



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-----|---|--------------------------------|--|--------------------------------|---------------------|-----------|-----|
| 1. | SHELL No. | 4017 | DISPATCH DATE | | | 13.8.2014 | |
| 2. | Railway | SR | Type | LWACCN | Coach No. | 14107 | |
| 3. | Booked to | SSE/C&W/PER | | | | | |
| 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) | FAVELY | 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 | 3.00 ± 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 | GS | 87/85 | | |
| | 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 | | | SAVITRI | | |
| | iv. | BODY SIDE DOOR | | | SUKATA & JBM | | |
| | v. | VESTIBULE SLIDING DOOR | | | JBM | | |
| | vi. | SALOON DOOR | | | NA | | |
| | vii. | WATER TANKS | | | AMIT ,MANOJ,KUTEER | | |
| | viii. | UIC VESTIBULE | | | KRP | | |
| | ix | FLOOR BOARD | | | TAYAL | | |
| 10. | | | | | | | |
| | 10.1 | Modification / Trail (if any): | | | | NIL | |
| | 10.2 | Deviations if any: | | | | NIL | |



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|--------------------|---|---------------------------------------|------------------------------------|--------------------|----------------------|--------------------|--------------|-----------------------|------------------|-----------|----------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4017 | | SR | | LACCN | | 14107 | | 08-07-2014 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | |
| | i. | Bogie No. | 146592 | | | | | | 146593 | | | |
| | ii. | Frame No. | FIAT-3203 | | | | | | FIAT-3064 | | | |
| | iii. | Bolster No. | 3734-VT | | | | | | 3872-VT | | | |
| | iv. | Axle No. | RWF-110312 | | | RWF-110614 | | | W-4710 | | W-4616 | |
| | v. | Wheel Dia. | 915.00 | 915.00 | 915.00 | 915.00 | 915.50 | 915.50 | 915.00 | 915.00 | | |
| | vi. | Wheel Disc No. | 07745-00131 | 07745-00129 | 135-63302 | 353-63309 | 270-63302 | 345-63309 | 065-51910 | 245-51910 | | |
| | vii. | R.B. Nos. | 34390 | 34214 | 34517 | 34190 | 34139 | 00115 | 00120 | 34373 | | |
| | 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. | BPS-2013 | BPS-2013 | BPS-2013-32 | BPS-2013-154 | BPS-2013-60 | BPS-2013-110 | BPS-2013-11 | BPS-2013-031 | | | |
| ii. | Ht. attest load | 515 | 468 | 513 | 462 | 510 | 466 | 507 | 468 | | | |
| iii. | Align .deviation | 10 | 26 | 9 | 18 | 12 | 22 | 8 | 18 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | Sno. | Item | | | PP Side Bogie | | | NPP side Bogie | | | Make | |
| | i. | Primary Outer Spring | | | BPS-2013 | | | BPS-2013 | | | BPS | |
| | ii. | Primary inner Spring | | | BPS-2013 | | | BPS-2013 | | | BPS | |
| | 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 | | | | | | | | | MTC | |
| | x. | Lateral Bump stop | | | | | | | | | GMT | |
| | xi. | Traction center make | | | | | | | | | SARITA | |
| | xii. | Traction lever make | | | | | | | | | SARITA | |
| | xiii. | Ball joint traction lever | | | | | | | | | SGA | |
| | 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. | 4013 | DISPATCH DATE | | | | 31.7.2014 |
| 2. | Railway | SR | Type | LWACCN | Coach No. | | 14105 |
| 3. | Booked to | | SSE/C&W/PER | | | | |
| 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 | | 1102 | 1104 | |
| | 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 | | 3.00 ± 0.15 Kg/cm ² | 3.00 | |
| | | | 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 | GS | 86/86.5 | | |
| | 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 | | | | SAVITRI | |
| | iv. | BODY SIDE DOOR | | | | JBM | |
| | v. | VESTIBULE SLIDING DOOR | | | | JBM | |
| | vi. | SALOON DOOR / COMPTT.DOOR | | | | SUKATA | |
| | vii. | WATER TANKS | | | | AMIT | |
| | viii. | UIC VESTIBULE | | | | KRP | |
| | ix | FLOOR BOARD | | | | NARBADA | |
| | x | PVC FLOORING | | | | RESPONSIVE | |
| 10. | | | | | | | |
| | 10.1 | Modification / Trail (if any): | | | | NIL | |
| | 10.2 | Deviations if any: | | | | NIL | |



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|--------------------|---|--------------------------------|------------------------------------|---------------|----------------------|---------------|-----------------------|---------------|------------------|---------------|----------------------|--|
| 12. | Bogie Details: | | Shell No. | | Railway | | Type | | Coach No. | | Dispatch Date | |
| | | | 4013 | | SR | | LWACCN | | 14105/C | | 15-5-14 | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | |
| | i. | Bogie No. | 146436 | | | | | | 146437 | | | |
| | ii. | Frame No. | FIAT-2504 | | | | | | FIAT-3044 | | | |
| | iii. | Bolster No. | 3834-P | | | | | | 3833-P | | | |
| | iv. | Axle No. | W-4559 | | | W-4509 | | | RWF-110332 | | RWF-109969 | |
| | v. | Wheel Dia. | 916.50 | 916.00 | 916.00 | 916.00 | 916.50 | 916.00 | 917.00 | 916.50 | | |
| | vi. | Wheel Disc No. | 027/63 301 | 338/63 302 | 045/51 916 | 074/51 915 | 231/63 301 | 263/63 307 | 211/63 307 | 047/6231 4 | | |
| | vii. | R.B. Nos. | 08821 | 07145 | 08795 | 08027 | 09141 | 08741 | 08260 | 09131 | | |
| | viii. | R.B. Make | SKF | | | SKF | | | SKF | | SKF | |
| | 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. | BPS-2013-40 | BPS-02-13-232 | BPS-2013-45 | BPS-02-13-220 | BPS-2013-95 | BPS-02-13-5 | BPS-2013-62 | BPS-02-13-34 | | | |
| ii. | Ht. attest load | 510 | 466 | 513 | 463 | 510 | 463 | 512 | 463 | | | |
| iii. | Align .deviation | 9 | 21 | 8 | 22 | 5 | 25 | 5 | 24 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | |
| | Sno. | Item | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| | i. | Primary Outer Spring | | | BPS-2013 | | BPS-2013 | | BPS | | | |
| | ii. | Primary inner Spring | | | BPS-2013 | | BPS-2013 | | BPS | | | |
| | iii. | Primary Damper | | | | | | | SACHS | | | |
| | 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-4013



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Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

| | | | | | | | |
|-------|---|--|--------------------|--------------------------------|---------------------|-------------------|------------|
| 1. | SHELL No. | 4018 | DISPATCH DATE | | | 06.08.2014 | |
| 2. | Railway | SR | Type | LWACCN | Coach No. | 14106 | |
| 3. | Booked to | SSE/C&W/PER | | | | | |
| 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 | | 3.00 ± 0.15 Kg/cm ² | 3.00 | | |
| | | 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 | | GS | 87/87 | | |
| 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 | | | AMIT | | | |
| iii. | SEATS/ BERTHS | | | SAVITRI | | | |
| iv. | BODY SIDE DOOR | | | JBM | | | |
| v. | VESTIBULE SLIDING DOOR | | | JBM | | | |
| vi. | SALOON DOOR / COMPTT.DOOR | | | SUKATA | | | |
| vii. | WATER TANKS | | | AMIT & MANOJ | | | |
| viii. | UIC VESTIBULE | | | KRP | | | |
| ix | FLOOR BOARD | | | TAYAL | | | |
| x | PVC FLOORING | | | RESPONSIVE | | | |
| 10. | | | | | | | |
| 10.1 | Modification / Trail (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 | | |
| | | | 4018 | | SR | | LWACCN | | 14106/C | | 17-05-14 | | |
| 12.1 | Wheel & Axle Details: | | PP Side | | | | | | NPP Side | | | | |
| | i. | Bogie No. | | 146440 | | | | | | 146441 | | | |
| | ii. | Frame No. | | FIAT-2580 | | | | | | FIAT-2485 | | | |
| | iii. | Bolster No. | | HEI---- | | | | | | 009-HEI | | | |
| | iv. | Axle No. | | RWF-109249 | | RWF-109803 | | W-4685 | | RWF-110260 | | | |
| | v. | Wheel Dia. | | 916.00 | 916.50 | 917.00 | 917.00 | 916.00 | 916.00 | 915.00 | 915.00 | | |
| | vi. | Wheel Disc No. | | 102-63302 | 036-63305 | 177-63309 | 151-51915 | 290-63302 | 300-63307 | 377-63309 | 250-63350 | | |
| | vii. | R.B. Nos. | | 35925 | 77361 | 07021 | 07001 | 07844 | 07320 | 35960 | 35921 | | |
| | viii. | R.B. Make | | SKF | | SKF | | SKF | | SKF | | | |
| | 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. | | BPS-2013-97 | BPS-2013-222 | BPS-2013-93 | BPS-2013-137 | BPS-2013-03 | BPS-2013-071 | BPS-2013-21 | BPS-2013-016 | | | |
| ii. | Ht. attest load | | 515 | 463 | 512 | 466 | 511 | 468 | 515 | 468 | | | |
| iii. | Align .deviation | | 4 | 24 | 4 | 28 | 13 | 21 | 16 | 22 | | | |
| 12.3 | Items traceability: | | | | | | | | | | | | |
| S no. | | Item | | | | PP Side Bogie | | NPP side Bogie | | Make | | | |
| i. | | Primary Outer Spring | | | | BPS-2013 | | BPS-2013 | | BPS | | | |
| ii. | | Primary inner Spring | | | | BPS-2013 | | BPS-2013 | | BPS | | | |
| iii. | | Primary Damper | | | | | | | | GEREP | | | |
| iv. | | Secondary damper | | | | | | | | GEREP | | | |
| 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 | | | | | | | | SGA | | | |
| xiv. | | Traction centre elastic | | | | | | | | GMT | | | |
| 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 | | | | | |