

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 1421/PO45279 DIN EN 10088-3-05; DIN EN 10272-08; AD2000-Merkblatt W2; AD 2000-Merkblatt W10; ASTM A 182/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: 3 Sheet: 3 INSPECTION CERTIFICATE EN10204/3.1 Nr. 340748 PLANT ORDER № 8014901421
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	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, отбоченные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.750m/171.45 mm L-5.640m/18.492ft L-5.660m/18.557ft L-5.640m/18.492ft Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs)	1bund Q-2381 lb/1080 kg 1bund Q-2385 lb/1082 kg 1bund Q-2381 lb/1080 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	<.100	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 № A06703	.021	.44	1.35	.040	.026	16.90	10.30	2.08	.057	.28	.05	.06	.007	.09	.01	.027	.009	.002

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) <table style="width:100%; text-align: center;"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>2.0</td><td>2.0</td><td>1.5</td><td>1.0</td> </tr> <tr> <td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td> </tr> </table> 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-12.8:1										A	B	C	D	thin	thick	thin	thick	2.0	2.0	1.5	1.0	0.0	0.0	0.0	1.0
A	B	C	D																																
thin	thick	thin	thick																																
2.0	2.0	1.5	1.0																																
0.0	0.0	0.0	1.0																																
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation A ₅ , % L Q		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J																											
REQUIRED	205	240	515-690	45	35			40	50	140-217	100	60																							
EFFECTIVE	275 273	298 295	553 552	60	52 60	59 58	81 80	163 163	276 208 210 272 275 265	92 97 90 90 91 87																									
Mechanical properties tested in state of delivery																																			

US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK	Manufacturer: PrJSC DNIPROSPETSSTAL Date: 13.12.18 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.
Radiation free; mercury free. No Weld or Weld repair.			