



C277650


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

	<p>Contract No. : 20002          TECHN.PROTOCOL № 390-11 SPEC.№9684/PO49596          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, 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</p>	<p><b>INSPECTION CERTIFICATE EN10204/3.1 Nr.363163</b>          PLANT ORDER № 8014909684</p>	
	<p><b>CUSTOMER</b>  <b>DSS INTERNATIONAL</b>  <b>SA Switzerland</b></p>	<p><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+AOB</b>  <b>СПОСОБ ВЫПЛАВКИ:</b> Электродуговая печь+АКР          Round 15.000in/381.00 mm L=7.639ft/2.330m L=7.590 ft/2.315m  <b>Grade: 316/316L/1.4401/1.4404</b></p>	<p><b>QUANTITY:</b> <b>1bund Q-4788 lb/2172 kg</b>          (number of pcs) <b>1bund Q-4744 lb/2152 kg</b></p> <p>Delivery condition          solution annealed :1940<sup>0</sup> F(1060<sup>0</sup> C) water 30minutes          термообработка: закалка в воду</p>

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 № A09131	.020	.43	1.30	.037	.025	17.06	10.15	2.08	.07	.27	.05	.06	.005	.13	.011	.030	.0095	.0022

DIN EN 10002-1, ASTM A370-09										<p><b>TECHNICAL REQUIREMENTS:</b>          Macrostructure – GOOD          GRAIN SIZE : 5 to ASTM E 112-96(2004)          Nonmetallic inclusions ASTM E 45-05 (Method A)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td><td></td><td></td><td></td><td></td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>2.5</td><td>2.0</td><td>2.0</td><td>2.0</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td> </tr> </table> <p>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-6.3:1</p>										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
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																																				
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			L	Q																																			
			In 2 inches (50mm) or 4D, min, % L																																								
REQUIRED	205	240	45	35	40	50	140-217	100	60																																		
EFFECTIVE	278	301	576	61	54	58	77	170	190 190 190	64 64 64																																	

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBH1/5"; EN 10228-4 type 1a; class 3: OK
Radiation free; mercury free. No Weld or Weld repair.		<p>Date: 06.11.2020 <b>Manager of quality assurance department</b>          - V. Kapaieva Signed:          Zaporozhye          Melted and Produced in Ukraine.          MELTED and MANUFACTURED PrJSC " Dniprospsstal"          Phone number +380612834255          e-mail: info@dss.com.ua          http://www.dss-ua.com</p> 

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