



C299062

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No. : 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 2327/PO51076 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-10GR B8M,CL1(EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8,CL 1(EXC PAR 7.3) ;NACE MR 0175-03;NACE MR 0103-10										INSPECTION CERTIFICATE EN10204/3.1 Nr. 371167 PLANT ORDER № 8014902327																																																															
		CUSTOMER DSS INTERNATIONAL SA Switzerland					PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line.Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ:Электродуговая печь+АКР Round 4.000in/101.60 mm L=5.390/17.672ft Grade: 316/316L/1.4401/1.4404					QUANTITY: (number of pcs) 1bund Q-3607 lb/1636kg Delivery condition solution annealed :1900 ⁰ F(1040 ⁰ C)water 30minutes термообработка:закалка в воду																																																														
<table border="1"> <thead> <tr> <th>ANALYSIS, %</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>Al</th> <th>Cu</th> <th>V</th> <th>W</th> <th>Ti</th> <th>Co</th> <th>Nb</th> <th>N</th> <th>Sn</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>REQUIRED</td> <td><.030</td> <td><1,00</td> <td>1.20-2.00</td> <td><.040</td> <td>.015-.030</td> <td>16.50-18.00</td> <td>10.00-13.00</td> <td>2.00-2.50</td> <td><.10</td> <td><.40</td> <td><.10</td> <td><.20</td> <td><.15</td> <td><.40</td> <td><.20</td> <td><.10</td> <td></td> <td></td> </tr> <tr> <td>CAST № A10016</td> <td>.020</td> <td>.44</td> <td>1.36</td> <td>.039</td> <td>.024</td> <td>16.82</td> <td>10.25</td> <td>2.07</td> <td>.076</td> <td>.32</td> <td>.06</td> <td>.04</td> <td>.005</td> <td>.13</td> <td>.01</td> <td>.024</td> <td>.010</td> <td>.0023</td> </tr> </tbody> </table>																		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 № A10016	.020	.44	1.36	.039	.024	16.82	10.25	2.07	.076	.32	.06	.04	.005	.13	.01	.024	.010	.0023
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MECHANICAL PROPERTIES		Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)		Elongation A ₅ % L Q In 2 inches (50mm) or 4D,min,% L		Reducti on of area, Z % L		Brinell Hardness HB		Impact strength, KV, J L Q		TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="0"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>2.0</td><td>2.0</td><td>2.0</td><td>1.0</td> </tr> <tr> <td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td> </tr> </table> 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-29.8:1					A	B	C	D	thin	thick	thin	thick	2.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																								
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REQUIRED		205	240	515-690	40 -	40	50	140-217	100	-																																																																
EFFECTIVE		290	325	568	62 -	60	79	167	215 215 215	-																																																																
Mechanical properties tested in state of delivery																																																																										
US - testing		yes	Results: ASTM A388/A388M-FBH1/8";EN 10308 type 1a;class 3:OK										Date: 25.06.2021 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Melted and Produced in Ukraine. MELTED and MANUFACTURED PrJSC " Dnipropetsstal" Phone number +380612834255 e-mail: info@dss.com.ua http://www.dss-ua.com																																																													
Radiation free; mercury free. No Weld or Weld repair.																																																																										

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