

CERTIFICATE OF INSPECTION & TEST

ORIGINAL



ST&H CORPORATION
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(EN 10204 3.1)

Certified to ISO9001:2008, ISO14001:2004, PED97/23/EC by LRQA

Certified API Spec Q1 and API Spec 6A (Licence No : 6A-1284)



Customer : PLESA ANAHUAC Y CIAS..S.A DE C.V.				Contract No. : 15982				Report No : MSH8188				Date: SEP.09.2013			
Spec. For Material : ASTM/ASME A/SA 105N-11(NACE MR0175/ISO 15156-2009)												Heat Treatment			
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	910°C NORMALIZED & AC			
Heat No./Batch no.	MAX	0.350	0.350	1.050	0.035	0.040	0.400	0.300	0.120	0.400	0.080				
	MIN		0.100	0.600											
05490A		0.203	0.200	0.880	0.016	0.006	0.011	0.026	0.002	0.010	0.001	Dimensional Inspection			
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)			Hardness Test (HB)	Bending Test 90:120(180°)					
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual min	Average min				Notch Type				
Dia	Gage Length											ANSI B16.5 - 2009 GOOD			
12.5	50	MAX				Test Result				187					
		MIN	250.000	485.000	22.000	30.000	①	②	③		Average				
12.5	50		334.000	534.000	37.000	68.000					141, 145	Ultrasonic Examination			
ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	N/A						
150LBS WNRF STD 12"		30	BLANK			BLANK							Magnetic Particle Examination		
BLANK									N/A						
													Remarks : **CE = 0.36 (LONG FORMULAR)		

NOTE :
 1MPa = 145.037 psi
 1MPa = 0.145037 ksi
 1psi = 0.006895 MPa
 1ksi = 6.89476 MPa

W.C:Water Cool O.C:Oil Cool
 A.C:Air Cool N.A:Non Action
 N:Normalized A:Annealed
 Q.T:Quenched and Tempered
 N.T:Normalized and Tempered

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order.

[Signature]



Witnessed by / H. J. LEE Manager of Q.A Dept. / S. H. LEE