



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-----|---|--------------------------------|--|--------------------------------|--|------------------|------------|
| 1. | SHELL No. | 4047 | DISPATCH DATE | | | 20.9.2014 | |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14104 | |
| 3. | Booked to | SSE/C&W/GKP | | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage | NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | | |
| | 6.1 | Leading Dimensions: | | | | | |
| | i) | Maximum length over Body | 23700+10/-0 mm | | | | |
| | ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | |
| | iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | |
| | iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | |
| | v) | Buffer/CBC (Make) | ESCORTS | Fiba Device | NIL | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | | |
| | 7.1 | Full Brake Application | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 –10 sec | 6 Sec | | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | | |
| | | | All Brake are applied | OK | OK | | |
| | 7.2 | Insensitivity | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | | |
| | 7.3 | Sensitivity | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | | |
| | 8.1 | PAINT | PU PAINT | VIBGYOR | 87/88 | | |
| | 8.2 | APPLICATION OF PCN-123 | SATISFACTORY | | | | |
| | 8.3 | INSUALTION | SATISFACTORY | | | | |
| 9. | Traceability of Furnishing Items: | | | Make | | | |
| | i. | BRAKE EQUIPMENT | | FAIVELEY | | | |
| | ii. | CDTS/ BIO TOILET | | AIR FLOW | | | |
| | iii. | SEATS/ BERTHS | | AAR KAY FOAMS | | | |
| | iv. | BODY SIDE DOOR | | SUKATA & JBM | | | |
| | v. | VESTIBULE SLIDING DOOR | | JBM | | | |
| | vi. | SALOON DOOR | | J R INDUSTRIES | | | |
| | vii. | WATER TANKS | | AMIT & SHIVALIK | | | |
| | viii. | UIC VESTIBULE | | KRP | | | |
| | ix. | FLOOR BOARD | | TAYAL | | | |
| 10. | | | | | | | |
| | 10.1 | Modification / Trail (if any): | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB | | |
| | 10.2 | Deviations if any: | | | NIL | | |



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Rail Coach Factory , Kapurthala

| | | | | | | | | | | | | |
|--------------------|---|---------------------------------------|------------------------------------|--------------------|----------------------|--------------------|-----------------------|--------------------|------------------|-----------|----------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4047 | | NER | | LWACCN | | 14104 | | 11-08-2014 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | |
| | i. | Bogie No. | 146693 | | | | | | 146696 | | | |
| | ii. | Frame No. | FIAT-3339 | | | | | | FIAT-3219 | | | |
| | iii. | Bolster No. | 3517-GT | | | | | | 4091-GT | | | |
| | iv. | Axle No. | 125918/477 | | | Z-3549 | | | Z-3790 | | Z-3471 | |
| | v. | Wheel Dia. | 915.00 | 915.00 | 917.00 | 917.00 | 917.50 | 917.50 | 917.00 | 917.00 | | |
| | vi. | Wheel Disc No. | 080-11607 | 045-11607 | 053-11600 | 118-11607 | 339-11685 | 333-11607 | 004-11600 | 109-11607 | | |
| | vii. | R.B. Nos. | 35785 | 36321 | 36181 | 35894 | 36206 | 36278 | 35811 | 35958 | | |
| | viii. | R.B. Make | TIMKEN | | | TIMKEN | | | TIMKEN | | TIMKEN | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | |
| Description | | Secondary 1 | | Secondary 2 | | Secondary 1 | | Secondary 2 | | | | |
| | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | | | |
| i. | Make & nos. | G-13-5-750 | G-13-5-4898 | G-13-5-422 | G-13-5-5017 | G-13-5-732 | G-13-5-4919 | G-13-5-835 | G-13-5-4920 | | | |
| ii. | Ht. attest load | 513 | 466 | 514 | 466 | 515 | 465 | 513 | 466 | | | |
| iii. | Align .deviation | 22 | 9 | 18 | 8 | 17 | 14 | 17 | 13 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | S no. | Item | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| | i. | Primary Outer Spring | | | L&S-03-13 | | L&S-03-13 | | L&S | | | |
| | ii. | Primary inner Spring | | | L&S-05-12 | | L&S-05-12 | | L&S | | | |
| | iii. | Primary Damper | | | | | | | KONI | | | |
| | iv. | Secondary damper | | | | | | | SACHS | | | |
| | v. | Lateral Damper | | | | | | | SACHS | | | |
| | vi. | Yaw Damper | | | | | | | NIL | | | |
| | vii. | Brake cylinder & Caliper | | | | | | | FTI | | | |
| | viii. | Brake Disc | | | | | | | FTI | | | |
| | ix. | Ball joint Control arm | | | | | | | SGA | | | |
| | x. | Lateral Bump stop | | | | | | | GMT | | | |
| | xi. | Traction center make | | | | | | | SARITA | | | |
| | xii. | Traction lever make | | | | | | | SARITA | | | |
| | xiii. | Ball joint traction lever | | | | | | | GMT | | | |
| | xiv. | Traction centre elastic | | | | | | | SGA | | | |
| | xv. | Secondary rubber pad | | | | | | | TESPAK | | | |
| | xvi. | Rubber spring | | | | | | | GMT | | | |
| | xvii. | Anti roll bar make | | | | | | | SARITA | | | |
| | xviii. | Ball joint roll link | | | | | | | SARITA | | | |
| | xix. | Fork make | | | | | | | EMSON | | | |
| 12.4 | i. | Modification / Trial (if any): | | | NIL | | | | | | | |
| | ii. | Deviations (if any): | | | NIL | | | | | | | |

LWACCN-4047



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Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|----|---|--------------------------------|--|--------------------------------|--|--------------|------------------|
| 1. | SHELL No. | 4059 | DISPATCH DATE | | | | 24.9.2014 |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14109 | |
| 3. | Booked to | SSE/C&W/GKP | | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage | NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | | |
| | 6.1 | Leading Dimensions: | | | | | |
| | i) | Maximum length over Body | 23700+10/-0 mm | | | | |
| | ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | |
| | iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | |
| | iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | |
| | v) | Buffer/CBC (Make) | ESCORTS | Fiba Device | NIL | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | | |
| | 7.1 | Full Brake Application | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 –10 sec | 6 Sec | | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | | |
| | | | All Brake are applied | OK | OK | | |
| | 7.2 | Insensitivity | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | | |
| | 7.3 | Sensitivity | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | | |
| | 8.1 | PAINT | PU PAINT | VIBGYOR | 89/89 | | |
| | 8.2 | APPLICATION OF PCN-123 | SATISFACTORY | | | | |
| | 8.3 | INSUALTION | SATISFACTORY | | | | |
| 9. | Traceability of Furnishing Items: | | | Make | | | |
| | i. | BRAKE EQUIPMENT | | KBI | | | |
| | ii. | CDTS/ BIO TOILET | | DARSHAN | | | |
| | iii. | SEATS/ BERTHS | | AAR KAY FOAMS | | | |
| | iv. | BODY SIDE DOOR | | JBM | | | |
| | v. | VESTIBULE SLIDING DOOR | | KALSI | | | |
| | vi. | SALOON DOOR | | NA | | | |
| | vii. | WATER TANKS | | AMIT & KUTEER | | | |
| | viii. | UIC VESTIBULE | | KRP | | | |
| | ix | FLOOR BOARD & PVC | | TAYAL& RESPONSIVE | | | |
| | xi | LP SHEET | | KAE | | | |
| 10 | 10.1 | Modification / Trail (if any): | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB | | |
| | 10.2 | Deviations if any: | | | NIL | | |



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|--------------------|---|---------------------------------------|------------------------------------|------------|----------------------|--------------------|-------------|-----------------------|------------------|--------------------|----------------------|--------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | | |
| | | | 4059 | | NER | | LWACCN | | 14109 | | 28-07-2014 | | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | NPP Side | | | | | |
| | i. | Bogie No. | 146656 | | | | | 146657 | | | | | |
| | ii. | Frame No. | FIAT-3328 | | | | | FIAT-3325 | | | | | |
| | iii. | Bolster No. | 3971-P | | | | | 4023-VT | | | | | |
| | iv. | Axle No. | 128198/984 | | 129060/986 | | | Z-3932 | | 126382/474 | | | |
| | v. | Wheel Dia. | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | | |
| | vi. | Wheel Disc No. | 222-11610 | 198-11605 | 233-10579 | 169-11600 | 090-10568 | 168-11607 | 360-10582 | 367-11605 | | | |
| | vii. | R.B. Nos. | 36230 | 36074 | 35884 | 36548 | 36260 | 36131 | 36476 | 36597 | | | |
| | viii. | R.B. Make | TIMKEN | | TIMKEN | | | TIMKEN | | TIMKEN | | | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | | |
| Description | | Secondary 1 | | | | Secondary 2 | | | | Secondary 1 | | Secondary 2 | |
| | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | | |
| i. | Make & nos. | G-13-4-773 | G-13-4-4773 | G-13-4-775 | G-13-4-5197 | G-13-4-752 | G-13-4-5171 | G-13-4-785 | G-13-4-518 | | | | |
| ii. | Ht. attest load | 511 | 466 | 512 | 465 | 513 | 465 | 515 | 465 | | | | |
| iii. | Align .deviation | 23 | 19 | 23 | 19 | 21 | 20 | 21 | 21 | | | | |
| 12.3 | Items traceability: | | | | | | | | | | | | |
| | S no. | Item | | | PP Side Bogie | | | NPP side Bogie | | | Make | | |
| | i. | Primary Outer Spring | | | L&S-03-13 | | | L&S-03-13 | | | L&S | | |
| | ii. | Primary inner Spring | | | L&S-05-12 | | | L&S-05-12 | | | L&S | | |
| | iii. | Primary Damper | | | | | | | | | KONI | | |
| | iv. | Secondary damper | | | | | | | | | SACHS | | |
| | v. | Lateral Damper | | | | | | | | | SACHS | | |
| | vi. | Yaw Damper | | | | | | | | | NIL | | |
| | vii. | Brake cylinder & Caliper | | | | | | | | | KBI | | |
| | viii. | Brake Disc | | | | | | | | | KBI | | |
| | ix. | Ball joint Control arm | | | | | | | | | SGA | | |
| | x. | Lateral Bump stop | | | | | | | | | GMT | | |
| | xi. | Traction center make | | | | | | | | | SARITA | | |
| | xii. | Traction lever make | | | | | | | | | SARITA | | |
| | xiii. | Ball joint traction lever | | | | | | | | | GMT | | |
| | xiv. | Traction centre elastic | | | | | | | | | SGA | | |
| | xv. | Secondary rubber pad | | | | | | | | | TESPAK | | |
| | xvi. | Rubber spring | | | | | | | | | GMT | | |
| | xvii. | Anti roll bar make | | | | | | | | | EMSON | | |
| | xviii. | Ball joint roll link | | | | | | | | | SARITA | | |
| | xix. | Fork make | | | | | | | | | SARITA | | |
| 12.4 | i. | Modification / Trial (if any): | | | | | | NIL | | | | | |
| | ii. | Deviations (if any): | | | | | | NIL | | | | | |



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-------|---|--|--|--|---------------------|---------|-----------|
| 1. | SHELL No. | 4043 | DISPATCH DATE | | | | 30.9.2014 |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14107 | |
| 3. | Booked to | SSE/C&W/GKP | | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage | NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | | |
| 6.1 | Leading Dimensions: | | | | | | |
| i) | Maximum length over Body | 23700+10/-0 mm | | | | | |
| ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | | |
| iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | | |
| iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | | |
| v) | Buffer/CBC (Make) | FAIVELEY | Fiba Device | NIL | | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | | |
| 7.1 | Full Brake Application | | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 –10 sec | 6 Sec | | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | | |
| | | | All Brake are applied | OK | OK | | |
| 7.2 | Insensitivity | | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | | |
| 7.3 | Sensitivity | | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | | |
| 8.1 | PAINT | | PU PAINT | VIBGYOR | 69/91 | | |
| 8.2 | APPLICATION OF PCN-123 | | SATISFACTORY | | | | |
| 8.3 | INSUALTION | | SATISFACTORY | | | | |
| 9. | Traceability of Furnishing Items: | | Make | | | | |
| i. | BRAKE EQUIPMENT | | FAIVELEY | | | | |
| ii. | CDTS/ BIO TOILET | | AIKON | | | | |
| iii. | SEATS/ BERTHS | | AAR KAY FOAMS | | | | |
| iv. | BODY SIDE DOOR | | SUKATA | | | | |
| v. | VESTIBULE SLIDING DOOR | | KALSI | | | | |
| vi. | SALOON DOOR | | NA | | | | |
| vii. | WATER TANKS | | AMIT & KUTEER | | | | |
| viii. | UIC VESTIBULE | | KRP | | | | |
| ix | FLOOR BOARD | | TAYAL | | | | |
| X | L P SHEET | | NA | | | | |
| 10. | | | | | | | |
| 10.1 | Modification / Trail (if any): | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB | | | |
| 10.2 | Deviations if any: | | | NIL | | | |



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| | | | | | | | | | | | | |
|--------------------|---|---------------------------------------|------------------------------------|------------|----------------|----------------------|-------------|-------------|-----------------------|-------------|----------------------|-------------|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4043 | | NER | | LWACCN | | 14107 | | 05-07-2014 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | |
| | i. | Bogie No. | 146382 | | | | | | 146415 | | | |
| | ii. | Frame No. | FIAT-3068 | | | | | | FIAT-3045 | | | |
| | iii. | Bolster No. | 3763-P | | | | | | 104-HEI | | | |
| | iv. | Axle No. | 126320/374 | | | 126592/480 | | | 114135/374 | | RWF-110564 | |
| | v. | Wheel Dia. | 916.00 | 916.50 | 916.00 | 916.50 | 916.00 | 916.50 | 916.00 | 916.00 | 916.00 | 916.00 |
| | vi. | Wheel Disc No. | 044-10582 | 348-63309 | 154-10559 | 060-10582 | 043-10583 | 059-10559 | 281-63302 | 331-63309 | 281-63302 | 331-63309 |
| | vii. | R.B. Nos. | 34319 | 34426 | 34568 | 00199 | 34544 | 00142 | 34333 | 34472 | 34333 | 34472 |
| | viii. | R.B. Make | TIMKEN | | | TIMKEN | | | TIMKEN | | TIMKEN | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | |
| Description | | Secondary 1 | | | Secondary 2 | | | Secondary 1 | | Secondary 2 | | |
| | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | |
| i. | Make & nos. | G-13-5-723 | G-13-5-4782 | G-13-5-784 | G-13-5-5141 | G-13-4-792 | G-13-4-5133 | G-13-4-796 | G-13-4-4890 | G-13-4-796 | G-13-4-4890 | |
| ii. | Ht. attest load | 514 | 467 | 513 | 464 | 513 | 464 | 512 | 466 | 512 | 466 | |
| iii. | Align .deviation | 19 | 22 | 19 | 18 | 20 | 13 | 18 | 12 | 18 | 12 | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | | Sno. | Item | | | PP Side Bogie | | | NPP side Bogie | | | Make |
| | | i. | Primary Outer Spring | | | G-12-8 | | | G-12-8 | | | GF |
| | | ii. | Primary inner Spring | | | G-12-5 | | | G-12-5 | | | GF |
| | | iii. | Primary Damper | | | | | | | | | KONI |
| | | iv. | Secondary damper | | | | | | | | | SACHS |
| | | v. | Lateral Damper | | | | | | | | | SACHS |
| | | vi. | Yaw Damper | | | | | | | | | NIL |
| | | vii. | Brake cylinder & Caliper | | | | | | | | | FTI |
| | | viii. | Brake Disc | | | | | | | | | KBI |
| | | ix. | Ball joint Control arm | | | | | | | | | SGA |
| | | x. | Lateral Bump stop | | | | | | | | | GMT |
| | | xi. | Traction center make | | | | | | | | | SARITA |
| | | xii. | Traction lever make | | | | | | | | | SARITA |
| | | xiii. | Ball joint traction lever | | | | | | | | | GMT |
| | | xiv. | Traction centre elastic | | | | | | | | | SGA |
| | | xv. | Secondary rubber pad | | | | | | | | | TESPAK |
| | | xvi. | Rubber spring | | | | | | | | | GMT |
| | | xvii. | Anti roll bar make | | | | | | | | | SARITA |
| | | xviii. | Ball joint roll link | | | | | | | | | SARITA |
| | | xix. | Fork make | | | | | | | | | EMSON |
| 12.4 | i. | Modification / Trial (if any): | | | | | NIL | | | | | |
| | ii. | Deviations (if any): | | | | | NIL | | | | | |



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-------|---|--|--|--|---------------------|---------------------------------------|------------|
| 1. | SHELL No. | 4053 | DISPATCH DATE | | | 30.9.2014 | |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14112 | |
| 3. | Booked to | SSE/C&W/GKP | | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage | NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | | |
| 6.1 | Leading Dimensions: | | | | | | |
| i) | Maximum length over Body | 23700+10/-0 mm | | | | | |
| ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | | |
| iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | | |
| iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | | |
| v) | Buffer/CBC (Make) | ESCORTS | Fiba Device | NIL | | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | | |
| 7.1 | Full Brake Application | | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 –10 sec | 6 Sec | | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | | |
| | | | All Brake are applied | OK | OK | | |
| 7.2 | Insensitivity | | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | | |
| 7.3 | Sensitivity | | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | | |
| 8.1 | PAINT | | PU PAINT | VIBGYOR | 87/86 | | |
| 8.2 | APPLICATION OF PCN-123 | | SATISFACTORY | | | | |
| 8.3 | INSUALTION | | SATISFACTORY | | | | |
| 9. | Traceability of Furnishing Items: | | | | | Make | |
| i. | BRAKE EQUIPMENT | | | | | KBI | |
| ii. | CDTS/ BIO TOILET | | | | | DARSHAN | |
| iii. | SEATS/ BERTHS | | | | | SAVITRI | |
| iv. | BODY SIDE DOOR | | | | | JBM | |
| v. | VESTIBULE SLIDING DOOR | | | | | JBM | |
| vi. | SALOON DOOR | | | | | NA | |
| vii. | WATER TANKS | | | | | AMIT, SHIVALIK& E C BLADES | |
| viii. | UIC VESTIBULE | | | | | KRP | |
| ix | FLOOR BOARD | | | | | TAYAL | |
| X | L P SHEET | | | | | NA | |
| 10. | | | | | | | |
| 10.1 | Modification / Trail (if any): | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB | | | |
| 10.2 | Deviations if any: | | | NIL | | | |



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Rail Coach Factory , Kapurthala

| | | | | | | | | | | | | |
|------|---|---------------------------------------|------------------------------------|--------------|----------------------|--------------|-----------------------|--------------|--------------------|--------------|----------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4053 | | NER | | LWACCN | | 14112 | | 30-07-2014 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | NPP Side | | | | | |
| | i. | Bogie No. | 146658 | | | | 146659 | | | | | |
| | ii. | Frame No. | FIAT-3305 | | | | FIAT-3321 | | | | | |
| | iii. | Bolster No. | 4037-P | | | | 4053-P | | | | | |
| | iv. | Axle No. | Z-3595 | | 126567/481 | | Z-3880 | | Z-3927 | | | |
| | v. | Wheel Dia. | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | | |
| | vi. | Wheel Disc No. | 080-10533 | 038-11610 | 143-11600 | 045-11611 | 208-11600 | 148-10579 | 326-11610 | 088-10568 | | |
| | vii. | R.B. Nos. | 36574 | 36185 | 36081 | 35921 | 36279 | 35657 | 35868 | 36064 | | |
| | viii. | R.B. Make | TIMKEN | | TIMKEN | | TIMKEN | | TIMKEN | | | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | |
| | Description | | Secondary 1 | | Secondary 2 | | Secondary 1 | | Secondary 2 | | | |
| | | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | | |
| i. | Make & nos. | | G-13-5-843 | G-12-11-3871 | G-13-5-763 | G-12-11-3912 | G-13-5-798 | G-12-11-3885 | G-13-5-837 | G-12-11-3866 | | |
| ii. | Ht. attest load | | 512 | 467 | 513 | 466 | 512 | 465 | 513 | 465 | | |
| iii. | Align .deviation | | 17 | 7 | 19 | 5 | 21 | 8 | 21 | 5 | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | S no. | Item | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| | i. | Primary Outer Spring | | | L&S-03-13 | | L&S-03-13 | | L&S | | | |
| | ii. | Primary inner Spring | | | L&S-05-12 | | L&S-05-12 | | L&S | | | |
| | iii. | Primary Damper | | | | | | | KONI | | | |
| | iv. | Secondary damper | | | | | | | SACHS | | | |
| | v. | Lateral Damper | | | | | | | SACHS | | | |
| | vi. | Yaw Damper | | | | | | | NIL | | | |
| | vii. | Brake cylinder & Caliper | | | | | | | KBI | | | |
| | viii. | Brake Disc | | | | | | | KBI | | | |
| | ix. | Ball joint Control arm | | | | | | | SGA | | | |
| | x. | Lateral Bump stop | | | | | | | GMT | | | |
| | xi. | Traction center make | | | | | | | SARITA | | | |
| | xii. | Traction lever make | | | | | | | SARITA | | | |
| | xiii. | Ball joint traction lever | | | | | | | GMT | | | |
| | xiv. | Traction centre elastic | | | | | | | SGA | | | |
| | xv. | Secondary rubber pad | | | | | | | TESPAK | | | |
| | xvi. | Rubber spring | | | | | | | GMT | | | |
| | xvii. | Anti roll bar make | | | | | | | SARITA | | | |
| | xviii. | Ball joint roll link | | | | | | | SARITA | | | |
| | xix. | Fork make | | | | | | | EMSON | | | |
| 12.4 | i. | Modification / Trial (if any): | | | NIL | | | | | | | |
| | ii. | Deviations (if any): | | | NIL | | | | | | | |



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-----|---|--------------------------------|--|--------------------------------|--|---------|-----------|
| 1. | SHELL No. | 4063 | DISPATCH DATE | | | | 29.9.2014 |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14108 | |
| 3. | Booked to | SSE/C&W/GKP | | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage | NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | | |
| | 6.1 | Leading Dimensions: | | | | | |
| | i) | Maximum length over Body | 23700+10/-0 mm | | | | |
| | ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | |
| | iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | |
| | iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | |
| | v) | Buffer/CBC (Make) | ESCORTS | Fiba Device | NIL | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | | |
| | 7.1 | Full Brake Application | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 -10 sec | 6 Sec | | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | | |
| | | | All Brake are applied | OK | OK | | |
| | 7.2 | Insensitivity | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | | |
| | 7.3 | Sensitivity | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | | |
| | 8.1 | PAINT | PU PAINT | VIBGYOR | 88/88 | | |
| | 8.2 | APPLICATION OF PCN-123 | SATISFACTORY | | | | |
| | 8.3 | INSUALTION | SATISFACTORY | | | | |
| 9. | Traceability of Furnishing Items: | | | Make | | | |
| | i. | BRAKE EQUIPMENT | FAIVELEY | | | | |
| | ii. | CDTS/ BIO TOILET | DARSHAN | | | | |
| | iii. | SEATS/ BERTHS | AAR KAY FOAMS | | | | |
| | iv. | BODY SIDE DOOR | SUKATA | | | | |
| | v. | VESTIBULE SLIDING DOOR | JBM | | | | |
| | vi. | SALOON DOOR | NA | | | | |
| | vii. | WATER TANKS | AMIT & KUTEER | | | | |
| | viii. | UIC VESTIBULE | KRP | | | | |
| | ix | FLOOR BOARD | TAYAL | | | | |
| | X | L P SHEET | KAE | | | | |
| 10. | | | | | | | |
| | 10.1 | Modification / Trail (if any): | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB | | |
| | 10.2 | Deviations if any: | | | NIL | | |



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|--------------------|---|---------------------------------------|------------------------------------|--------------------|----------------------|--------------------|-----------------------|--------------------|------------------|-----------|----------------------|-----------|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4063 | | NER | | LWACCN | | 14108 | | 17-06-14 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | NPP Side | | | | |
| | i. | Bogie No. | 146348 | | | | | 146381 | | | | |
| | ii. | Frame No. | FIAT-3010 | | | | | FIAT-3084 | | | | |
| | iii. | Bolster No. | 3808GT | | | | | 3802GT | | | | |
| | iv. | Axle No. | Z-3456 | | 129000/1986 | | | Z-3976 | | Z-3279 | | |
| | v. | Wheel Dia. | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.00 | 916.50 | 916.50 | 916.50 | 916.50 |
| | vi. | Wheel Disc No. | 233-63305 | 237-10583 | 258-10533 | 124-10559 | 305-10533 | 200-63301 | 197-63301 | 285-10533 | 285-10533 | 285-10533 |
| | vii. | R.B. Nos. | 34535 | 34196 | 34271 | 00416 | 34295 | 00110 | 34580 | 34580 | 34134 | 34134 |
| | viii. | R.B. Make | TIM | | TIM | | | TIM | | TIM | | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | |
| Description | | Secondary 1 | | Secondary 2 | | Secondary 1 | | Secondary 2 | | | | |
| | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | | | |
| i. | Make & nos. | G13-04-0660 | G13-04-4294 | G13-04-0613 | G13-04-4281 | G13-05-772 | G13-05-4753 | G13-05-764 | G13-05-4833 | | | |
| ii. | Ht. attest load | 512 | 468 | 513 | 467 | 515 | 468 | 513 | 467 | | | |
| iii. | Align .deviation | 21 | 14 | 18 | 11 | 20 | 6 | 21 | 8 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | S no. | Item | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| | i. | Primary Outer Spring | | | L&S-02-13 | | L&S-02-13 | | L&S | | | |
| | ii. | Primary inner Spring | | | G-12-5 | | G-12-5 | | GF | | | |
| | iii. | Primary Damper | | | | | | | KONI | | | |
| | iv. | Secondary damper | | | | | | | GEREP | | | |
| | v. | Lateral Damper | | | | | | | SACHS | | | |
| | vi. | Yaw Damper | | | | | | | NIL | | | |
| | vii. | Brake cylinder & Caliper | | | | | | | FTI | | | |
| | viii. | Brake Disc | | | | | | | KBI | | | |
| | ix. | Ball joint Control arm | | | | | | | SGA | | | |
| | x. | Lateral Bump stop | | | | | | | GMT | | | |
| | xi. | Traction center make | | | | | | | SARITA | | | |
| | xii. | Traction lever make | | | | | | | SARITA | | | |
| | xiii. | Ball joint traction lever | | | | | | | GMT | | | |
| | xiv. | Traction centre elastic | | | | | | | SGA | | | |
| | xv. | Secondary rubber pad | | | | | | | TESPAK | | | |
| | xvi. | Rubber spring | | | | | | | GMT | | | |
| | xvii. | Anti roll bar make | | | | | | | EMSON | | | |
| | xviii. | Ball joint roll link | | | | | | | SARITA | | | |
| | xix. | Fork make | | | | | | | EMSON | | | |
| 12.4 | i. | Modification / Trial (if any): | | | | | | | NIL | | | |
| | ii. | Deviations (if any): | | | | | | | NIL | | | |

LWACCN-4063



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | |
|-------|---|--|--|--|---------------------|--|
| 1. | SHELL No. | 4057 | DISPATCH DATE | | | 30.9.2014 |
| 2. | Railway | NER | Type | LWACCN | Coach No. | 14110 |
| 3. | Booked to | SSE/C&W/GKP | | | | |
| 4. | Tare Weight of Coach | 45.6 T | | | | |
| 5. | Carrying Capacity | Seating | 72 | Sleeping | 72 | Luggage NIL |
| 6. | Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b') | | | | | |
| 6.1 | Leading Dimensions: | | | | | |
| i) | Maximum length over Body | 23700+10/-0 mm | | | | |
| ii) | Maximum width over Body | 3240-8/+0 mm, 3050 mm (LWSCZDAC) | | | | |
| iii) | Max. Height From Rail Level | 4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC) | | | | |
| iv) | Buffer/CBC Height | Specified : 1105 +0 /-15 mm | 1105 | 1105 | | |
| v) | Buffer/CBC (Make) | ESCORTS | Fiba Device | NIL | | |
| 7. | Air Brake Testing: | | Description | Specified | Observed | |
| 7.1 | Full Brake Application | | Reduce pressure of BP from 5.0 to 3.4 kg/cm ² | 6 –10 sec | 6 Sec | |
| | | | Max Pressure in BC | 3.80 ± 0.15 Kg/cm ² | 3.80 | |
| | | | All Brake are applied | OK | OK | |
| 7.2 | Insensitivity | | Exhaust BP @ 0.3 kg/cm ² /min | No brake application | OK | |
| 7.3 | Sensitivity | | Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec. | Brake must apply | OK | |
| 8. | PAINTING DEATAILS: | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | |
| 8.1 | PAINT | | PU PAINT | VIBGYOR | 87/87 | |
| 8.2 | APPLICATION OF PCN-123 | | SATISFACTORY | | | |
| 8.3 | INSUALTION | | SATISFACTORY | | | |
| 9. | Traceability of Furnishing Items: | | | Make | | |
| i. | BRAKE EQUIPMENT | | | KBI | | |
| ii. | CDTS/ BIO TOILET | | | DARSHAN | | |
| iii. | SEATS/ BERTHS | | | AAR KAY FOAMS | | |
| iv. | BODY SIDE DOOR | | | MOHAN | | |
| v. | VESTIBULE SLIDING DOOR | | | JBM | | |
| vi. | SALOON DOOR | | | NA | | |
| vii. | WATER TANKS | | | SHIVALIK, E C BLADES & KUTEER | | |
| viii. | UIC VESTIBULE | | | KRP | | |
| ix | FLOOR BOARD | | | TAYAL | | |
| X | PVC | | | RESPONSIVE | | |
| XI | L P SHEET | | | NK | | |
| 10. | Modification / Trail (if any): | | | | | FITTED WITH BIO DIGESTER OF M/s RAIL FAB |
| 10.1 | Deviations if any: | | | | | NIL |
| 10.2 | | | | | | |



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Rail Coach Factory , Kapurthala

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| | | | | | | | | | | | | |
|--------------------|---|---------------------------------------|------------------------------------|-------------|----------------------|-------------|-----------------------|-------------|------------------|-----------|----------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4057 | | NER | | LWACCN | | 14110/C | | 14-07-2014 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | |
| | i. | Bogie No. | 146614 | | | | | | 146615 | | | |
| | ii. | Frame No. | FIAT-3263 | | | | | | FIAT-3006 | | | |
| | iii. | Bolster No. | 123/VT/ASR | | | | | | 3351-GT | | | |
| | iv. | Axle No. | 125908/477 | | W-4688 | | Z-2996 | | Z-3812 | | | |
| | v. | Wheel Dia. | 915.00 | 915.00 | 915.00 | 915.00 | 917.00 | 916.50 | 915.00 | 915.00 | | |
| | vi. | Wheel Disc No. | 088-11611 | 260-10568 | 174-63305 | 228-63301 | 015-10570 | 022-10568 | 191-10559 | 044-10533 | | |
| | vii. | R.B. Nos. | 36282 | 34338 | 34531 | 00165 | 35949 | 35985 | 36473 | 35920 | | |
| | viii. | R.B. Make | TIMKEN | | TIMKEN | | TIMKEN | | TIMKEN | | | |
| | ix. | RB Type | UIC CARTRIDGE TAPER ROLLER BEARING | | | | | | | | | |
| 12.2 | Secondary suspension load deflection Values: | | | | | | | | | | | |
| Description | | Secondary 1 | | Secondary 2 | | Secondary 1 | | Secondary 2 | | | | |
| | | Outer | Inner | Outer | Inner | Outer | Inner | Outer | Inner | | | |
| i. | Make & nos. | G-13-5-745 | G-13-5-5093 | G-13-5-767 | G-13-5-4904 | G-13-5-856 | G-13-5-4961 | G-13-5-847 | G-13-5-5094 | | | |
| ii. | Ht. attest load | 513 | 465 | 513 | 463 | 513 | 465 | 514 | 466 | | | |
| iii. | Align .deviation | 21 | 21 | 23 | 23 | 19 | 15 | 15 | 14 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | Sno. | Item | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| | i. | Primary Outer Spring | | | G-3-13 | | G-3-13 | | GF | | | |
| | ii. | Primary inner Spring | | | G-5-12 | | G-5-12 | | GF | | | |
| | iii. | Primary Damper | | | | | | | KONI | | | |
| | iv. | Secondary damper | | | | | | | SACHS | | | |
| | v. | Lateral Damper | | | | | | | SACHS | | | |
| | vi. | Yaw Damper | | | | | | | NIL | | | |
| | vii. | Brake cylinder & Caliper | | | | | | | KBI | | | |
| | viii. | Brake Disc | | | | | | | KBI | | | |
| | ix. | Ball joint Control arm | | | | | | | SGA | | | |
| | x. | Lateral Bump stop | | | | | | | GMT | | | |
| | xi. | Traction center make | | | | | | | SARITA | | | |
| | xii. | Traction lever make | | | | | | | SARITA | | | |
| | xiii. | Ball joint traction lever | | | | | | | GMT | | | |
| | xiv. | Traction centre elastic | | | | | | | SGA | | | |
| | xv. | Secondary rubber pad | | | | | | | TESPAK | | | |
| | xvi. | Rubber spring | | | | | | | GMT | | | |
| | xvii. | Anti roll bar make | | | | | | | SARITA | | | |
| | xviii. | Ball joint roll link | | | | | | | SARITA | | | |
| | xix. | Fork make | | | | | | | EMSON | | | |
| 12.4 | i. | Modification / Trial (if any): | | | | NIL | | | | | | |
| | ii. | Deviations (if any): | | | | NIL | | | | | | |

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