

HT# A01073

20114787

PJSC DNIPROPETSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN. PROTOCOL № 390-11 SPEC.№3 734/P033051-ED
 DIN EN 10088-3-05; DIN EN 10272-108; DIN EN 10222-5-00; ASTM A182/A182M-10; ASME SA-132/SA-132M-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
 Comd. ASAMS 5648K-07; ASMS 5653F-07; ASTM A193/A193M-10; GR B8M; CL 1; 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 B8; CL 1; NACE MR 0175-03; NACE MR 0103-10

Sheets: 7 Sheet: 1
 INSPECTION CERTIFICATE EN10204/3.1 Nr. 287092
 PLANT ORDER № 8014903734

CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, pealed. Прутки з корозійностійких (нержавіючих) сталей ковані, обточені.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВПЛАВЛЕННЯ: Електроплавка перш+АКР
 Round 15.000mm/381.00 mm L=4.630m/15.180ft
 Grade: 316/316L/1.4404

QUANTITY:
 (number of pcs) 1bund Q.9546 1b/4330 kg

Delivery condition
 solution annealed: 1940°F(1060°C) water 34minutes
 термодобробота: загарятка в воді


ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mg	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 № A01073	.023	.44	1.32	.034	.022	16.89	10.26	2.09	.076	21	.04	.11	.005	.07	.01	.027	.012	.0011

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R _{0.2} & R _{1.0} %	Tensile Strength, (N/mm ²) R _m	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J	
			A % L Q	In 2 inches (50mm) or 4D, min. % L			L	Q
REQUIRED	205	240	45-35	40	50	140-223	100	60
EFFECTIVE	265 295	297 565	61.54 61.54	60 60	79 79	163 163	204 199 200 206	65 65 64 64

Mechanical properties tested in state of delivery

US - testing
 Results: ASM E SA-388/SA-388M-10/ASTM A 388/A 388M-09-
 FBH1/5"-EN 10228-4 type 1; class 3: OK

Manufacturer: PJSC DNIPROPETSTAL
 Date: 14.08.14 Manager of quality assurance department - V. Kapateva
 Signed: 

Radiation free; mercury free. No Weld or Weld repair.
 Zaporozhye
 Made in Ukraine.

TECHNICAL REQUIREMENTS:
 Macrostructure - GOOD
 GRAIN SIZE: 5 to ASTM E 112-96(2004)
 Nonmetallic inclusions ASTM E 45-05 (Method A)
 A thin thin thin thin thin thin thin thin thin
 B 2.5 2.5 2.0 1.0 0.0 0.0 1.0 1.0
 C
 D
 ICC-ASTM A262-08 (practice E)-test: OK
 Dimension/surface defects test, anti-mixing test - OK