




C22445

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№0111/PO44618 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-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:4 Sheet: 1																																																																			
	CUSTOMER DSS INTERNATIONAL SA Switzerland										INSPECTION CERTIFICATE EN10204/3.1 Nr.336733 PLANT ORDER № 8014900111																																																																			
 GMS Certified	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 11.000in/279.40 mm L=14.213 ft/4.335m L=13.885 ft/4.235m Grade: 316/316L/1.4401/1.4404										QUANTITY: (number of pcs)																																																																			
											1bund Q-4771 lb/2164 kg 1bund Q-4669 lb/2118 kg																																																																			
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 № A06284	.018	.45	1.29	.040	.025	16,78	10.30	2.06	.076	.33	.05	.07	.005	.12	.011	.028	.011	.0022																																																												
DIN EN 10002-1, ASTM A370-09																																																																														
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z, % L	Brinell Hardness HB	Impact strength, KV, J L		TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table 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><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>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><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><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> </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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-7.4:1 Manufacturer: PrJSC DNIPROSPETSSTAL Date: 09.08.18 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.									A	B	C	D																	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0												
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3.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																																																							
REQUIRED	205	240	515-690	45 35	40	50	140-217	100	60																																																																					
EFFECTIVE	275 277	301 305	555 557	58 46 58 46	57 57	73 73	163 163	189 189 189 185 185 185	65 65 65 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.																																																																														

ANS