



0224457

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN. PROTOCOL № 390-11 SPEC. № 9728/PO44311 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-Q-S-763B-06 Cond. A, AMS 5648K-07, AMS 5653F-07, ASTM A193/A193M-10GR B8M, CL1 (EXC PAR 7.2), ASME SA-193/SA-193M-10GR B8, CL 1 (EXC PAR 7.3), NACE MR 0175-03, NACE MR 0103-10	Sheets: 7 Sheet: 3 INSPECTION CERTIFICATE EN10204/3.1 Nr. 336732 PLANT ORDER № 8014909728
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 OMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 4.000in/101.60 mm L=5.590/18.328ft L=5.640m/18.492ft L=5.640m/18.492ft Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-1631 lb/740 kg 1bund Q-820 lb/372 kg 1bund Q-4101 lb/1860 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	C	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 № A06239	.017	.37	1.50	.040	.027	17.20	10.35	2.06	.07	.32	.05	.06	.005	.11	.01	.032	0.13	.0023

DIN EN 10002-1, ASTM A370-09


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						
	A ₅ % L	Q		In 2 inches (50mm) or 4D, min, % L				L						
REQUIRED	205	240	515-690	40	-	40	50	140-217	100		-			
EFFECTIVE	285 290	301 305	594 599	61	-	59	77 79	174 174	185 180	185 180	185 180			

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 2.5 2.0 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
 Ratio of reduction-22.6:1

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type Ia; class 3: OK
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Radiation free; mercury free. No Weld or Weld repair.

Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 09.08.18 Manager of quality assurance department - V. Kapaieva
 Signed: 
 Zaporozhye
 Made in Ukraine.

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