

HT# A01033

C 1140418

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 20002
 TECHN. PROTOCOL № 390-11 SPEC. № 3734/P033051-ED
 DIN EN 10088-3-05; DIN EN 10272-08; AD20000-MechBylat 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 (EXC PAR 7.2); ASME SA-193/SA-193M-10; GR B8, CL1 (EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10

Sheets: 3 Sheet: 1
 INSPECTION CERTIFICATE EN10204/3.1 Nr: 286612
 PLANT ORDER № 8014903734



CUSTOMER
DSS INTERNATIONAL
 SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПУСККИ: Электродуговая печь+АКР
 Round 5.250in/133.35 mm L=5.480m/17.967ft L=5.270m/17.279ft L=5.430m/17.803ft
 Grade: 316/316L/1.4401/1.4404

Delivery condition
 solution annealed : 1900-2010° F(1040-1100° C) water
 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	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A01033	.020	.41	1.32	.034	.024	16.85	10.35	2.03	.067	.29	.04	.14	.005	.08	.01	.025	.0127	.001

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R _{0.2} % R 1.0%	Tensile Strength, R _m , (N/mm ²)	Elongation		Reduction of area, Z%, L	Brinell Hardness HB	Impact strength, KV, J												
			A ₅ % L	In 2 inches (50mm) or 4D, min.% L															
REQUIRED	205	515-700	40	40	50	140-217	100												
EFFECTIVE	303 300	339 342	561 568	60 60	- -	61 60	77 78	163 163	257 250 254 248 251 245										

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 1, class 3-OK

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 30.07.14 Manager of quality assurance department - V. Kapateva
 Signed:

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