




C238382

**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 <b>INSPECTION CERTIFICATE EN10204/3.1 Nr. 343151</b> PLANT ORDER № 8014901897	
	 CUSTOMER <b>DSS INTERNATIONAL</b> SA Switzerland	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 5.25 in/133.35mm L=6.19m/20.295ft; L=6.19 m/20.295ft <b>Grade: 316/316L/1.4401/1.4404</b>											QUANTITY: (number of pcs) <b>1bund Q-3095lb/1404kg</b> <b>1bund Q-3100 lb/1406kg</b>  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:											
MECHANICAL PROPERTIES	Yield Strength, (N/mm <sup>2</sup> ) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm <sup>2</sup> )	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		A	B	C	D									
	L	Q		In 2 inches (50mm) or 4D, min, % L	L			Q	thin					thick	thin	thick	thin	thick	thin	thick		
REQUIRED	205	240	515-690	40 -	40	50	140-217	100	-					3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0	
EFFECTIVE	286	319	573	62 -	61	79	170	197 197 197	-					3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0	
	281	315	574	63 -	61	79	170	193 193 193	-													

Mechanical properties tested in state of delivery											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								
US - testing	yes	Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK									Manufacturer: PrJSC DNIPROSPETSSTAL Date: 04.03.19 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.								
Radiation free; mercury free. No Weld or Weld repair.																			

P.O. # 5370      Part # MIXER 6 NPS -D3 - 702201      Desc. CPA MIXER PROTOTYPE 6 NPS RVM 702