



ROLLING STOCK CERTIFICATE

Form No. : QMF4254; Version: 05

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|-----|-----------------------------------|---|---------------------------------------|----------|--|--------------|
| 1. | SHELL No: | 4051 | DISPATCH DATE: | | | 22.04.2015 |
| 2. | Rly: | SR | Type: | MEMU/TC2 | Coach No.: | 13361 |
| 3. | Booked to | SSE/C&W/CHENNAI | | | | |
| 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) 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 | | 1033/1034 | |
| | 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) 3 to 5 Sec (for Non BMBC type) | |
| | | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 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 | |
| | iii | PVC | | | RESPONSIVE | |
| | Iv | FLOOR BOARD | | | TAYAL | |
| | V | UIC VESTIBULE | | | ESCORTS, ELASTOMER | |
| | 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 | | | JR | |
| 10. | 10.1 | Modification/ Trial (if any): | | | NIL | |
| | 10.2 | Deviations (if any): | | | NIL | |



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Rail Coach Factory , Kapurthala

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| 12. | Bogie Details: | Shell No. | Railway | Type | Coach No. | Dispatch Date | | | | | |
| | | 4051 | SR | MEMU-TC | 13361 | 24-12-2014 | | | | | |
| 12.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | | | |
| 12.2 | Wheel & Axle Details: | PP Side | | | | | NPP Side | | | | |
| | i. | Bogie No. | 145151 | | | | | 145154 | | | |
| | ii. | Frame No. | ASR-138 | | | | | ASR-136 | | | |
| | iii. | Axle No. | P-5777 | | A-5888 | | Y-6837 | | Y-6556 | | |
| | iv. | Wheel Diameter | 953.00 | 953.00 | 953.50 | 953.00 | 953.00 | 953.00 | 953.50 | 953.00 | |
| | v. | Wheel Disc No. | 07147/ 937 | 008868 /958 | 07337/ 929 | 07177/ 958 | 06342/ 956 | 07232/ 947 | 07264/ 941 | 06932/93 6 | |
| | vi. | R.B. Nos. | S446 | T2800 | S658 | S482 | S585 | S599 | S488 | S484 | |
| | vii. | R.B. Make | FAG | | FAG | | FAG | | FAG | | |
| | viii. | R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | | | |
| 12.3 | Items Traceability: | | | | | | | | | | |
| | i. | BRAKE CYLINDER (Make) | | | | | ESCORT | | | | |
| | ii. | SECONDARY Shock Absorber (Make) | | | | | K/B | | | | |
| 12.4 | i. | Modification/ Trail (if any): | | | | | NIL | | | | |
| | ii. | Deviations (if any): | | | | | NIL | | | | |

MEMU/TC2—4051



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ROLLING STOCK CERTIFICATE

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|-----|-----------------------------------|---|---------------------------------------|----------|--|--------------|
| 1. | SHELL No: | 4050 | DISPATCH DATE: | | | 24.04.2015 |
| 2. | Rly: | SR | Type: | MEMU/TC2 | Coach No.: | 13363 |
| 3. | Booked to | SSE/C&W/CHENNAI | | | | |
| 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) 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 | | 1035/1033 | |
| | 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) 3 to 5 Sec (for Non BMBC type) | |
| | | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 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 | | | DHINJAN | |
| 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 | |
| | | 4050 | SR | | MEMU-TC | | 13363 | | 27-12-2014 | |
| 12.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | | |
| 12.2 | Wheel & Axle Details: | PP Side | | | | NPP Side | | | | |
| | i. | Bogie No. | 145153 | | | | 145161 | | | |
| | ii. | Frame No. | ASR-130 | | | | ASR-156 | | | |
| | iii. | Axle No. | P-3361 | | RWF-103990 | | W-2670 | | Y-7752 | |
| | iv. | Wheel Diameter | 954.00 | 954.00 | 954.00 | 954.00 | 953.00 | 953.00 | 953.00 | 953.00 |
| | v. | Wheel Disc No. | 06267/ 948 | 05621/ 926 | 06355/ 940 | 06458/ 940 | 07240/ 931 | 06283/ 944 | 08818/ 958 | 06289/94 4 |
| | vi. | R.B. Nos. | V1598 | V1606 | V1621 | V1617 | V1508 | V1528 | V1514 | V1489 |
| | vii. | R.B. Make | FAG | | FAG | | FAG | | FAG | |
| | viii. | R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | | |
| 12.3 | Items Traceability: | | | | | | | | | |
| | i. | BRAKE CYLINDER (Make) | | | | AJT | | | | |
| | ii. | SECONDARY Shock Absorber (Make) | | | | K/B,GABRIEL | | | | |
| 12.4 | i. | Modification/ Trail (if any): | | | | NIL | | | | |
| | ii. | Deviations (if any): | | | | NIL | | | | |

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ROLLING STOCK CERTIFICATE

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|------|---|---------------------------------------|----------------|--|------------|--------------|
| 1. | SHELL No: | 4052 | DISPATCH DATE: | | | 24.04.2015 |
| 2. | Rly: | SR | Type: | MEMU/TC2 | Coach No.: | 13362 |
| 3. | Booked to | SSE/C&W/CHENNAI | | | | |
| 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) 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 | | 1034/1035 | | |
| 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) 3 to 5 Sec (for Non BMBC type) | | |
| | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 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 | 85/85 | | |
| 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 | | | ESCORTS | | |
| 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 | | | DHINJAN | | |
| 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 | | |
| | | 4052 | SR | | MEMU-TC | | 13362 | | 24-12-2014 | | |
| 12.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | | | |
| 12.2 | Wheel & Axle Details: | PP Side | | | | | NPP Side | | | | |
| | i. | Bogie No. | 145156 | | | | | 145157 | | | |
| | ii. | Frame No. | ASR-143 | | | | | ASR-146 | | | |
| | iii. | Axle No. | Z-7408 | | S-1503 | | RWF-92943 | | T-0242 | | |
| | iv. | Wheel Diameter | 954.00 | 954.00 | 953.00 | 953.00 | 954.00 | 954.00 | 954.00 | 954.00 | |
| | v. | Wheel Disc No. | 05964/ 939 | 05919/ 947 | 04269/ 936 | 04072/ 942 | 05636/ 928 | 06460/ 958 | 06372/ 956 | 02238/94 7 | |
| | vi. | R.B. Nos. | S490 | T2795 | S486 | S666 | S535 | S593 | R348 | R274 | |
| | vii. | R.B. Make | FAG | | FAG | | FAG | | FAG | | |
| | viii. | R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | | | |
| 12.3 | Items Traceability: | | | | | | | | | | |
| | i. | BRAKE CYLINDER (Make) | | | | | ESCORT | | | | |
| | ii. | SECONDARY Shock Absorber (Make) | | | | | K/B | | | | |
| 12.4 | i. | Modification/ Trail (if any): | | | | | NIL | | | | |
| | ii. | Deviations (if any): | | | | | NIL | | | | |

MEMU/TC2—4052