

# 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. : 13797				Report No : MHJ7564				Date: OCT.26.2012				
Spec. For Material : ASTM/ASME A/SA105-11(NACE MR-0175)												Heat Treatment				
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb	910°C 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												
08235			0.186	0.200	0.830	0.014	0.009	0.004	0.130	0.008	0.022	0.003	Dimensional Inspection			
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)						Hardness Test (HB)				
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual		Average		Notch Type		Temp	187	ANSI B16.5 - 2009  GOOD		
Dia	Gage Length					min	min									
12.5	50	MAX				Test Result				142-145	Ultrasonic Examination					
		MIN	250.000	485.000	22.000	30.000	①	②	③				Average			
12.5	50		347.000	543.000	30.000	63.000							Ultrasonic Examination			
ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	N/A				
150LBS SORF 14"		5	150LBS WNRF STD 2"		200	300LBS WNRF STD 3"		30	Magnetic Particle Examination							
300LBS SORF 3"		30	150LBS WNRF STD 4"		1,000	300LBS WNRF STD 4"		30	N/A							
300LBS SORF 4"		30	150LBS WNRF STD 6"		1,000	300LBS SORF 2"		50	Remarks : **CE = 0.35 (LONG FORMULAR)							
300LBS SORF 6"		40	150LBS WNRF STD 8"		200	<b>BLANK</b>										
300LBS SORF 8"		10	300LBS WNRF STD 10"		10											

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



Manage of Q.A Dept/ H. J. LEE