

C220877
1524

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, 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-10 GR 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: 2 INSPECTION CERTIFICATE EN10204/3.1 Nr.335735 PLANT ORDER № 8014909728
--	--	---

 GMS 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: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 11.000in/279.40 mm L=14.492 ft/4.42 m; L=14.459 ft/4.41 m Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-4890 lb/2218 kg 1bund Q-4859 lb/2204 kg
			Delivery condition solution annealed : 1940° F(1060°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 № A06147	.017	.41	1.36	.040	.025	16,85	10.20	2.05	.067	.36	.06	.08	.005	.13	.013	.025	.0129	.0025

DIN EN 10002-1, ASTM A370-09										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> </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/Подтверждаем, что поставленная продукция соответствует требованиям заказа Ratio of reduction-5.8:1									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																																			
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation A ₅ % L Q		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J																																		
				In 2 inches (50mm) or 4D, min, % L	L			Q	L	Q																																
REQUIRED	205	240	515-690	45 35	40	50	140-217	100	60																																	
EFFECTIVE	280	304	586	61 54	59	75	174	176 176 176	64 64 64																																	

Mechanical properties tested in state of delivery			Manufacturer: PrJSC DNIPROSPETSSTAL Date: 10.07.18 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.
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