

C193080

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



Contract No.: 20002  
TECHN.PROTOCOL № 390-11 SPEC.№ 5152/PO41107  
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-10GR B8M,CL1(EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8,CL 1(EXC PAR 7.3);NACE MR 0175-03;NACE MR 0103-10

**Sheets: 5** **Sheet: 2**  
**INSPECTION CERTIFICATE EN10204/3.1 Nr.323608**  
**PLANT ORDER № 8014905152**



**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 **6.25 in/158.75 mm** L=5.59 m/18.328ft ; L=5.60 m/18.361ft  
**Grade: 316/316L/1.4401/1.4404**

**QUANTITY:** **1bund Q-4012 lb/1820 kg**  
(number of pcs) **1bund Q-2011 lb/912 kg**

**Delivery condition**  
solution annealed :1900<sup>o</sup> F(1040<sup>o</sup> 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 № A04982	.019	.32	1.37	.038	.027	16.83	10.37	2.14	.071	.25	.05	.08	.006	.08	.01	.025	.009	.0025

DIN EN 10002-1,ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm <sup>2</sup> ) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm <sup>2</sup> )	Elongation		Reduction of area, Z%, L	Brinell Hardness HB	Impact strength, KV, J	
	L	Q		A5%	In 2 inches (50mm) or 4D,min,% L			L	Q
REQUIRED	205	240	515-700	40 -	40	50	140-217	100	
EFFECTIVE	295 296	321 324	568 570	60 - 60 -	59 58	79 79	167 167	206 206 206 212 212 212	

**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

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 Ia;class 3:OK
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Radiation free; mercury free. No Weld or Weld repair.

Manufacturer:PrJSC DNIPROSPETSSTAL  
Date: 06.08.17 Manager of quality assurance department - V. Kapaieva  
Signed:  
Zaporozhye  
Made in Ukraine.

Nov 26/22