

# CERTIFICATE OF INSPECTION & TEST

**ORIGINAL**



**ST&H CORPORATION**  
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(EN 10204 3.1)

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/SA105N-05(NACE MR-0175)															
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb	910℃ NORMALIZED		
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											
Y4778		0.180	0.250	0.850	0.013	0.012	0.020	0.010	0.003	0.019	0.001				
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		Average						Notch Type	
Dia	Gage Length					min	min	Temp		Temp		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				
ITEM / SIZE		Q'TY		ITEM / SIZE				Q'TY		ITEM / SIZE		Q'TY			
600LBS SORF 6"		20		<b>BLANK</b>						<b>BLANK</b>					
600LBS WNRF STD 2"		10													
600LBS WNRF STD 3"		10													
600LBS WNRF STD 6"		10													
<b>BLANK</b>															

Dimensional Inspection

ANSI B16.5-2009  
GOOD

Ultrasonic Examination

N/A

Magnetic Particle Examination

N/A

Remarks :

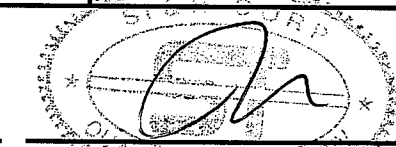
\*\*CE = 0.33  
(LONG FORMULAR)

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.

Witnessed by/ K. S. KIM



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