

CERTIFICATE OF INSPECTION & TEST (EN 10204 3.1)

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Certificate No. MJW9145B-04/06 Date : MAR. 08. 2016
 Customer PLESA ANAHUAC Y CIAS., S.A. DE C.V
 Contract No. 22014
 Spec. For Material ASTM/ASME A/SA234-14 WPB,NACE MR0175-2009/ ISO15156-1:2015
 Heat Treatment HOT FORMED (620°C ~ 980°C)

Certified to ISO9001:2008, ISO14001:2004,PED97/23/EC by LRQA

Dimensional inspection ASME B16.9 - 2012

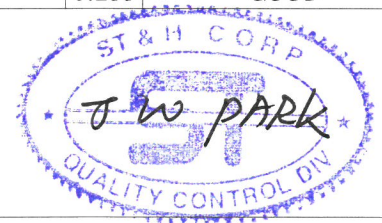
ITEM / SIZE	Q'ty	Heat No./ Batch No.	Size of Test Specimen		Tension Test				Hardness Test (HB)		Charpy Impact Test (10X10mm Specimen Size)			
			D	GL	Max	Y.S MPa	T.S MPa	E.L %	R.A %	197	Indiv.	Ave.	Notch	Temp.
			mm	mm										
G90ELRSTD10 LR 90D ELBOW STD 10"	2	GBADT	12.5	50.0		270	480	35		110	127	Test Result (J)		Ave.(J)
G90ELRSTD12 LR 90D ELBOW STD 12"	10	GBAER	12.5	50.0		270	485	35		111	128	Test Result (J)		Ave.(J)
G45ELRSTD12 LR 45D ELBOW STD 12"	1	WAABX	12.5	50.0		309	489	32		117	140	Test Result (J)		Ave.(J)
G45ELRSTD12 LR 45D ELBOW STD 12"	16	GBABI	12.5	50.0		270	465	36		115	143	Test Result (J)		Ave.(J)
GEQTS8020 TEE SCH80 20"	4	WBAGO	12.5	50.0		280	490	38		114	130	Test Result (J)		Ave.(J)
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Heat No./ Batch No.	Max Min	Chemical Composition (%)										NDE						
		C	SI	Mn	P	S	Cr	Mo	Ni	Cu	V	CE	UT	MT	PT			
		0.300	0.100	1.060	0.050	0.058	0.400	0.150	0.400	0.400	0.080				0.430			
GBADT		0.180	0.220	0.450	0.009	0.008	0.014	0.009	0.009	0.004	0.002				0.260			
GBAER		0.140	0.240	0.410	0.010	0.009	0.012	0.003	0.010	0.008	0.003				0.213			
WAABX		0.210	0.200	0.550	0.014	0.003	0.110	0.008	0.040	0.090	0.009				0.335			
GBABI		0.180	0.190	0.460	0.008	0.008	0.025	0.009	0.011	0.016	0.002				0.265			
WBAGO		0.190	0.230	0.430	0.009	0.006	0.014	0.003	0.008	0.011	0.002				0.266	GOOD		

REMARK * CARBON STEEL FITTINGS MADE FROM PIPE
 * EXPORT COUNTRY - BUSAN, KOREA
 * COUNTRY OF ORIGIN - KOREA
 * TOTAL WEIGHT : 18,360 KGS

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.

[Signature]
 Witnessed by / H. J. LEE



Manager of Q.A Dept. / J. W. PARK