



C233811

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


	Contract No.: 20002 TECH.PROTOCOL № 390-11 SPEC.№1652/PO45380 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-10 GR B8M,C L 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	Sheets:5 <b>Sheet:5</b> <b>INSPECTION CERTIFICATE EN10204/3.1 Nr.341437</b> PLANT ORDER № 8014901652
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 GMS Certified	<b>CUSTOMER</b> <b>DSS INTERNATIONAL</b> SA Switzerland	<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel forged, peeled.Прутки из коррозионностойких (нержавеющих) сталей кованые, обточенные. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+AOP</b> Round 18.750in/476.25 mm L=10.754 ft/3.280m <b>Grade: 316/316L/1.4401/1.4404</b>	<b>QUANTITY:</b> (number of pcs) <b>1bund Q-10494 lb/4760 kg</b>  Delivery condition solution annealed :1940° F(1060° C)water 30minutes термообработка:закалка в воду
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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 № A06796	.023	.40	1.30	.040	.026	16.80	10.23	2.07	.075	.40	.05	.07	.005	.11	.01	.027	.011	.0026

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		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 2.5 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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-7.5:1									
	L	Q		A5,% L	In 2 inches (50mm) or 4D,min,% L			L	Q										
REQUIRED	205	240	515-690	45 35	40	50	140-217	100	60										
EFFECTIVE	270	310	573	59 48	58	80	167	190 190 190	80 80 80										

Mechanical properties tested in state of delivery

US - testing	yes	Result: ASTM A388/A388M-FB11/5";EN 10228-4 type 1a;class 3:OK	Manufacturer:PrJSC DNIPROSPETSSTAL Date: 08.01.19 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.
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Radiation free; mercury free. No Weld or Weld repair.

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