




C22445

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№0111/PO44618 DIN EN 10088-3-05,DIN EN 10272-08,DIN EN 10222-5-00,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; 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										<b>Sheets:4</b>		<b>Sheet: 1</b>						
											<b>INSPECTION CERTIFICATE EN10204/3.1 Nr.336733</b> PLANT ORDER № 8014900111								
 GMS Certified	<b>CUSTOMER</b> <b>DSS INTERNATIONAL</b> <b>SA Switzerland</b>		<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled.Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ:Электродуговая печь+АКР</b> Round 11.000in/279.40 mm L=14.213 ft/4.335m L=13.885 ft/4.235m <b>Grade: 316/316L/1.4401/1.4404</b>										<b>QUANTITY:</b> (number of pcs)		<b>1bund Q-4771 lb/2164 kg</b> <b>1bund Q-4669 lb/2118 kg</b>				
											Delivery condition solution annealed :1940 <sup>o</sup> F(1060 <sup>o</sup> C)water 30minutes термообработка:закалка в воду								
<b>ANALYSIS, %</b>																			
	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B	
<b>REQUIRED</b>	<.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			
<b>CAST</b> № A06284	.018	.45	1.29	.040	.025	16,78	10.30	2.06	.076	.33	.05	.07	.005	.12	.011	.028	.011	.0022	
DIN EN 10002-1,ASTM A370-09																			
<b>MECHANICAL PROPERTIES</b>	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		<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 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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-7.4:1 Manufacturer:PrJSC DNIPROSPETSSTAL Date: 09.08.18 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.									
				A <sub>5</sub> % L	Q			In 2 inches (50mm) or 4D,min,% L	L										
	<b>REQUIRED</b>	205	240	515-690	45 35	40	50	140-217	100										
<b>EFFECTIVE</b>	275 277	301 305	555 557	58 46 58 46	57 57	73 73	163 163	189 189 189 185 185 185	65 65 65 64 64 64										
<b>Mechanical properties tested in state of delivery</b>																			
<b>US - testing</b>		yes	<b>Results: ASTM A388/A388M-FBH1/5";EN 10228-4 type 1a;class 3:OK</b>																
<b>Radiation free; mercury free. No Weld or Weld repair.</b>																			

ANS