



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4039	DISPATCH DATE				18.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15403	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	1103		
	v)	Buffer/CBC (Make)	ESCORTS	Fiba Device	NA		
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	VIBGYOR	89/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
	I	BRAKE EQUIPMENT	KBI				
	ii	SEAT & BERTH	MANOJ				
	iii	BODY SIDE DOORS	JBM				
	iv	WATER TANKS	RAIL FAB, RUBICONE				
	v	FLOOR BOARD	ORIENTAL				
	VI	PVC	PREMIER POLFILM				
	Vii	LP SHEET	PUNJAB LAMINATE				
10.							
	10.1	Modification / Trail (if any):	NIL				
	10.2	Deviations if any:	NIL				



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4039		ECR		LS3		15403		10-1-2015	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	146997					147021				
	ii.	Frame No.	FIAT-3576					FIAT-3601				
	iii.	Bolster No.	3850-P					4232-VT				
	iv.	Axle No.	Z-3967		125588/377			Z-3387		129304/982		
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vi.	Wheel Disc No.	182-10583	281-11600	054-51916	219-51915	049-51077	176-51912	030-51915	158-51915		
	vii.	R.B. Nos.	32047	02559	30940	02970	01361	01381	35759	35918		
	viii.	R.B. Make	SKF			SKF		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-14-3-019	G-14-3-166	G-14-3	G-14-3	G-14-3-128	G-14-3-080	G-14-3-178	G-14-3-065			
ii.	Ht. attest load	514	469	513	471	514	472	513	471			
iii.	Align .deviation	5	13	6	13	5	9	3	6			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-3		G-14-3		GF			
	ii.	Primary inner Spring			G-14-3		G-14-3		GF			
	iii.	Primary Damper							GEREP			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							FTI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							SGA			
	xi.	Traction center make							SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT			
	xiv.	Traction centre elastic							GMT			
	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					



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4032	DISPATCH DATE				18.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15406	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	1104	1105			
v)	Buffer/CBC (Make)	ESCORTS	Fiba Device	NA			
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	VIBGYOR	89/88			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:					Make	
I	BRAKE EQUIPMENT					KBI	
ii	SEAT & BERTH					CPF	
iii	BODY SIDE DOORS					JBM	
iv	WATER TANKS					RAIL FAB, RUBICONE	
v	FLOOR BOARD					TAYAL	
VI	PVC					RESPONSIVE	
Vii	LP SHEET					NA	
10.							
10.1	Modification / Trail (if any):					NIL	
10.2	Deviations if any:					NIL	



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4032		ECR		LS3		15406		05-12-2014	
12.1	Wheel & Axle Details:		PP Side				NPP Side					
	i.	Bogie No.	146993				146994					
	ii.	Frame No.	FIAT-3581				FIAT-3579					
	iii.	Bolster No.	4404-VT				2686-VT					
	iv.	Axle No.	126915/470		126134/471		126827/468		129097/992			
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00		
	vi.	Wheel Disc No.	314-51908	046-11610	204-51015	257-51908	233-51912	071-51910	122-51908	211-51908		
	vii.	R.B. Nos.	36930	38026	30012	30020	02902	02908	37722	38106		
	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.	G-14-3	G-14-3	G-14-3-127	G-14-3-191	G-14-3-168	G-14-3-054	G-14-3-013	G-14-3-043			
ii.	Ht. attest load	515	470	513	469	515	471	515	469			
iii.	Align .deviation	3	18	2	12	4	9	6	10			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-4		G-14-4		GF			
	ii.	Primary inner Spring			G-14-4		G-14-4		GF			
	iii.	Primary Damper							GEREP			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							KBI,FTI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							SGA,GMT			
	xiv.	Traction centre elastic							SGA,GMT			
	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						

LS3-4032



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4041	DISPATCH DATE				18.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15405	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	NA			
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	VIBGYOR	88/87		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:					Make	
I	BRAKE EQUIPMENT					KBI	
ii	SEAT & BERTH					MANOJ	
iii	BODY SIDE DOORS					JBM, JVR	
iv	WATER TANKS					RAIL FAB, RUBICONE	
v	FLOOR BOARD					TAYAL	
VI	PVC					PREMIER POLYFILM	
Vii	LP SHEET					NA	
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:	Shell No.	Railway	Type	Coach No.	Dispatch Date			
		4041	ECR	LS3	15405	24-12-2014			
12.1	Wheel & Axle Details:	PP Side				NPP Side			
	i. Bogie No.	147013				147014			
	ii. Frame No.	FIAT-3629				FIAT-3609			
	iii. Bolster No.	4212-VT				4411-VT			
	iv. Axle No.	127247/987		B-9876		Z-3762		127913/988	
	v. Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi. Wheel Disc No.	314-51916	289-51916	218-10582	257-51912	207-51908	130-61077	267-10579	301-63307
	vii. R.B. Nos.	36751	36720	36571	27024	37568	37944	36821	36699
	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.	G-14-3-030	G-14-3-045	G-14-3-029	G-14-3-140	G-14-3-033	G-14-3-029	G-14-3-117	G-14-3-156
	ii. Ht. attest load	514	470	514	470	514	469	515	469
	iii. Align .deviation	3	19	3	14	5	15	4	11
12.3	Items traceability:								
	Sno.	Item		PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring		G-14-4		G-14-4		GF	
	ii.	Primary inner Spring		G-14-4		G-14-4		GF	
	iii.	Primary Damper						GEREP	
	iv.	Secondary damper						GEREP	
	v.	Lateral Damper						GEREP	
	vi.	Yaw Damper						NIL	
	vii.	Brake cylinder & Caliper						KBI	
	viii.	Brake Disc						KBI	
	ix.	Ball joint Control arm						SGA/GMT	
	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/MGN	
	xix.	Fork make						EMSON	
12.4	i.	Modification / Trial (if any):				NIL			
	ii.	Deviations (if any):				NIL			



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4038	DISPATCH DATE				18.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15408	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	NA		
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	VIBGYOR	88/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			MANOJ		
	iii	BODY SIDE DOORS			JBM		
	iv	WATER TANKS			RAIL FAB, RUBICONE		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			PREMIER POLYFILM		
	Vii	LP SHEET			PUNJAB LAMINATE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4038		ECR		LS3		15408		13-01-2015	
12.1	Wheel & Axle Details:		PP Side				NPP Side					
	i.	Bogie No.	156032				156033					
	ii.	Frame No.	SCI-FM-74				FIAT-3725					
	iii.	Bolster No.	4450-GT				4459-GT					
	iv.	Axle No.	Z-3091		Z-3259		Z-3479		Z-3399			
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	916.00	916.00	917.00	917.00		
	vi.	Wheel Disc No.	197-11610	020-11605	148-11605	231-11607	006-11610	008-11600	184-11607	190-11607		
	vii.	R.B. Nos.	36566	36254	36479	00902	36041	35839	36163	35990		
	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-14-3-112	G-14-3-073	G-14-3-084	G-14-3-197	G-14-3-053	G-14-3-011	G-14-3-047	G-14-3-016			
ii.	Ht. attest load	512	469	513	471	515	469	515	468			
iii.	Align .deviation	6	10	7	12	2	9	3	12			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-3		G-14-3		GF			
	ii.	Primary inner Spring			G-14-3		G-14-3		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							GMT			
	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						

LS3-4038



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4037	DISPATCH DATE				18.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15409	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	1100	1100		
	v)	Buffer/CBC (Make)	ESCORTS	Fiba Device	NA		
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	VIBGYOR	86/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:				Make		
	I	BRAKE EQUIPMENT			KBI		
	li	SEAT & BERTH			CPF		
	lii	BODY SIDE DOORS			JBM, MOHAN		
	lv	WATER TANKS			RAIL FAB, RUBICONE		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
	Vii	LP SHEET			NK		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4037	ECR	LS3	15409	23-12-2014			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	147049				147051			
	ii.	Frame No.	FIAT-3660				BEC-010			
	iii.	Bolster No.	4148-ECBT				4426-VT			
	iv.	Axle No.	126815/468		A-2914		129053/986		C-0091	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	055-11603	271-51916	109-51912	113-61077	016-51915	019-51912	086-51908	027-10559
	vii.	R.B. Nos.	30000	02371	03058	30010	30016	289318	30277	32100
	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.	G14-3-125	G14-3-039	G14-3-024	G14-3-079	G14-3-018	G14-3-095	G14-3-051	G14-3-127	
ii.	Ht. attest load	513	471	514	468	515	469	515	477	
iii.	Align .deviation	3	10	1	7	4	15	2	15	
12.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			G-14-3		G-14-3		GF	
	ii.	Primary inner Spring			G-14-4		G-14-4		GF	
	iii.	Primary Damper							GEREP	
	iv.	Secondary damper							GEREP	
	v.	Lateral Damper							GEREP	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper							KBI	
	viii.	Brake Disc							KBI	
	ix.	Ball joint Control arm							GMT	
	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/MGN	
	xix.	Fork make							EMSON	
12.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				

LS3-4037



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4005	DISPATCH DATE				16.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15404	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	1100			
v)	Buffer/CBC (Make)	FAIVELEY	Fiba Device	NA			
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	VIBGYOR	87/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:					Make	
I	BRAKE EQUIPMENT				KBI		
li	SEAT & BERTH				CPF		
lii	BODY SIDE DOORS				JBM		
lv	WATER TANKS				RAIL FAB		
v	FLOOR BOARD				TAYAL		
VI	PVC				RESPONSIVE		
Vii	LP SHEET				NK		
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4005		EC		LS3		15404/C		27-12-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	147027						147019			
	ii.	Frame No.	FIAT-3589						FIAT-3591			
	iii.	Bolster No.	4403-VT						4414-VT			
	iv.	Axle No.	A-3016			M-5709			Z-3734		129001/986	
	v.	Wheel Dia.	917.00	917.00	918.00	918.00	916.00	916.00	915.00	915.50		
	vi.	Wheel Disc No.	310-10559	239-11611	231-51915	033-10533	151-10533	032-51908	059-10579	089-10533		
	vii.	R.B. Nos.	01383	01515	01534	01430	37672	37026	37851	29292		
	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.	G14-3-022	G14-3-248	G14-3-048	G14-3-241	G14-3-001	G14-3-237	G14-3-101	G14-3-2401			
ii.	Ht. attest load	514	467	514	469	515	468	515	469			
iii.	Align .deviation	2	23	3	24	4	22	5	23			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			14-4		14-4		GF			
	ii.	Primary inner Spring			14-03		14-03		GF			
	iii.	Primary Damper							GEREP			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	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/MGN			
	xix.	Fork make							EMSON			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					

LS3-4005



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4025	DISPATCH DATE			16.02.2015	
2.	Railway	ECR	Type	LS3	Coach No.	15407	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	NA	
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	VIBGYOR	88/88		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			KBI			
ii	SEAT & BERTH			CPF			
iii	BODY SIDE DOORS			JBM, MOHAN			
iv	WATER TANKS			RUBICONE			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
Vii	LP SHEET			MILTON			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4025		EC		LSCN		15407/C		17-12-2014	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	147036					147037				
	ii.	Frame No.	FIAT-3590					FIAT-3642				
	iii.	Bolster No.	4104-VT					3963-P				
	iv.	Axle No.	129201/992		Z-3991			106075/630		105687/626		
	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.	106-51915	281-51910	106-10533	329-10579	029-10570	317-51908	021-51912	040-51915		
	vii.	R.B. Nos.	02914	30968	20482	30954	02956	30964	30960	29296		
	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	Outer	Inner	
i.	Make & nos.	G-14-3-179	G-14-3-077	G-14-3-005	G-14-3-057	G-14-3-146	G-14-3-151	G-14-3-006	G-14-3-199			
ii.	Ht. attest load	514	470	515	471	515	469	514	469			
iii.	Align .deviation	2	4	3	5	5	11	5	10			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie		Make		
	i.	Primary Outer Spring			G-14-4			G-14-4		GF		
	ii.	Primary inner Spring			G-14-4			G-14-4		GF		
	iii.	Primary Damper								GEREP		
	iv.	Secondary damper								GEREP		
	v.	Lateral Damper								GEREP		
	vi.	Yaw Damper								NIL		
	vii.	Brake cylinder & Caliper								KBI		
	viii.	Brake Disc								KBI/FTI		
	ix.	Ball joint Control arm								GMT		
	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								GMT		
	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		

LS3-4025



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4045	DISPATCH DATE				16.02.2015
2.	Railway	ECR	Type	LS3	Coach No.	15402	
3.	Booked to	SSE/C&W/RNCC					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	Sleeping	NIL	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	NA		
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	VIBGYOR	90/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
	I	BRAKE EQUIPMENT	KBI				
	ii	SEAT & BERTH	CPF				
	iii	BODY SIDE DOORS	JBM, SUKATA				
	iv	WATER TANKS	RAIL FAB				
	v	FLOOR BOARD	TAYAL				
	VI	PVC	PREMIER POLYFILM				
	Vii	LP SHEET	NA				
10.							
	10.1	Modification / Trail (if any):	NIL				
	10.2	Deviations if any:	NIL				



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4045		ECR		LS3		15402/C		24-01-2015	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	156076						156077			
	ii.	Frame No.	FIAT-3685						FIAT-3726			
	iii.	Bolster No.	4313-VT						4001-VT			
	iv.	Axle No.	C-4274			A-3122			C-4480		C-4799	
	v.	Wheel Dia.	916.00	916.00	917.00	917.00	916.00	916.00	917.50	917.00		
	vi.	Wheel Disc No.	177- 62314	210- 63309	015- 63309	213- 11611	003- 10570	343- 63314	203- 10582	288- 10582		
	vii.	R.B. Nos.	03033	03146	01356	03250	03454	02784	01225	01104		
	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-14-03- 137	G-14-03- 030	G-14-03- 003	G-14-03- 217	G-14-03- 160	G-14- 03-154	G-14- 03-153	G-14- 03-165			
ii.	Ht. attest load	514	470	515	468	513	466	515	470			
iii.	Align .deviation	4	12	4	15	2	9	2	10			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-3		G-14-3		GF			
	ii.	Primary inner Spring			G-14-3		G-14-3		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT,MTC			
	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					

LS3-4045