




PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 7683/PO42853-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-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: 2																															
	 CUSTOMER DSS INTERNATIONAL SA Switzerland										INSPECTION CERTIFICATE EN10204/3.1 Nr. 329829 PLANT ORDER № 8014907683																															
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 5.000in/127.00 mm L=5.630m/18.459ft L=5.630m/18.459ft Grade: 316/316L/1.4401/1.4404										QUANTITY: (number of pcs) 1bund Q-3845 lb/1744 kg 1bund Q-2562 lb/1162 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 № A05575	.018	.44	1.36	.039	.024	17.28	10.24	2.07	.068	.32	.05	.08	.005	.11	.015	.026	.0096	.0025																								
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		TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">A</th> <th colspan="2">B</th> <th colspan="2">C</th> <th colspan="2">D</th> </tr> <tr> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> <th>thin</th> <th>thick</th> </tr> </thead> <tbody> <tr> <td>2.0</td> <td>1.5</td> <td>1.5</td> <td>1.0</td> <td>0.0</td> <td>0.0</td> <td>1.0</td> <td>1.0</td> </tr> </tbody> </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									A		B		C		D		thin	thick	thin	thick	thin	thick	thin	thick	2.0	1.5	1.5	1.0	0.0	0.0	1.0	1.0
				A				B											C		D																					
	thin	thick	thin	thick	thin	thick	thin	thick																																		
2.0	1.5	1.5	1.0	0.0	0.0	1.0	1.0																																			
L	Q	L	Q	L	Q																																					
REQUIRED	205	240	515-690	40 -	40	50	140-217	100	-																																	
EFFECTIVE	285 281	308 310	580 576	60 - 61 -	60 59	79 79	170 170	238 238 238 240 240 240	-																																	
Mechanical properties tested in state of delivery																																										
US - testing		yes	Results: ASTM A388/A388M)-FBH1/8"; EN 10308 type 1a; class 3:OK																																							
Radiation free; mercury free. No Weld or Weld repair.										Manufacturer: PrJSC DNIPROSPETSSTAL Date: 26.01.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.																																