




HT# A06134

C220876

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

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№9728/P044311 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,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: 7 Sheet: 1 INSPECTION CERTIFICATE EN10204/3.1 Nr.335735 PLANT ORDER № 8014909728																															
	 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 коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. <b>STEEL MAKING PROCESS: EAF+AOD</b> <b>СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР</b> Round 5.000in/127.00 mm L=5.65 m/18.525ft; L=5.65 m/18.525ft; L=4.19 m/13.738ft; <b>Grade: 316/316L/1.4401/1.4404</b>							QUANTITY: (number of pcs)		1bund Q-3849 lb/1746 kg 1bund Q-2566 lb/1164 kg 1bund Q-952 lb/432 kg																													
Delivery condition solution annealed :1900 <sup>o</sup> F(1040 <sup>o</sup> C)water 30minutes термообработка:закалка в воду																																										
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 № A06134	.019	.40	1.40	.040	.025	16,72	10.30	2.06	.066	.27	.05	.08	.01	.10	.012	.026	.0115	.0025																								
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 % L	Brinell Hardness HB	Impact strength, KV, J		<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="1"> <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>3.0</td> <td>2.0</td> <td>2.0</td> <td>1.0</td> <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-24.0:1									A	B	C	D					thin	thick	thin	thick	thin	thick	thin	thick	3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0
	A	B		C	D																																					
thin	thick	thin	thick	thin	thick	thin	thick																																			
3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																			
REQUIRED	205	240	515-690	45 -	40	50	140-217	100	-																																	
EFFECTIVE	281 284	304 306	557 560	59 - 59 -	58 58	73 73	163 163	200 200 200 197 197 197	- -																																	
Mechanical properties tested in state of delivery																																										
US - testing	yes	Results: ASTM A388/A388M-FBI11/8"; EN 10308 type 1a; class 3:OK																																								
Radiation free; mercury free. No Weld or Weld repair.										Manufacturer: PrJSC DNIPROSPETSSTAL Date: 10.07.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.																																