




PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 1897/PO45605 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 INSPECTION CERTIFICATE EN10204/3.1 Nr. 343151 PLANT ORDER № 8014901897
 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 5.25 in/133.35mm L=6.19m/20.295ft;L=6.19 m/20.295ft Grade: 316/316L/1.4401/1.4404	QUANTITY: 1bund Q-3095lb/1404kg (number of pcs) 1bund Q-3100 lb/1406kg 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 № A06954	.022	.49	1.31	.038	.025	16.73	10.40	2.07	.083	.28	.06	.06	.005	.09	.012	.030	.0093	.0024

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) A B C D thin thick thin thick thin thick thin thick 3.0 2.0 2.0 1.0 0.0 0.0 1.0 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 Ratio of reduction-20.8:1									
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		In 2 inches (50mm) or 4D,min,% L	L			Q	L										
REQUIRED	205	240	515-690	40 -	40	50	140-217	100	-										
EFFECTIVE	286 281	319 315	573 574	62 - 63 -	61 61	79 79	170 170	197 197 197 193 193 193	- -										

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: 04.03.19 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.