

C204648
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PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN.PROTOCOL № 390-11 SPEC.№ 6956/PO42393-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, 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

INSPECTION CERTIFICATE EN10204/3.1 Nr. 327679
 PLANT ORDER № 8014906956

CUSTOMER
DSS INTERNATIONAL
SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (пержавеющих) сталей горячекатаные, обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 5.500in/139.70 mm L=5.680m/18.623ft L=5.690m/18.656ft
Grade: 316/316L/1.4401/1.4404

QUANTITY: 1bund Q-3117 lb/1414 kg
 (number of pcs) 1bund Q-3122 lb/1416 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	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 № A05401	.018	.52	1.28	.040	.024	17,01	10.27	2.06	.071	.34	.06	.04	.01	.15	.011	.034	.010	.0023

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	
	A5%	In 2 inches (50mm) or 4D, min, % L		L	Q			L	Q
REQUIRED	205	240	515-690	40 -	40	50	140-223	100	-
EFFECTIVE	280 282	307 310	566 568	59 - 59 -	58 58	75 75	167 167	219 219 219 216 216 216	∴


DIN EN 10002-1, ASTM A370-09

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
 3.0 2.0 2.0 1.0 0.0 0.0 1.0 1.0
 ICC-ASTM A262-08 (practice E)-test: O.K.
 Dimension/surface defects test. anti-mixing test – OK
 We acknowledge that the delivered products conform to the requirements of the order

Mechanical properties tested in state of delivery

US - testing: yes Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBHI/8"; EN 10308 type 1a; class 3:OK

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

Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 26.11.17 Manager of quality assurance department - V. Kapaieva
 Signed: 
 Zaporozhye
 Made in Ukraine.

ANS