



HT # A05840

C214251

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 8367/PO43227 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 <b>INSPECTION CERTIFICATE EN10204/3.1 Nr. 332613</b> PLANT ORDER № 8014908367			
	 <p>GMS Certified</p>	CUSTOMER <b>DSS INTERNATIONAL</b> SA Switzerland	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 5.000in/127.00 mm L=4.970m/16.295ft L=5.610m/18.393ft L=5.610m/18.393ft <b>Grade: 316/316L/1.4401/1.4404</b>	QUANTITY: (number of pcs) <table border="0"> <tr> <td><b>1bund Q-1133 lb/514 kg</b></td> </tr> <tr> <td><b>1bund Q-1279 lb/580 kg</b></td> </tr> <tr> <td><b>1bund Q-3827 lb/1736 kg</b></td> </tr> </table> Delivery condition solution annealed :1900 <sup>o</sup> F(1040 <sup>o</sup> C)water 30minutes термообработка:закалка в воду	<b>1bund Q-1133 lb/514 kg</b>	<b>1bund Q-1279 lb/580 kg</b>
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<b>1bund Q-3827 lb/1736 kg</b>						

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 № A05840	.020	.50	1.43	.040	.023	17.09	10.26	2.07	.072	.32	.06	.04	.005	.12	.012	.027	.0093	.0022

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		As % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q
REQUIRED	205	240	515-690	40 -	40	50	140-217	100	-
EFFECTIVE	290 292	304 307	559 560	60 - 60 -	59 59	79 79	167 167	242 242 242 240 240 240	-

Mechanical properties tested in state of delivery

**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
3.0	2.0	2.0	1.0
0.0	0.0	0.0	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

US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 16.04.18 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			