

MILL CERTIFICATE

(EN 10204 3.1)

COPY



ST AND H CORP
1270-4 JWA3DONG, HAEUNDAEGU BUSAN
KOREA ZIP CODE 612-852 AT'N: S.I.SUN
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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 A105-05/ASME SA105(NACE MR-0175)															
Chemical Composition (%)		C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	N	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											
07516			0.207	0.245	0.910	0.018	0.009	0.009	0.010	0.002	0.010	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		Average		Notch Type					
Dia	Gage Length					min	min	Temp		Test Result		Temp			
12.5	50	MAX				① ② ③ Average				187					
		MIN	250.000	485.000	22.000	30.000					137				
12.5	50		373.270	598.930	30.700	62.045					143-146		Ultrasonic Examination		
ITEM / SIZE			Q'TY	ITEM / SIZE			Q'TY	ITEM / SIZE			Q'TY	Ultrasonic Examination			
150LBS THRF 6"			10	BLANK				BLANK				N/A			
300LBS SORF 2"			20									Magnaflux Examination			
300LBS SORF 3"			20									N/A			
300LBS SORF 8"			10									Remarks : **CE = 0.36 (LONG FORMULAR)			
300LBS WNRF STD 3"			30												

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.