




A01105

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYYE, UKRAINE																																																																											
	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№4468/P033536-ED 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 A487/A487M-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												Sheets: 7 Sheet: 6 INSPECTION CERTIFICATE EN10204/3.1 Nr.287092 PLANT ORDER № 8014904468																																																														
	 DSS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland			PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. STEEL MAKING PROCESS: RAP+AOD ШЛОСОВЕ ВПЛИВАННЯ: Електродугуова пещь+АКР Round 13.000in 330.20 mm L=3.090m/10.131ft L=2.920m/9.574ft Grade: 316/316L/1.4401/1.4404									QUANTITY: 1bund Q-4815 lb/2184 kg (number of pcs) 1bund Q-4528 lb/2054 kg Delivery condition solution annealed :1940° F(1060° C) water 22minutes термообработка: закалка в воду																																																													
ANALYSIS, % <table border="1"> <thead> <tr> <th></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>N₂</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 № A01105</td> <td>.026</td> <td>.39</td> <td>1.31</td> <td>.038</td> <td>.027</td> <td>16.85</td> <td>10.25</td> <td>2.04</td> <td>.062</td> <td>.24</td> <td>.04</td> <td>.12</td> <td>.005</td> <td>.08</td> <td>.01</td> <td>.035</td> <td>.011</td> <td>.001</td> </tr> </tbody> </table>																				C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	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 № A01105	.026	.39	1.31	.038	.027	16.85	10.25	2.04	.062	.24	.04	.12	.005	.08	.01	.035	.011	.001
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TECHNICAL REQUIREMENTS: Macrostructure - GOOD GRAIN SIZE: 5 to ASTM B 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <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>2.0</td> </tr> <tr> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>1.0</td> </tr> <tr> <td>1.0</td> <td>1.0</td> <td></td> <td></td> </tr> </tbody> </table> ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test - OK																			A	B	C	D	thin	thick	thin	thick	2.0	2.0	2.0	2.0	0.0	0.0	0.0	1.0	1.0	1.0																																							
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Mechanical properties tested in state of delivery																																																																											
US - testing yes Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBH/1/5"; EN 10228-4 type 1a; class 3:OK																																																																											
Radiation free; mercury free. No Weld or Weld repair.																																																																											
Manufacturer: PJSC DNIPROSPETSSTAL Date: 14.08.14 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.																																																																											