



C241972

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 2426/PO45858 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,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:3 Sheet: 2 INSPECTION CERTIFICATE EN10204/3.1 Nr. 344970 PLANT ORDER № 8014902426
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 <p>QMS Certified</p>	CUSTOMER DSS INTERNATIONAL SA Switzerland	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионноустойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.	QUANTITY: (number of pcs)
		STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.250in/158.75 mm L=5.620/18.426ft L=4.000m/13.115ft L=4.090m/13.410ft Grade: 316/316L/1.4401/1.4404	1bund Q-4026 lb/1826 kg 1bund Q-1437 lb/652 kg 1bund Q-1468 lb/666 kg Delivery condition solution annealed :1900 ⁰ F(1040 ⁰ C)water 30minutes термообработка:закалка в воду

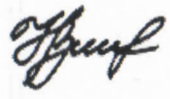
ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B
REQUIRED	<.030	<1.00	1.20-2.00	<.040	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A07179	.020	.47	1.46	.040	.022	16.83	10.40	2.08	.075	.25	.04	.07	.007	.08	.022	.025	.008	.0023

DIN EN 10002-1, ASTM A370-09										TECHNICAL REQUIREMENTS:																																																																					
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	Q	Macrostructure – GOOD																																																																			
	A: % L	Q		In 2 inches (50mm) or 4D,min,% L	L			L	L			Q	GRAIN SIZE : 5 to ASTM E 112-96(2004)																																																																		
REQUIRED	205	240	515-690	40	-	40	50	140-217	100	-	Nonmetallic inclusions ASTM E 45-05 (Method A)																																																																				
EFFECTIVE	299	344	557	60	-	58	78	163	202	202	202	<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><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><td>thin</td> </tr> <tr> <td></td><td>2.5</td><td>2.0</td><td>2.0</td><td>2.0</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> </tr> </table>									A	B	C	D																	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin	thick	thin		2.5	2.0	2.0	2.0	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	thin																																																												
	2.5	2.0	2.0	2.0	0.0	0.0	1.0	1.0																																																																							

Mechanical properties tested in state of delivery

US - testing yes Results: ASTM A388/A388M-FBH1/8"; EN 10308 type 1a; class 3:OK

Radiation free; mercury free. No Weld or Weld repair.

Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 29.04.19 Manager of quality assurance department - V. Kapaieva
 Signed: 
 Zaporozhye
 Made in Ukraine.

Aug 15/19

ANS