

DATE OF ISSUE : JULY. 24. 2010
 CUSTOMER : BROWNSVILLE STEEL CITY LLC

INSPECTION CERTIFICATE

(EN 10204:2004 3.1)

ST&H CORPORATION
 1270-4 Jwa3dong, Haeundaegu, Busan, Korea
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발주번호 P/O NO.			원 재료 RAW MATERIAL										성적서 번호 CERTIFICATE NO.																							
BSC 2010 - 222 (PSJ5724)			MADE FROM SEAMLESS PIPE										QA100724 - 02																							
재료규격 Spec. for Material			검사규격 Spec. for inspection					외관 및 치수검사 Surface & Dimension					비파괴검사 N.D.E.			열 처리 HEAT TREATMENT																				
ASTM A234-05/ASME SA234-05 WPB NACE MR-0175			ASME B16.9					GOOD					MT : GOOD			620℃ ~ 980℃																				
STD	제품번호 STAMP NO.	화 학 성 분 CHEMICAL COMPOSITION (%)												인 장 시 험 Tensile Test				굴곡시험 Bending Test ()	편평시험 flattening Test	경도시험 Hardness Test(HB)	충격시 험 Impact Test	수압시험 Hydrost- atic Test	C.E													
		C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Nb	N	Y-S 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																					
LR 45D ELBOW STD		0.23	0.19	0.50	0.019	0.005	0.02	0.01	0.018	0.019	0.01			285	470	27										0.32										
6"	125	6897																																		
LR 45D ELBOW STD		0.18	0.20	0.51	0.019	0.026	0.02	0.01	0.02	0.018	0.01			305	490	31										0.28										
8"	60	6259																																		
LR 45D ELBOW STD		0.23	0.20	0.55	0.019	0.021	0.019	0.01	0.02	0.016	0.01			305	505	30										0.33										
10"	20	3325																																		
LR 45D ELBOW STD		0.23	0.20	0.55	0.019	0.021	0.019	0.01	0.02	0.016	0.01			305	505	30										0.33										
12"	10	4332																																		
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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.

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

품질보증부
 QUALITY ASSURANCE DEP'T
 (株) 釜山 카프링
 釜山 釜山 釜山
 B.J. KIM/Q.A. -GENERAL MANAGER

양식번호 : QMS-8102-11

PUSAN COUPLING CO.,LTD