

# MILL CERTIFICATE



COPY



ST AND H CORP  
1270-4 JWA3DONG, HAEUNDAEGU BUSAN  
KOREA ZIP CODE612-852 AT'N: S.I.SUN  
PH:+82-51-744-4682

(EN 10204 3.1)

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.

Certified by PED97/23/EC by LRQA

Report No : MYM5509

Date: MAR.31.2010

Customer : PLESA ANAHUAC Y CIAS, SA DE CV AV.										No. & date of LC : DC MXH100500			FEB.19.2010		Heat Treatment	
Spec. For Material : ASTM A105N-05/ASME SA105N(NACE MR-0175)																
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	N	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												
00146		0.191	0.220	0.820	0.013	0.006	0.012	0.024	0.002	0.012	0.001		Dimensional Inspection			
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 min	Average min		Notch Type							
Dia	Gage Length	MAX				Test Result				Temp	187	Ultrasonic Examination				
		MIN	250.000	485.000	22.000	30.000	①	②	③		Average				137	
12.5	50		334.780	548.950	34.600	68.190					146-149	PASS				
ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE			Q'TY	Magnaflux Examination			
600LBS BLRF 10"		5	BLANK			BLANK							N/A			
BLANK													Remarks :			
													**CE = 0.33 (LONG FORMULAR)			

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

\* DESCRIPTION OF GOODS:  
CIF .

3.445 PC. ANSI B16.5 ASTM A105/SA105 FORGED STEEL FLANGE.

THE 3.445 PC WHICH COVERS THE SHIPMENT IS INDIFFERENT SIZES.  
WITH A NET WEIGHT APPROX 47,240 KGS

Witnessed by



Manager of Q.A. Dept.