

계약 번호 : 7010224  
P/O No. : 7010224

발행 일자 : 2007.06.14  
Date of Issue : 2007.06.14

증명서 번호 : K-07-366  
Certificate No. : K-07-366

제품명 : 340.504 M1 ERW SQUARE  
AND RECTANGLES TUBES  
Commodity : ASTM A500 GR B

제품규격 : ASTM A 500 Gr B  
Spec. & Type : ASTM A 500 Gr B

# 검사 증명서

## CERTIFICATE OF QUALITY

수요자 : PLESA ANAHUAC Y CIAS SA DE CV  
Customer : PLESA ANAHUAC Y CIAS SA DE CV

주문자 :  
Shipper :



DONG - A STEEL INC

\* Head Office : Rim 405 Woo Chang Bldg 152-2  
Kamion-dong, Sasang-gu, Busan, Korea

\* Gwangyang Factory : 1653-12, Taein-dong,  
Gwangyang City, Jeonnam-do, Korea

\* Busan Factory : 1516-5, Dadae-dong,  
Saha-gu, Busan, Korea

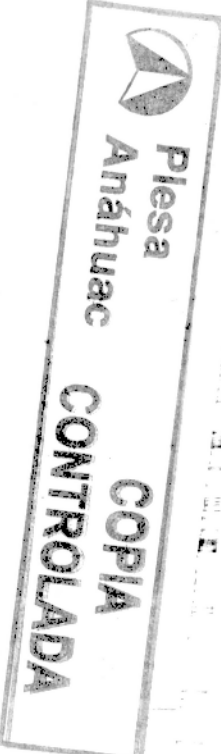
\* Seoul Office : 507-1, Sihwa Industrial Complex 2ma,  
Jungwang-dong, Sicheung City, Gyeonggi, Korea

| 제 수<br>Size<br>(inch) | 두께<br>Thick-<br>ness<br>(inch) | 길이<br>Length<br>(ft) | 제품번호<br>Product No.<br>(Lot No.) | 수량<br>Quan-<br>tity | 총길이<br>Total<br>Length<br>(ft) | 인장시험<br>Tensile Test<br>Y.P.<br>(Mpa) | T.S<br>(%) | E.L<br>(%) | 굽힘시험<br>Bending<br>Test | 편평시험<br>Flattening<br>Test | 표면상태<br>Surface<br>Treatment | 화학성분(%)<br>Chemical<br>Composition (Max.) | 재간번호<br>Heat No.<br>(Coil No.) | 비<br>Rem   |
|-----------------------|--------------------------------|----------------------|----------------------------------|---------------------|--------------------------------|---------------------------------------|------------|------------|-------------------------|----------------------------|------------------------------|---|--------------------------------|------------|
| C                     | Si                             | Mn                   | P                                | S                   |                                |                                       |            |            |                         |                            |                              |   |                                |            |
| 2 X 2                 | 0.120                          | 40                   | JEE21F1ZZ001                     | 392                 | 15,680                         | 317                                   | 400        | 23         | -                       | Good                       | Oiled                        | 0.0378 0.014 0.329 0.0094 0.0034          | SR22579                        | CREDIT NO  |
| 2 X 2                 | 0.120                          | 40                   | JD.21S2TM014                     | 160                 | 6,400                          | 402                                   | 453        | 35         | -                       | Good                       | Oiled                        | 0.0368 0.012 0.542 0.0107 0.0031          | SR07854                        | DC MXH0711 |
| 2 X 2                 | 0.165                          | 40                   | JEE21F1ZZ001                     | 392                 | 15,680                         | 354                                   | 462        | 32         | -                       | Good                       | Oiled                        | 0.0378 0.014 0.329 0.0094 0.0034          | SR22579                        |            |
| 2 X 2                 | 0.165                          | 40                   | JEE24F1ZZ001                     | 50                  | 2,000                          | 405                                   | 450        | 38         | -                       | Good                       | Oiled                        | 0.0338 0.019 0.584 0.0147 0.0036          | SR08541                        |            |
| 2 X 2                 | 0.165                          | 40                   | JEF01F1ZZ016                     | 6                   | 240                            | 405                                   | 450        | 38         | -                       | Good                       | Oiled                        | 0.0338 0.019 0.584 0.0147 0.0036          | SR08541                        |            |
| 4 X 4                 | 0.250                          | 40                   | JEF30G1P5032                     | 675                 | 27,000                         | 345                                   | 454        | 27         | -                       | Good                       | Oiled                        | 0.0338 0.019 0.584 0.0147 0.0036          | SR28074                        |            |
| 4 X 2                 | 0.188                          | 40                   | JEF14F1ZZ002                     | 240                 | 9,600                          | 342                                   | 449        | 28         | -                       | Good                       | Oiled                        | 0.0555 0.021 0.298 0.0109 0.0026          | SR22551                        |            |
| 6 X 4                 | 0.188                          | 40                   | JEE28G1P5019                     | 168                 | 6,720                          | 378                                   | 437        | 38         | -                       | Good                       | Oiled                        | 0.0526 0.018 0.543 0.0162 0.0025          | SR11658                        |            |
| 6 X 4                 | 0.188                          | 40                   | JEE28G1P5062                     | 10                  | 400                            | 378                                   | 437        | 38         | -                       | Good                       | Oiled                        | 0.0526 0.018 0.543 0.0162 0.0025          | SR11658                        |            |
| 6 X 8                 | 0.188                          | 40                   | JEE18G2P5025                     | 30                  | 1,200                          | 328                                   | 489        | 33         | -                       | Good                       | Oiled                        | 0.1762 0.021 0.305 0.0141 0.0026          | SR22354                        |            |
| 6 X 6                 | 0.188                          | 40                   | JEE15G1P5012                     | 189                 | 7,560                          | 342                                   | 449        | 28         | -                       | Good                       | Oiled                        | 0.0555 0.021 0.298 0.0109 0.0026          | SR22551                        |            |



본 제품은 관련 규격의 시험을 통하여 합격하였음을 증명합니다.  
We hereby certify that the material has been made in accordance with the order and specification.

Manager of material testing section KIM



인증서번호 : E200701-0393-000393(5000987)

COMMODITY : E.R. STEEL PIPE

SPECIFICATION : ASTM A500 (B2003A)

MILL'S QUALITY CERTIFICATE

**Seah Steel Corp.**  
(주)세아제강

HEAD OFFICE : BONGNAE-DONG 1GA, JUNG-GU, SEOUL, KOREA  
POHANG PLANT : 14-1, JANGHEUNG-DONG, NAM-GU, POHANG

발급일자 : 2007.01.19  
DATE OF ISSUE : 2007.01.19  
계약서번호 : 1103044883  
L/C No. (P/O No.) : 1103044883  
수요자 : DURECO SA  
CUSTOMER : DURECO SA  
주문자 : SEAH STEEL CORPORATION  
SHIPPER : SEAH STEEL CORPORATION

| NO. (BATCH NO.) | HEAT NO.              | 관단 TYPE | 주문 치 수 ORDER SIZE  | 수량 QUANTITY |                   | 증명(단/톤) WEIGHT | 비고 REMARK |
|-----------------|-----------------------|---------|--------------------|-------------|-------------------|----------------|-----------|
|                 |                       |         |                    | 본 수 TONS    | 총 길이 TOTAL LENGTH |                |           |
| 1               | C634351 (SIK30X41070) | BME     | 16" X 16" X 0.375" | 11          | 440,000 FT        | 15.682         |           |
| 2               | C624593 (SIK30X41080) | BME     | 16" X 16" X 0.375" | 42          | 1,680,000 FT      | 59.875         |           |
| 3               | C624584 (SIK30X41100) | BME     | 16" X 16" X 0.375" | 20          | 800,000 FT        | 28.512         |           |
| 4               | C634350 (SIK30X41110) | BME     | 16" X 16" X 0.375" | 20          | 800,000 FT        | 28.512         |           |

| 기준 SPEC | NO. (BATCH NO.)       | HEAT NO. | 관단 TYPE | 주문 치 수 ORDER SIZE | ZINC COATING  |                | CHEMICAL COMPOSITION(%) |    |    |    |    | TENSILE TEST (Gage Length : 50mm) |       |      | IMPACT TEST (°C) | HARDNESS TEST | HEAT TREATMENT | PROTECTIVE COATING & LINING |
|---------|-----------------------|----------|---------|-------------------|---------------|----------------|-------------------------|----|----|----|----|-----------------------------------|-------|------|------------------|---------------|----------------|-----------------------------|
|         |                       |          |         |                   | 중량 % WEIGHT % | 두께 μ THICKNESS | C                       | Si | Mn | P  | S  | TS                                | YS    | E.L. |                  |               |                |                             |
| 1       | C634351 (SIK30X41070) | G        |         |                   | MAX 30        | MIN            | 78                      | 15 | 9  | 45 | 45 | 58000                             | 46000 | 23   |                  |               |                |                             |
| 2       | C624593 (SIK30X41080) | G        |         |                   | MAX 30        | MIN            | 77                      | 14 | 7  | 7  | 7  | 73100                             | 52200 | 32   |                  |               |                |                             |
| 3       | C624584 (SIK30X41100) | G        |         |                   | MAX 30        | MIN            | 76                      | 15 | 8  | 8  | 8  | 71540                             | 52340 | 26   |                  |               |                |                             |
| 4       | C634350 (SIK30X41110) | G        |         |                   | MAX 30        | MIN            | 79                      | 18 | 10 | 8  | 8  | 74950                             | 56040 | 26   |                  |               |                |                             |

Surveyor : Plesa Anahuac

WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TESTS ARE ACCEPTABLE. THE USE OF THE MATERIAL OUTSIDE THE SPECIFICATIONS INDICATED ON THIS CERTIFICATE MAY CAUSE SAFETY AND/OR QUALITY PROBLEMS. FURTHERMORE, ANY ORGANIZATION OR PERSON(S) WHO DELIBERATELY MODIFIES OR ALTERS THIS CERTIFICATE WILL BE PROSECUTED FOR VIOLATING AN OFFICIAL DOCUMENT (PENAL CODE 231)

Manager of Q. M Dept.  
**J. E. KIM**

