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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 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°C ~ 980°C | | | | | | | | | |
| 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) | 충격시험 Impact Test | 수압시험 Hydrostatic 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 | 0.40 | 0.29 | | | | | | | | | | 240 | 415 | 22 | | | | | | | |
| | | MAX | 0.30 | | 1.06 | 0.05 | 0.058 | 0.40 | 0.15 | 0.40 | 0.40 | 0.08 | | | | | | | | | | | |
| LR 90D ELBOW STD | | | 0.23 | 0.19 | 0.50 | 0.019 | 0.010 | 0.03 | 0.01 | 0.017 | 0.019 | 0.01 | | 285 | 475 | 30 | | | | | | 197 | |
| 5" | 25 | 26812 | | | | | | | | | | | | | | | | | | | | <197 | 0.33 |
| LR 90D ELBOW STD | | | 0.23 | 0.19 | 0.50 | 0.019 | 0.010 | 0.03 | 0.01 | 0.017 | 0.019 | 0.01 | | 285 | 475 | 30 | | | | | | <197 | 0.33 |
| 5" | 19 | 27325 | | | | | | | | | | | | | | | | | | | | <197 | 0.33 |
| LR 90D 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 | | | | | | <197 | 0.28 |
| 8" | 165 | 6259 | | | | | | | | | | | | | | | | | | | | <197 | 0.28 |
| LR 90D 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 | | | | | | <197 | 0.33 |
| 10" | 85 | 3325 | | | | | | | | | | | | | | | | | | | | <197 | 0.33 |
| LR 90D 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 | | | | | | <197 | 0.33 |
| 12" | 20 | 4332 | | | | | | | | | | | | | | | | | | | | <197 | 0.33 |

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.

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

양식번호 : QMS-8102-11

IMP_a = 145.037 psi
 IMP_a = 0.145037 ksi
 Ipsi = 0.00689 Mpa
 Uksi = 6.89476 Mpa

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

PUSAN COUPLING CO.,LTD

품질보증부
 QUALITY ASSURANCE DEP'T

(株) 釜 山 카 프 링

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