

MILL CERTIFICATE

(EN 10204 3.1)

COPY



ST AND H CORP
1270-4 JWA3DONG, HAEUNDAEGU BUSAN
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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									
20176		0.213	0.226	0.860	0.014	0.011	0.018	0.011	0.002	0.017	0.002		
Tension Test						Charpy Impact Test (10x10 mm Specimen Size)				Hardness Test (HB)	Bending Test 90:120(180°)	ANSI B16.5-2003	
Size of Specimen(mm)		Yield Strength MPa	Tensile Strength MPa	Elongation %	Red of Area %	Individual		Average					Notch Type
Dia	Gage Length					min	min	Test Result		Temp			
12.5	50	MAX									187	GOOD	
		MIN	250.000	485.000	22.000	30.000	①	②	③	Average	137		
12.5	50		372.670	579.790	32.900	65.970					143-149		
ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	ITEM / SIZE		Q'TY	Ultrasonic Examination	
300LBS WNRF STD 8"		25	300LBS SORF 10"		10	BLANK			BLANK			N/A	
300LBS WNRF STD 10"		10	BLANK			BLANK			BLANK			Magnaflux Examination	
300LBS BLRF 6"		10	BLANK			BLANK			BLANK			N/A	
300LBS BLRF 8"		30	BLANK			BLANK			BLANK			Remarks : **CE = 0.36 (LONG FORMULAR)	
300LBS BLRF 10"		10	BLANK			BLANK			BLANK				
NOTE :		W.C:Water Cool O.C:Oil Cool		* DESCRIPTION OF GOODS:		CIF .							
1MPa = 145.037 psi		A.C:Air Cool N.A:Non Action		3.445 PC, ANSI B16.5 ASTM A105/SA105 FORGED STEEL FLANGE.									
1MPa = 0.145037 ksi		N:Normalized A:Annealed		THE 3.445 PC WHICH COVERS THE SHIPMENT IS INDIFFERENT SIZES.									
1psi = 6894.76 MPa		Q.T:Quenched and Tempered		WITH A NET WEIGHT APPROX 47.240 KGS									
1ksi = 6.89476 MPa		N.T:Normalized and Tempered											
												Witnessed by _____	
												Manager of Q.A Dept.	

