



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


	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№9398/PO44029 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, CL.1, 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, CL.1, NACE MR 0175-03, NACE MR 0103-10	Sheets: 4 Sheet: 4 <b>INSPECTION CERTIFICATE EN10204/3.1 Nr.334825</b> PLANT ORDER № 8014909398
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 QMS 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 коррозионноустойчивых (нержавеющих) сталей кованные, обточенные. <b>STEEL MAKING PROCESS: EAF+AOB</b> <b>СПОСОБ ВЫПЛАВКИ: Электропудовая печь + АКР</b> Round 13.000m/330.20 mm L=11.377 ft/3.470m L=9.967 ft/3.040m <b>Grade: 316/316L/1.4401/1.4404</b>	QUANTITY: <b>1bund Q-5366 lb/2434 kg</b> (number of pcs) <b>1bund Q-4660 lb/2114 kg</b>  Delivery condition solution annealed :1940°F(1060°C)water 36minutes 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
<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 № A06028</b>	.020	.45	1.35	.040	.026	16,88	10.32	2.07	.065	.32	.05	.05	.01	.11	.013	.023	.012	.0027

DIN EN 10002-1, ASTM A370-09									
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, %	Brinell Hardness HB	Impact strength, KV, J	
	L	Q		A5 %	In 2 inches (50mm) or 4D, min, %			L	Q
<b>REQUIRED</b>	205	240	515-690	45.35	40	50	140-217	100	60
<b>EFFECTIVE</b>	269	301	569	59.48	58	79	163	189 189 189	79 79 79

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBH1/S"; EN 10228-4 type 1a; class 3; OK	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 2.0 1.5 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-6.6:1 Manufacturer: PrJSC DNIPROSPETSSTAL Date: 13.06.18 <b>Manager of quality assurance department - V. Kapateva</b> Signed:  Zaporozhye Made in Ukraine.
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Radiation free; mercury free. No Weld or Weld repair.