




PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№2327/P051076 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: 2 Sheet: 1 INSPECTION CERTIFICATE EN10204/3.1 Nr.371012 PLANT ORDER № 8014902327
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	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 15.000in/381.00 mm L=16.721 ft/5.10 m Grade: 316/316L/1.4401/1.4404	QUANTITY: 1bund Q-10459lb/4744 kg (number of pcs)
			Delivery condition solution annealed :1940° F(1060°C)water 34minutes 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 № A09969	.024	.44	1.37	.040	.027	16.79	10.25	2.06	.074	.22	.06	.05	.005	.10	.01	.029	.0076	.0023

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>A</td><td>B</td><td>C</td><td>D</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>2.0</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-6.4:1										A	B	C	D	A	B	C	D	thin	thick	thin	thick	thin	thick	thin	thick	2.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0
A	B	C	D	A	B	C	D																																				
thin	thick	thin	thick	thin	thick	thin	thick																																				
2.0	2.0	2.0	1.0	0.0	0.0	1.0	1.0																																				
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R L.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J																																			
	L	Q		In 2 inches (50mm) or 4D, min, % L	L			Q																																			
REQUIRED	205	240	515-690	45	35	40	50	140-217	100	60																																	
EFFECTIVE	289 291	323 325	554 554	61	54 61	60	79 78	163 163	213 213 213 210 210 210	61 61 61 61 61 61																																	

Mechanical properties tested in state of delivery			Date: 22.06.2021 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Melted and Produced in Ukraine. MELTED and MANUFACTURED PrJSC " Dniprospsstal" Phone number +380612834255 e-mail: info@dss.com.ua http://www.dss-ua.com									
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.												

P.O.# 6129 Part # 12-FOE-60 Desc: 12" CPA 50E S-60 316 S/S

ANS