DATE OF ISSUE : JAN.26.2011
CUSTOMER :Brownsville Steel City LLC

INSPECTION CERTIFICATE
(EN 10204:2004 3.1)

ST&H CORPORATION
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발주번호 P/O NO.	원재료 RAW MATERIAL	성적서번호 CERTIFICATE NO
BSC 2010-225 (PSJ6054)	MADE FROM SEAMLESS PIPE	QA110126-01

재료규격 Spec. for Material	검사규격 Spec. for Inspection	외관및치수검사 Surface & Dimension	비파괴검사 N.D.E	열처리 HEAT TREATMENT
ASTM A234-07/ASME SA234-07 WPB NACE MR-0175	ASME B16.9	GOOD	MT:GOOD	620℃ ~ 980℃

STD		제품번호 STAMP NO.	화학성분 CHEMICAL COMPOSITION (%)												인장시험 Tensile Test				굴곡시험 Bending Test ( )	평판시험 Flattening Test	경도시험 Hardness Test(HB)	충격시험 Impact Test	수압시험 Hydrostatic Test	C.E
			C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Nb	N	Y-P MPA	T-S MPA	EL (%)	RA (%)						
SPEC	수량 Q'TY	MIN		0.10	0.29										240	415	22							
		MAX	0.30		1.06	0.05	0.058	0.40	0.15	0.40	0.40	0.08				655					197			
LR 45D ELBOW STD 4"	142	02178	0.2	0.22	0.53	0.009	0.006	0.06	0.005	0.03	0.05	0.01			310	500	31				<197			0.31
LR 45D ELBOW STD 6"	129	02570J	0.19	0.2	0.5	0.009	0.005	0.04	0.003	0.02	0.03	0.01			315	510	31				<197			0.29
LR 45D ELBOW STD 8"	35	03417J	0.2	0.25	0.49	0.009	0.006	0.03	0.003	0.01	0.03	0.01			315	515	32				<197			0.29
LR 90D ELBOW SCH40 12"	11	03445	0.22	0.23	0.54	0.007	0.012	0.02	0.01	0.02	0.03	0.01			325	465	32				<197			0.32
LR 90D ELBOW SCH40 12"	4	03445J	0.22	0.23	0.54	0.007	0.011	0.02	0.01	0.02	0.03	0.01			330	465	31				<197			0.32

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.

1MPa = 145.037 psi
1MPa = 0.145037 ksi
1psi = 0.00689 MPa
1ksi = 6.89476 MPa

QUALITY INSPECTED AND SUPPLY BY ST&H CORP
MANUFACTURED BY PUSAN COUPLING CO.LTD

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

품 질 보 증 부
QUALITY ASSURANCE DEP'T
(株)釜山카프링
[illegible]

B.J. KIM / Q.A -GENERAL MANAGER

양식번호 : QMS-8102-11

PUSAN COUPLING CO.,LTD