

99675 (16")

0093192

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

	Contract No.: 50005 TECHN.PROTOCOL № 390-11 SPBC.№1144/P030989-ED 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 5653P-07; ASTM A193/A193M-10 GR 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: 6 Sheet: 5 QUALITY CERTIFICATE EN10204/3.1 Nr.276345 PLANT ORDER № R014901144
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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: BAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+AKP Round 16.000in/406.40 mm L=3.920m/12.852ft Grade: 316/316L/1.4401/1.4404	QUANTITY: (number of pcs) 1bund Q-9136 lb/4144 kg
		Delivery condition solution annealed :1904° F(1040°C) water 19minutes термообработка: закатка в воду	

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	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 № 99675	.022	.32	1.30	.038	.022	16,71	10.28	2.08	.063	.30	.05	.08	.011	.10	.01	.031	.011	.001

DIN EN 10002-1, ASTM A370-09										TECHNICAL REQUIREMENTS:										
MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R _{0.2} R _{1.0}		Tensile Strength, R _m , (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) A B C D thin thick thin thick thin thick thin thick 2.0 1.5 1.5 1.0 0.0 0.0 1.0 1.0 ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test – OK										
	REQUIRED	205		240	45			35	40											50
EFFECTIVE	284	316	561	60	49	58	77	163	288 285 291	67 65 65	286	325	558	57	51	58	75	163	275 283 277	68 68 65

Mechanical properties tested in state of delivery		Manufacturer: PJSC DNIPROSPETSSTAL Date: 12.09.13 Manager of quality assurance department - V. Kapaieva Signed:																			
US - testing	yes	Results: ASME SA-388/SA-388M-10 (ASTM A 388/A 388M-09)-FBH1/5"; EN 10228-4 type 1a; class 3: OK																			
Radiation free; mercury free. No Weld or Weld repair.												Zaporozhye Made in Ukraine.									