

CERTIFICATE OF INSPECTION & TEST

(EN 10204 3.1)

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

Certified to ISO9001:2008, PED97/23/EC by LRQA
 Report No : MYM6979 Date: FEB.20.2012

Customer : PLESA ANAHUAC Y CIAS, SA DE CV AV.										Contract No. : 11890			Heat Treatment		
Spec. For Material : ASTM/ASME A/SA105-05(NACE MR-0175)													AS FORGED		
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb			
Heat No.		MAX	0.350	0.350	1.050	0.035	0.040	0.400	0.300	0.120	0.400	0.080			
Y4778		MIN		0.100	0.600										
			0.180	0.250	0.850	0.013	0.012	0.020	0.010	0.003	0.019	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							
Dia	Gage Length					min		min		Temp					
12.5 50		MAX				Test Result						187			
		MIN	250.000	485.000	22.000	30.000	①	②	③	Average		137			
12.5 50			301.750	517.500	35.250	65.750				146-155		Ultrasonic Examination			
ITEM / SIZE		Q'TY		ITEM / SIZE				Q'TY		ITEM / SIZE		Q'TY		N/A Magnetic Particle Examination N/A Remarks : **CE = 0.33 (LONG FORMULAR)	
150LBS SORF 6"		1,000		150LBS WNRF STD 2"				20		150LBS WNRF STD 3"		200			
150LBS SORF 8"		500		150LBS WNRF STD 10"				50		BLANK					
300LBS SORF 2"		50		150LBS WNRF STD 4"				100							
300LBS SORF 4"		50		150LBS WNRF STD 6"				400							
150LBS WNRF STD 8"		10		150LBS WNRF STD 8"				200							

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.

Witnessed by/ K. S. KIM

 Manager of Q.A Dept/ Y. M. CHOI

