

HT# A01413

Q 119360

PJSC DNIPROSPETSSTAL, YUZHNOYE SHO SSE 81, 69008 ZAPOROZH YE, UKRAINE

Contract No.: 20002
 TECHN PROTOCOL № 390-11 SPEC № 5037/P034083-ED
 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 5648K-07, AMS 5653F-07, ASTM A193/A193M-10 GR 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 B8M, CL 1; NACE MR 0175-03; NACE MR 0103-10

CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Листы из коррозионно-стойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.

STEEL MAKING PROCESS: EAF+AOD
ЧОСОБ ВПЛАВКИ: Электроплавочная печь+АКР
 Round 5.250in/133.35 mm L=5.310m/17.410ft L=5.060m/16.590ft
 Grade: 316/316L/1.4401/1.4404

Quantity: 1bund Q-2606 lb/1182 kg
 1bund Q-2540 lb/1152 kg
 Delivery condition: solution annealed :1900° F(1040° C) water 30minutes
 термooбpaботка:закaлка в водy

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 № A01413	.022	.41	1.26	.034	.025	16,80	10.20	2.03	.062	.24	.06	.12	.005	.10	.019	.030	.010	.001


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		Reducti on of area, Z % L	Brinell Hardness HB	Impact strength, KV, J	
			A ₅ % L Q	In 2 inches area, (50mm) or 4D min, % L			L	Q
REQUIRED	205	240	40 -	40	50	140-217	100	
EFFECTIVE	278 281	294 297	58 - 57	- 56	75 75	163 163	237 231 237 230	

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

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

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 12.11.14 Manager of quality assurance department - V. Kapaleva
 Signed: 
 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 B C D
 thin thick thin thick thin thick thin thick
 2.5 2.0 1.5 1.0 0.0 0.0 1.0 1.0
 ICC-ASTM A262-08 (prachice E)-test: O.K.
 Dimension/surface defects test, anti-mixing test - OK