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 CUSTOMER : BROWNSVILLE STEEL CITY LLC

INSPECTION CERTIFICATE

(EN 10204:2004 3.1)

ST&H CORPORATION
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| 발주번호 P/O NO. | | | 원 재 료 RAW MATERIAL | | | | | | | | | | | 설적서 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 처 리 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 | | | | | | | | | | | | 197 | |
| LR 45D ELBOW SCH40 | | | 0.21 | 0.33 | 0.42 | 0.018 | 0.008 | 0.035 | 0.01 | 0.027 | 0.017 | 0.01 | | 290 | 495 | 31 | | | | | | | | | | | | 0.29 |
| 12" | 3 | 2191 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LR 45D ELBOW STD | | | 0.22 | 0.20 | 0.50 | 0.019 | 0.018 | 0.016 | 0.01 | 0.025 | 0.02 | 0.01 | | 300 | 510 | 28 | | | | | | | | | | | | 0.31 |
| 18" | 2 | 4491 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LR 45D ELBOW STD | | | 0.18 | 0.20 | 0.52 | 0.019 | 0.019 | 0.017 | 0.01 | 0.022 | 0.01 | 0.01 | | 305 | 505 | 30 | | | | | | | | | | | | 0.28 |
| 16" | 2 | 4389 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LR 90D ELBOW STD | | | 0.18 | 0.20 | 0.52 | 0.019 | 0.019 | 0.017 | 0.01 | 0.022 | 0.01 | 0.01 | | 305 | 505 | 30 | | | | | | | | | | | | 0.28 |
| 14" | 2 | 3895 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LR 90D ELBOW SCH40 | | | 0.18 | 0.26 | 0.45 | 0.020 | 0.02 | 0.016 | 0.01 | 0.023 | 0.012 | 0.01 | | 305 | 485 | 30 | | | | | | | | | | | | 0.26 |
| 16" | 2 | 2339 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

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

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

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

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