




C249065

**PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE**

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 3746/P046707 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	INSPECTION CERTIFICATE EN10204/3.1 Nr. 348117 PLANT ORDER № 8014903746
---	---	---

 GMS Certified	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 2.75 in/69.85 mm L=4.58 m/15.016ft; L=5.64m/18.492ft; L=5.63m/18.459ft; L=5.62m/18.426ft <b>Grade: 316/316L/1.4401/1.4404</b>	QUANTITY: (number of pcs) 1bund Q-631 lb/286 kg 1bund Q-1944 lb/882 kg 1bund Q-3884 lb/1762 kg 1bund Q-3884 lb/1762 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 № A07516	.020	.39	1.44	.039	.024	17.19	10.26	2.10	.069	.31	.05	.08	.005	.10	.011	.069	.012	.0022

DIN EN 10002-1, ASTM A370-09										<b>TECHNICAL REQUIREMENTS:</b> 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 2.5 2.0 2.0 2.0 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-62.4:1 Manufacturer: PrJSC DNIPROSPETSSTAL Date: 07.08.19 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.									
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 <sub>5</sub> % L Q	In 2 inches (50mm) or 4D, min, % L			L	Q										
REQUIRED	205	240	515-690	40 -	40	50 =	140-217	100	-										
EFFECTIVE	297 302	335 341	564 562	60 - 60 -	58 58	80 79	163 163	200 200 200 204 204 204	- -										
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.																			

P.O. # 5368  
 Part # D3 - 702201  
 Description: CPA MIXER PROTOTYPE  
 3 NPS RPM 201

P.O. # 5368  
 Part # D3 - 702201  
 Description: CPA MIXER PROTOTYPE  
 3 NPS RPM 702  
 INS March 19, 2020