




CPA-1944

97749 (13")

C057026

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE																	
	Contract No.: 50005 TECHN.PROTOCOL № 210-11 SPEC.№ 5867/P026458-ED ASTM A182/A182M-10; ASME SA-182/SA-182M-10; ASTM A276-10; ASTM A314-08; ASTM A479A479M-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,CL1 ; ASME SA-193/SA-193M-10GR B8M,CL1; ASTM A320/A320M-08 GR B8M,CL; ASME SA-320/SA-320M-10 GR B8M,CL; NACE MR 0175-03; NACE MR 0103-10												Sheets: 9 Sheet: 9 QUALITY CERTIFICATE EN10204/3.1 Nr.260467 PLANT ORDER № 8014905867				
	 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 13.000m/330.20 mm L=3.080m/10.098 ft Grade: 316/F316/316L/F316L									QUANTITY: (number of pcs) 1bund Q-4762 lb/2160 kg			
Delivery condition solution annealed : 1900-2010° F(1040-1100° C)/water 30min/ыте термообработки: закалка в воду																	
ANALYSIS, %																	
	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	
REQUIRED	<.030	<1.00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10	
CAST № 97749	.026	.27	1.37	.036	.025	16,70	10.23	2.06	.056	.26	.04	.10	.094	.08	.011	.0520	
ASTM A370-09																	
MECHANICAL PROPERTIES							TECHNICAL REQUIREMENTS:										
	Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation A ₅ %	Reduction of area, Z %	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 1.0 2.0 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	36(248)	75 (515)	45	50	140-223	100											
EFFECTIVE	38,5(265)	83,5(574)	59	75	167	194											
Mechanical properties tested in state of delivery																	
US - testing		yes	Results: «ASTM A 388/A 388M-09- FBH 1/5 “ »														
Radiation free; mercury free. No Weld or Weld repair.																	
Manufacturer: PJSC DNIPROSPETSSTAL Date: 04.04.12 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhyc Made in Ukraine.																	