

# CERTIFICATE OF INSPECTION & TEST

(EN 10204 3.1)

**ORIGINAL**

**ST** ST&H CORPORATION  
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CARBON STEEL FITTINGS MADE FROM SEAMLESS PIPE

Date: **AUG.14.2015**

Customer : <b>PLESA ANAHUAC Y CIAS.,S.A.DE C.V.</b>			Contract No : <b>21139</b> (AMOUNT : USD53,381.13)										Certificate No : <b>MJW9032</b>							
Spec. for Material			Spec. for Inspection										Surface & Dimension			N.D.E		Heat Treatment		
<b>ASTM A234-14/ASME SA234-13 WPB NACE MR0175 / ISO 15156-2009</b>			<b>ASME B16.9 - 2012</b>										<b>GOOD</b>			N/A		<b>HOT FORMED (620 °C ~ 980 °C)</b>		
ITEM	STAMP NO.	CHEMICAL COMPOSITION (%)											Tensile Test				Hardness Test(HB)	Hydrostatic Test	C.E	
		C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Nb	Y-P MPA	T-S MPA	EL (%)	RA (%)				
SIZE	Q'TY	MIN		0.10	0.29									240	415	30				
		MAX	0.30		1.06	0.05	0.058	0.40	0.15	0.40	0.40	0.08						197		
LR 45D ELBOW STD		GBAAQ	0.19	0.22	0.39	0.009	0.006	0.032	0.045	0.061	0.02	0.002		280	490	34		<197		0.28
3"	100																			
LR 45D ELBOW STD		051190	0.23	0.21	0.58	0.02	0.017	0.13	0.008	0.09	0.02	0.003		301	479	32		<197		0.36
16"	20																			
LR 45D ELBOW STD		WAAEN	0.24	0.32	0.46	0.012	0.007	0.02	0.007	0.01	0.008	0.004		265	470	38		<197		0.32
20"	10																			
LR 45D ELBOW STD		WAAEN	0.24	0.32	0.46	0.012	0.007	0.02	0.007	0.01	0.008	0.004		265	470	38		<197		0.32
24"	5																			
LR 90D ELBOW SCH40		WAABX	0.21	0.2	0.55	0.014	0.003	0.11	0.1	0.04	0.09	0.009		309	489	32		<197		0.35
12"	50																			

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.

EXPORT COUNTRY - BUSAN, KOREA  
 COUNTRY OF ORIGIN - KOREA  
 TOTAL WEIGHT : 31,995 KGS

Reviewed by  
 Witnessed by

C.E. =  $C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$

