




C220973

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-QQ-S-763B-06 Cond.A; AMS 5648K-07; AMS 5653F-07; ASTM A193/A193M-10 GR B8M, CL1; ASME SA-193/SA-193M-10 GR B8, CL 1; ASTM A320/A320M-08 GR B8M, CL 1; ASME SA-320/SA-320M-10 GR B8, CL1; NACE MR 0175-03; NACE MR 0103-10		Sheets:8 Sheet: 2 INSPECTION CERTIFICATE EN10204/3.1 Nr. 336112 PLANT ORDER № 8014909728
	 <p>QMS Certified</p>	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 6.250in/158.75 mm L=18.459ft/5.630m L=18.492ft/5.640m Grade: 316/316L/1.4401/1.4404

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 № A06221	.018	.38	1.35	.040	.024	16,77	10.20	2.07	.068	.32	.05	.06	.068	.13	.01	.026	.011	.0024

DIN EN 10002-1, ASTM A370-09										TECHNICAL REQUIREMENTS:																									
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		Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>thin</td> <td>thick</td> <td>thin</td> <td>thick</td> </tr> <tr> <td>3.0</td> <td>2.0</td> <td>2.0</td> <td>1.0</td> </tr> <tr> <td>0.0</td> <td>0.0</td> <td>0.0</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 Ratio of reduction-15.1:1										A	B	C	D	thin	thick	thin	thick	3.0	2.0	2.0	1.0	0.0	0.0	0.0	1.0
	A	B		C	D																														
thin	thick	thin	thick																																
3.0	2.0	2.0	1.0																																
0.0	0.0	0.0	1.0																																
REQUIRED	205	240	515-690	40 -	40	50	140-223	100	-																										
EFFECTIVE	298 302	336 342	559 553	60 - 59 -	59 58	78 78	163 163	204 204 204 208 208 208	-																										
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: 23.07.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.																									
Radiation free; mercury free. No Weld or Weld repair.																																			

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