




99258 (3.25<sup>u</sup>)

CO80504

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE																																																																											
	Contract No.: 50005 TECHN.PROTOCOL № 390-11 SPEC.№ 0231/P030022-ED 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-10 GR B8M, CL1 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8, CL 1 (EXC PAR 7.3); <b>NACE MR 0175-03</b> ; NACE MR 0103-10											Sheets:8 Sheet: 1 <b>QUALITY CERTIFICATE EN10204/3.1 Nr.273199</b> PLANT ORDER № 8014900231																																																															
	 GMS Certified	CUSTOMER <b>DSS INTERNATIONAL</b> SA Switzerland		<b>PRODUCT DESCRIPTION</b> Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+AOP</b> Round 3.250in/82.55 mm L=5.510m/18.066ft <b>Grade: 316/316L/1.4404/1.4404</b>											<b>QUANTITY:</b> (number of pcs) <b>1bund Q-6332 lb/2872 kg</b>																																																												
<b>Delivery condition</b> solution annealed :1900-2010 <sup>o</sup> F(1040-1100 <sup>o</sup> C)water термообработка:закалка в воду																																																																											
<b>ANALYSIS, %</b>																																																																											
	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N <sub>2</sub>	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 № 99258	.020	.43	1.31	.035	.027	16,91	10.25	2.08	.073	.28	.05	.10	.07	.08	.013	.025	.011	.001																																																									
DIN EN 10002-1, ASTM A370-09																																																																											
<b>MECHANICAL PROPERTIES</b>	<b>Yield Strength, (N/mm<sup>2</sup>)</b> R0.2% R 1.0%		<b>Tensile Strength, Rm, (N/mm<sup>2</sup>)</b>	<b>Elongation</b> A, % L Q		<b>Reduction of area, Z % L</b>	<b>Brinell Hardness HB</b>	<b>Impact strength, KV, J</b> L Q																																																																			
	REQUIRED	205	240	515-700	40	40	50	140-217	100																																																																		
	EFFECTIVE	248 243	282 281	550 548	60 59	52 53	75 73	163 163	284 278 280 280 272 275																																																																		
<b>TECHNICAL REQUIREMENTS:</b> Macrostructure -- GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table border="0"> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>thin</td> <td>thick</td> <td>thin</td> <td>thick</td> <td>thin</td> <td>thick</td> <td>thin</td> <td>thick</td> <td>thin</td> <td>thick</td> <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></td> <td>2.0</td> <td>1.0</td> <td>1.5</td> <td>1.0</td> <td>0.0</td> <td>0.0</td> <td>1.0</td> <td>1.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </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	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick		2.0	1.0	1.5	1.0	0.0	0.0	1.0	1.0										
	A	B	C	D																																																																							
	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick																																																									
	2.0	1.0	1.5	1.0	0.0	0.0	1.0	1.0																																																																			
Mechanical properties tested in state of delivery																																																																											
US - testing	yes	Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBH1/8"; EN 10308 type 1a; class 3:OK																																																																									
Radiation free; mercury free. No Weld or Weld repair.																																																																											
Manufacturer: PJSC DNIPROSPETSSTAL Date: 27.05.13 <b>Manager of quality assurance department - V. Kapaieva</b> Signed:  Zaporozhye Made in Ukraine.																																																																											