 kg
 (number of pcs)

Delivery condition
 solution annealed :1900°F(1040°C)water 25minutes
 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 № 98530	.029	.58	1.56	.035	.024	18,32	8.22	.24	.068	.23	.06	.10	.005	.07	.014	.065	.0074	.0010

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R L0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reducti on of area, Z %	Brinell Hardness HB	Impact strength, KV, J											
	L	Q		A ₅ %	In 2 inches (50mm) or 4D,min,%			L	Q	L	Q								
REQUIRED	205	230	515-700	45	35	40	50	140-223	100	60									
EFFECTIVE	273	311	568	62	56	61	73	167	281	280	284	61	61	61					

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
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: ASME SA-388/SA-388M-10(ASTM A 388/A 388M-09)-FBH1/8";EN 10228-4 type 1a;class 3:OK

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

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 20.11.12 Manager of quality assurance department - V. Kapaieva
 Signed:

[Signature]
 06-71378

Zaporozhye
 Made in Ukraine.