




PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 8683/PO43415-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-10 GR B8M, CL 1; 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, CL 1; NACE MR 0175-03; NACE MR 0103-10	Sheets: Sheet: INSPECTION CERTIFICATE EN10204/3.1 Nr. 333373 PLANT ORDER № 8014908683
---	--	--

 GMS Certified	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 5.750in/146.05 mm L=5.620m/18.426ft L=5.610m/18.393ft Grade: 316/316L/1.4401/1.4404	QUANTITY: 1bund Q-3417 lb/1550 kg (number of pcs) 1bund Q-3408 lb/1546 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 № A05923	.020	.32	1.25	.038	.027	16.87	10.28	2.09	.064	.27	.04	.07	.005	.09	.01	.028	.010	.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																																																				
	L	Q		A5 %	In 2 inches (50mm) or 4D, min, % L			L	Q	L	Q																																																	
REQUIRED	205	240	515-690	40	-	40	50	140-217	100	-	Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="0"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td><td colspan="6"></td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td colspan="6"></td> </tr> <tr> <td>3.0</td><td>2.0</td><td>3.0</td><td>2.0</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td><td colspan="6"></td> </tr> </table>										A	B	C	D							thin	thick	thin	thick	thin	thick	thin	thick	thin	thick							3.0	2.0	3.0	2.0	0.0	0.0	1.0	1.0						
A	B	C	D																																																									
thin	thick	thin	thick	thin	thick	thin	thick	thin	thick																																																			
3.0	2.0	3.0	2.0	0.0	0.0	1.0	1.0																																																					
EFFECTIVE	302 300	345 347	565 562	59	-	58 58	77 75	163 163	200 208	200 208	200 208	-	-	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: ASTM A388/A388M-FB11/8"; EN 10308 type 1a; class 3:OK										
Radiation free; mercury free. No Weld or Weld repair.			Manufacturer: PrJSC DNIPROSPETSSTAL Date: 03.05.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.									