

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 & AC			
		MAX	0.350	0.350	1.050	0.035	0.040	0.400	0.300	0.120	0.400				
Heat No./Batch no.	MIN		0.100	0.600											
05071J		0.201	0.296	1.050	0.014	0.006	0.013	0.031	0.002	0.007	0.005				
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					Test Result				Temp		187		ANSI B16.5 - 2009 GOOD	
12.5	50	MAX				①	②	③	Average						
		MIN	250.000	485.000	22.000	30.000									
12.5	50		332.000	522.000	38.000	64.000				144, 147		Ultrasonic Examination			
ITEM / SIZE			Q'TY	ITEM / SIZE			Q'TY	ITEM / SIZE			Q'TY	N/A			
300LBS BLRF 8"			20	BLANK				BLANK				Magnetic Particle Examination			
BLANK												N/A			
												Remarks :			
												**CE = 0.38 (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