

MILL TEST REPORT

Purchaser:				Certificate No.: 11-0902-05				
Contract No.: Primrose P.O.No			3851		Date of Issue: 2011.09.02			
Commodity: Stainless Steel Seamless Tubes				Specifications: ASTM A213-10/ASME SA213-08/ASTM A269-10 BAW				
Process: Cold Rolled				Delivery Condition: Bright Annealed				
Steel Grade	Heat Number	Lot Number	Dimensions	Quantity				
				Pieces	Feet			
TP316/TP316L	HDJ10-1312	HG110618	0.500" OD x 0.065" AW x 20'	250	5,000			
Chemical Composition by Weight (%)								
Element	C	Mn	P	S	Si	Cr	Ni	Mo
Requirements	≤0.035	≤2.00	≤0.045	≤0.030	≤1.00	16.00~18.00	10.00~14.00	2.00~3.00
Ladle Analysis	0.024	1.20	0.032	0.001	0.42	16.39	11.12	2.05
Product Analysis	0.025	1.22	0.031	0.002	0.45	16.40	11.13	2.07
Mechanical Properties								
Test Item	Elongation (% in 2")		Tensile Strength (MPa) Rm		Yield Strength (MPa) Rp / 0.2%			
Requirements	≥35		≥515		≥205			
Test Results	58/62		575/580		290/305			
Test Item	Reduction of Area Z (%)	Hardness	Cold Bend Test	Flaring Test	Flattening Test	Flange Test	P.M.L. Test	
Requirements		HRB≤80		18%	e=0.09			
Test Results		75		Passed	Passed	Passed	Passed	
Test Item	Eddy Current Test	Hydrostatic Test	Ultrasonic Test	Intergranular Corrosion Test	Macroscopic Inspection			
Requirements		100%		ASTM A262 E	End Cut	Appearance		
Test Results		Passed		Passed	Passed	Passed		

ISO 9001:2000 Certified by ABS QE Certification No: 39462

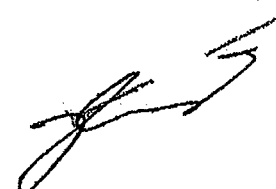
In Compliance with EN 10204:2004-3.1

Additional Remarks:

- (1) Materials is NACE MR0103-2007 compliant
- (2) Materials is NACE MR0175/ISO 15156-2003 compliant
- (3) Tubes tested per ASTM A1016-08
- (4) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (5) No weld repair performed
- (6) Free from mercury contamination
- (7) Billets melt and pipes/tubes manufactured
- (8) 100% PMI Tested

We hereby certify this report to be correct.

By:



Manager / Quality Control Department