

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, PED97/23/EC by LRQA
 Report No : MYM5925 Date: OCT.25.2010

Customer : PLESA ANAHUAC Y CIAS, SA DE CV AV.										Contract No. : 8863			Heat Treatment		
Spec. For Material : ASTM/ASME A/SA105-05(NACE MR-0175-03)															
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb	AS FORGED		
Heat 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											
01232		0.188	0.218	0.870	0.018	0.003	0.022	0.033	0.003	0.015	0.006				
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)				Hardness Test (HB)		Bending Test 90:120(180°)		ANSI B16.5-2003 GOOD	
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual		Average		Notch Type	Temp	187	137		
Dia	Gage Length					min	min	Test Result							
12.5	50	MAX				①	②	③	Average						
12.5	50	MIN	250.000	485.000	22.000										
12.5	50		365.000	547.000	33.000							141-152			
ITEM / SIZE		Q'TY		ITEM / SIZE		Q'TY		ITEM / SIZE		Q'TY		Ultrasonic Examination N/A Magnaflux Examination N/A Remarks : **CE = 0.34 (LONG FORMULAR)			
150LBS BLRF 18"		5		BLANK				BLANK							
150LBS BLRF 20"		3													
150LBS BLRF 24"		3													
BLANK															

NOTE :
 1MPa = 145.037 psi
 1MPa = 0.145037 ksi
 1psi = 6894.76 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.

Witnessed by/ K. S. KIM
 Manage. of Q.A Dept/ Y. M. CHOI