

CERTIFICATE OF INSPECTION & TEST

ORIGINAL



ST&H CORPORATION
 411-3 Shinwol-ri, Jinryemyun, Gimhae-si Gyungnam, Korea
 Tel: 82.51.744-4680(5 line) Fax: 82.51.744-4670
 E-mail: stcorp@kornet.net

(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/SA105N-11(NACE MR0175/ISO 15156-2009)												Heat Treatment					
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	910°C NORMALIZED & A.C					
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													
T2060C		0.198	0.263	0.910	0.020	0.005	0.070	0.070	0.006	0.053	0.001	Dimensional Inspection					
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)						Hardness Test (HB)		Bending Test 90:120(180°)		ANSI B16.5 - 2009 GOOD	
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual		Average		Notch Type		Temp	187				
Dia	Gage Length					min	min										
12.5	50	MAX				Test Result				143, 145							
		MIN	250.000	485.000	22.000	30.000	①	②	③		Average						
12.5	50		309.000	536.000	36.000	65.000							Ultrasonic Examination				
ITEM / SIZE		Q'TY		ITEM / SIZE		Q'TY		ITEM / SIZE		Q'TY		N/A					
150LBS SORF 12"		32		BLANK				BLANK				Magnetic Particle Examination					
150LBS SORF 20"		5										N/A					
BLANK												Remarks :					
												**CE = 0.37 (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