



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : **QMF4254; Version: 05**

|     |                                   |   |                                       |                 |  |              |
|-----|-----------------------------------|---|---------------------------------------|-----------------|--|--------------|
| 1.  | SHELL No:                         | 5002  | DISPATCH DATE:                        |                 |  | 14.05.2015   |
| 2.  | Rly:                              | SR  | Type:                                 | MEMU/TC2        | Coach No.:   | 13366        |
| 3.  | Booked to                         | <b>SSE/C&amp;W/CHENNAI</b>                            |                                       |                 |  |              |
| 4.  | Tare Weight of Coach :            | 33.15 T   |                                       |                 |  |              |
| 5.  | Carrying Capacity :               | Seating:  | 80                                    | <b>Standing</b> | 272  | Luggage: NIL |
| 6.  | Shell Details: (SG-90004 alt 'b') |   |                                       |                 |  |              |
|     | <b>6.1</b>                        | <b>Leading Dimensions;</b>                            |                                       |                 |  |              |
|     | i)                                | Maximum height above rail to top of Roof ventilator   |                                       |                 | 4100 ± 5 (for NAC)<br>4250 +0/-5 (for WGACCN only)                   |              |
|     | ii)                               | Maximum length over Body                              |                                       |                 | 21337 ± 10   |              |
|     | iii)                              | Maximum length over Buffer                            |                                       |                 | 22297 ± 15   |              |
|     | iv)                               | Maximum width over Body                               |                                       |                 | 3245 ± 5   |              |
|     | v)                                | Maximum width over Flasher light                      |                                       |                 | 3402 +0/-5   |              |
|     | vi)                               | Minimum height above rail level to the lowest fitting |                                       |                 | 181.5 mm ( AE63143)  |              |
|     | vii)                              | Buffer/CBC Height                                     | Specified : 1104 +0 /-10 mm           |                 | NA   | NA           |
|     | vii)                              | Make : WSF  | NA                                    |                 |  |              |
|     | ix)                               | Shaku Coupler Height                                  | Specified : 1035 +0 /-5 mm            |                 | 1033/1035  |              |
|     | x)                                | Shaku Coupler Make:                                   | WSF                                   |                 |  |              |
| 7.  | Air Brake Testing:                |   |                                       |                 |  |              |
|     |                                   | Description   |                                       |                 | Specified  |              |
|     | 7.1                               | Emergency Application                                 | Time for 0 to 3.6 Kg/cm2 of BC        |                 | Less than 05 Sec (for BMBC type)<br>3 to 5 Sec (for Non BMBC type)   |              |
|     |                                   |   | Brake release time to reach .4 Kg/cm2 |                 | Less than 20 Sec (for BMBC type)<br>15 to 20 Sec (for Non BMBC type) |              |
|     | 7.2                               | Insensitivity   | BP dipped @ 0.30 Kg/cm2 n 60 sec      |                 | No brake application   |              |
|     | 7.3                               | Sensitivity   | BP dipped @ 0.60 Kg/cm2 in 6 sec      |                 | Brakes "ON"  |              |
|     | 7.4                               | Passenger alarm by pulling chain                      |                                       |                 | BP Blasts out, Brakes "ON"   |              |
|     | 7.5                               | Piston stroke for BMBC type coach only                |                                       |                 | 19 +10/-0 mm (NAC)   |              |
| 8.  | PAINTING DEATAILS:                |   |                                       |                 |  |              |
|     |                                   |   | TYPE OF PAINT                         | MAKE            | AVERAGE GLOSS VALUE  |              |
|     | 8.1                               | PAINT   | PU PAINT                              | VIBGYOR         | 85/86  |              |
|     | 8.2                               | APPLICATION OF PCN-123                                | SATISFACTORY                          |                 |  |              |
|     | 8.3                               | INSUALTION  | SATISFACTORY                          |                 |  |              |
| 9.  | Traceability of Furnishing Items: |   |                                       |                 | Make   |              |
|     | i.                                | BRAKE EQUIPMENT                                       |                                       |                 | ESCORTS  |              |
|     | ii.                               | SEAT & BERTH  |                                       |                 | OVPL   |              |
|     | lii                               | PVC   |                                       |                 | RESPONSIVE   |              |
|     | Iv                                | FLOOR BOARD   |                                       |                 | TAYAL  |              |
|     | V                                 | UIC VESTIBULE   |                                       |                 | KRP  |              |
|     | Vi                                | LP SHEETS   |                                       |                 | NA   |              |
|     | Vii                               | BODY SIDE WINDOW                                      |                                       |                 | ABC  |              |
|     | Viii                              | EMERGENCY WINDOW                                      |                                       |                 | ABC  |              |
|     | Xi                                | DOOR WINDOW   |                                       |                 | MECIDON  |              |
|     | X                                 | WATER TANK  |                                       |                 | RAIL FAB   |              |
|     | Xi                                | LAV WINDOW  |                                       |                 | MECIDON  |              |
|     | xii                               | LAV DOOR  |                                       |                 | TWPL   |              |
| 10. | 10.1                              | Modification/ Trial (if any):                         |                                       |                 | NIL  |              |
|     | 10.2                              | Deviations (if any):                                  |                                       |                 | NIL  |              |



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|------|---|--|---|----------------|---------------|---------------|---------------------|------------------|---------------|----------------------|--|
| 12.  | <b>Bogie Details:</b>   | <b>Shell No.</b>                       |   | <b>Railway</b> |               | <b>Type</b>   |                     | <b>Coach No.</b> |               | <b>Dispatch Date</b> |  |
|      |   | 5002                                   |   | SR             |               | MEMU /TC      |                     | 13366            |               | 18-03-2015           |  |
| 12.1 | <b>BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'</b> |  |   |                |               |               |                     |                  |               |                      |  |
| 12.2 | <b>Wheel &amp; Axle Details:</b>                              | <b>PP Side</b>                         |   |                |               |               | <b>NPP Side</b>     |                  |               |                      |  |
|      | i.  | <b>Bogie No.</b>                       | 155011                                  |                |               |               |                     | 155012           |               |                      |  |
|      | ii.   | <b>Frame No.</b>                       | ASR-10                                  |                |               |               |                     | ASR-162          |               |                      |  |
|      | iii.  | <b>Axle No.</b>                        | 3841                                    |                | 10167         |               | 9347                |                  | P-2031        |                      |  |
|      | iv.   | <b>Wheel Diameter</b>                  | 954.00                                  | 953.50         | 954.00        | 954.00        | 954.00              | 953.50           | 954.00        | 953.50               |  |
|      | v.  | <b>Wheel Disc No.</b>                  | 07258/<br>941                           | 05882/<br>957  | 05637/<br>938 | 05845/<br>927 | 07339/<br>943       | 07318/<br>946    | 06413/<br>960 | 02339/96<br>1        |  |
|      | vi.   | <b>R.B. Nos.</b>                       | A1189                                   | A1484          | A1282         | A1057         | A1064               | A1070            | A1100         | A1044                |  |
|      | vii.  | <b>R.B. Make</b>                       | NBC                                     |                | NBC           |               | NBC                 |                  | NBC           |                      |  |
|      | viii  | <b>R.B. Type</b>                       | Direct Mounted Spherical Roller Bearing |                |               |               |                     |                  |               |                      |  |
| 12.3 | <b><u>Items Traceability:</u></b>                             |  |   |                |               |               |                     |                  |               |                      |  |
|      | i.  | <b>BRAKE CYLINDER (Make)</b>           |   |                |               |               | <b>AJT</b>          |                  |               |                      |  |
|      | ii.   | <b>SECONDARY Shock Absorber (Make)</b> |   |                |               |               | <b>KNORR BREMSE</b> |                  |               |                      |  |
| 12.4 | i.  | <b>Modification/ Trail (if any):</b>   |   |                |               |               | <b>NIL</b>          |                  |               |                      |  |
|      | ii.   | <b>Deviations (if any):</b>            |   |                |               |               | <b>NIL</b>          |                  |               |                      |  |

**MEMU/TC2—5002**



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Form No. : QMF4254; Version: 05

|     |                                   |   |                                       |                            |  |              |
|-----|-----------------------------------|---|---------------------------------------|----------------------------|--|--------------|
| 1.  | SHELL No:                         | 5003  | DISPATCH DATE:                        |                            |  | 29.05.2015   |
| 2.  | Rly:                              | SR  | Type:                                 | MEMU/TC2                   | Coach No.:   | 13365        |
| 3.  | Booked to                         | SSE/C&W/HAZIPUR                                       |                                       |                            |  |              |
| 4.  | Tare Weight of Coach :            | 33.15 T   |                                       |                            |  |              |
| 5.  | Carrying Capacity :               | Seating:  | 80                                    | Standing                   | 272  | Luggage: NIL |
| 6.  | Shell Details: (SG-90004 alt 'b') |   |                                       |                            |  |              |
|     | 6.1                               | Leading Dimensions;                                   |                                       |                            |  |              |
|     | i)                                | Maximum height above rail to top of Roof ventilator   |                                       |                            | 4100 ± 5 (for NAC)<br>4250 +0/-5 (for WGACCN only)                   |              |
|     | ii)                               | Maximum length over Body                              |                                       |                            | 21337 ± 10   |              |
|     | iii)                              | Maximum length over Buffer                            |                                       |                            | 22297 ± 15   |              |
|     | iv)                               | Maximum width over Body                               |                                       |                            | 3245 ± 5   |              |
|     | v)                                | Maximum width over Flasher light                      |                                       |                            | 3402 +0/-5   |              |
|     | vi)                               | Minimum height above rail level to the lowest fitting |                                       |                            | 181.5 mm ( AE63143)  |              |
|     | vii)                              | Buffer/CBC Height                                     | Specified : 1104 +0 /-10 mm           |                            | NA   | NA           |
|     | vii)                              | Make : ESCORTS  |                                       |                            | NA   |              |
|     | ix)                               | Shaku Coupler Height                                  | Specified : 1035 +0 /-5 mm            |                            | 1035/1035  |              |
|     | x)                                | Shaku Coupler Make:                                   |                                       |                            | WSF  |              |
| 7.  | Air Brake Testing:                |   |                                       |                            |  |              |
|     | Description                       |   |                                       | Specified                  |  |              |
|     | 7.1                               | Emergency Application                                 | Time for 0 to 3.6 Kg/cm2 of BC        |                            | Less than 05 Sec (for BMBC type)<br>3 to 5 Sec (for Non BMBC type)   |              |
|     |                                   |   | Brake release time to reach .4 Kg/cm2 |                            | Less than 20 Sec (for BMBC type)<br>15 to 20 Sec (for Non BMBC type) |              |
|     | 7.2                               | Insensitivity   | BP dipped @ 0.30 Kg/cm2 n 60 sec      |                            | No brake application   |              |
|     | 7.3                               | Sensitivity   | BP dipped @ 0.60 Kg/cm2 in 6 sec      |                            | Brakes "ON"  |              |
|     | 7.4                               | Passenger alarm by pulling chain                      |                                       | BP Blasts out, Brakes "ON" |  |              |
|     | 7.5                               | Piston stroke for BMBC type coach only                |                                       | 19 +10/-0 mm (NAC)         |  |              |
| 8.  | PAINTING DETAILS:                 |   |                                       |                            |  |              |
|     |                                   |   | TYPE OF PAINT                         | MAKE                       | AVERAGE GLOSS VALUE  |              |
|     | 8.1                               | PAINT   | PU PAINT                              | VIBGYOR                    | 85/85  |              |
|     | 8.2                               | APPLICATION OF PCN-123                                |                                       | SATISFACTORY               |  |              |
|     | 8.3                               | INSUALTION  |                                       | SATISFACTORY               |  |              |
| 9.  | Traceability of Furnishing Items: |   |                                       | Make                       |  |              |
|     | i.                                | BRAKE EQUIPMENT                                       |                                       | STONE INDIA                |  |              |
|     | ii.                               | SEAT & BERTH  |                                       | OVPL                       |  |              |
|     | lii                               | PVC   |                                       | RESPONSIVE                 |  |              |
|     | lv                                | FLOOR BOARD   |                                       | TAYAL                      |  |              |
|     | v                                 | UIC VESTIBULE   |                                       | KRP                        |  |              |
|     | Vi                                | LP SHEETS   |                                       | NA                         |  |              |
|     | Vii                               | BODY SIDE WINDOW                                      |                                       | MOHAN, GI                  |  |              |
|     | Viii                              | EMERGENCY WINDOW                                      |                                       | ABC                        |  |              |
|     | Xi                                | DOOR WINDOW   |                                       | MECIDONE                   |  |              |
|     | X                                 | WATER TANK  |                                       | RAIL FAB                   |  |              |
|     | Xi                                | LAV WINDOW  |                                       | MECIDON                    |  |              |
|     | xii                               | LAV DOOR  |                                       | AMIR CHAND                 |  |              |
| 10. | 10.1                              | Modification/ Trial (if any):                         |                                       |                            | NIL  |              |
|     | 10.2                              | Deviations (if any):                                  |                                       |                            | NIL  |              |



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|------|--|---|-----------|-----------|---------------------|---------------|---------------------|-----------|-----------|
| 12.  | Bogie Details:   | Shell No.                               | Railway   | Type      | Coach No.           | Dispatch Date |                     |           |           |
|      |  | 5003                                    | SR        | MEMU/TC   | 13365               | 21-05-2015    |                     |           |           |
| 12.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' |   |           |           |                     |               |                     |           |           |
| 12.2 | Wheel & Axle Details:                                  | PP Side                                 |           |           |                     | NPP Side      |                     |           |           |
|      | i. Bogie No.   | 155014                                  |           |           |                     | 155016        |                     |           |           |
|      | ii. Frame No.  | ASR-171                                 |           |           |                     | ASR-166       |                     |           |           |
|      | iii. Axle No.  | A-4684                                  |           | W-2272    |                     | P-3590        |                     | S-1437    |           |
|      | iv. Wheel Diameter                                     | 953.50                                  | 953.00    | 955.00    | 955.00              | 953.00        | 953.00              | 953.50    | 953.00    |
|      | v. Wheel Disc No.                                      | 09051/945                               | 09050/936 | 08983/937 | 08887/944           | 09141/940     | 08930/941           | 10490/960 | 10344/941 |
|      | vi. R.B. Nos.  | C-3030                                  | C-3050    | M3122     | M3127               | C-3053        | C-3038              | C-3012    | C-3112    |
|      | vii. R.B. Make   | NBC                                     |           | NBC       |                     | NBC           |                     | NBC       |           |
|      | viii. R.B. Type  | Direct Mounted Spherical Roller Bearing |           |           |                     |               |                     |           |           |
| 12.3 | <u>Items Traceability:</u>                             |   |           |           |                     |               |                     |           |           |
|      | i.   | BRAKE CYLINDER (Make)                   |           |           | 0804,0606 SIL       |               | 3804,3004 SIL       |           |           |
|      | ii.  | SECONDARY Shock Absorber (Make)         |           |           | 11010,11017 GABRIEL |               | 99587,99867 GABRIEL |           |           |
| 12.4 | i.   | Modification/ Trail (if any):           |           |           | NIL                 |               |                     |           |           |
|      | ii.  | Deviations (if any):                    |           |           | NIL                 |               |                     |           |           |

MEMU/TC2—5003