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| Contract No. | |
| Customer | PLESA ANAHUAC Y CIAS., S.A. DE C.V. |
| L/C No. | |
| P/O No. | 32201610C331 |
| Commodity | PRIME NEWLY PRODUCED WIDE FLANGE BEAM. |
| Specification | ASTM A572 G50/A992/CSA G 40.21-13 50WM(345WM) |

MILL TEST CERTIFICATE.

EN 10204(2004) TYPE 3.1



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|-----------------|--|
| Head Office | 63, Jungbong-daero, Dong-gu, Incheon, 22525, S. Korea |
| Certificate No. | IH20161104369 - 6 |
| Class Cert. No. | |
| Date of Issue | 2016-11-22 |

| Dimensions & Length | Heat No. | Pieces Weights (kg) | Chemical Composition (%) | | | | | | | | | | | Tensile Test | | | Impact Test (V-notch) | | | | Remarks (Impact Specimen Size) | |
|-------------------------|----------|------------------------|--------------------------|----|-------|----|------|----|-------|----|------|----|-------------------|------------------|-------------------|---------------------------|-----------------------|-----|------------------|---|-----------------------------------|---|
| | | | C | Si | Mn | P | S | Cu | Mo | Al | Nb | Sn | CE ⁽¹⁾ | Tensile Strength | Yield point | Elongation ⁽²⁾ | Yield Ratio | AVG | 1 | 2 | | 3 |
| | | | x100 | | x1000 | | x100 | | x1000 | | x100 | | x100 | | N/mm ² | | % | | (^o) | c | | |
| 14X6-3/4X34 40.00 FT | D 136616 | 7 4,319 | 16 | 17 | 60 | 30 | 4 | 33 | 3 | 5 | 15 | 16 | 33 | 513 | 395 | 27.0 | 0.77 | | | | | |
| 14X6-3/4X34 40.00 FT | D 137421 | 61 37,637 | 17 | 15 | 64 | 22 | 4 | 25 | 1 | 3 | 14 | 11 | 33 | 536 | 402 | 25.0 | 0.75 | | | | | |
| 14X6-3/4X38 40.00 FT | D 137410 | 10 6,890 | 15 | 16 | 63 | 23 | 4 | 26 | 2 | 3 | 14 | 9 | 31 | 506 | 377 | 27.5 | 0.75 | | | | | |
| 14X6-3/4X38 40.00 FT | D 137418 | 35 24,115 | 19 | 13 | 66 | 21 | 8 | 25 | 1 | 2 | 12 | 12 | 35 | 522 | 371 | 26.5 | 0.71 | | | | | |
| 14X8X43 40.00 FT | E 193897 | 22 17,160 | 18 | 15 | 64 | 21 | 8 | 26 | 1 | 4 | 2 | 14 | 34 | 524 | 395 | 27.0 | 0.75 | | | | | |
| 14X8X43 40.00 FT | E 193898 | 27 21,060 | 18 | 16 | 64 | 24 | 10 | 25 | 1 | 2 | 2 | 10 | 34 | 521 | 403 | 27.5 | 0.76 | | | | | |
| 14X8X43 40.00 FT | E 193899 | 7 5,460 | 18 | 17 | 65 | 21 | 8 | 25 | 1 | 3 | 1 | 13 | 33 | 514 | 380 | 27.0 | 0.74 | | | | | |
| 16X7X40 40.00 FT | E 193413 | 8 5,808 | 18 | 16 | 64 | 28 | 9 | 28 | 2 | 3 | 3 | 14 | 35 | 544 | 410 | 27.5 | 0.75 | | | | | |
| 16X7X40 40.00 FT | E 193414 | 7 5,082 | 19 | 16 | 63 | 31 | 12 | 27 | 2 | 3 | 2 | 13 | 36 | 540 | 420 | 26.0 | 0.78 | | | | | |
| SUB TOTAL | | 184 127,531 | | | | | | | | | | | | | | | | | | | | |

(Note) : (1) Ceq: (CE=C+Mn/6+Cr/5+V/5+Mo/5+Ni/15+Cu/15) (2) Gauge length : 200 mm (3) Yield Ratio = YP/TS

J. C. Ahn
General Manager of Q.A Team

WE HEREBY CERTIFY THAT THE MATERIAL HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIREMENTS CALLED FOR THE ABOVE ORDER