



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4007	DISPATCH DATE				10.9.2014
2.	Railway	NF	Type	LS3	Coach No.	14428	
3.	Booked to	SSE/C&W/GHY					
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	1105	
	v)	Buffer/CBC (Make)	FAVELLY	Fiba Device	NA	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	6 Sec	
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00	3.00	
			All Brake are applied	OK	OK	OK	
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min	No brake application	OK	OK	
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec.	Brake must apply	OK	OK	
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	NEROLACK	86/86		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:				Make		
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			ARR KAY		
	iii	BODY SIDE DOORS			SUKATA		
	iv	WATER TANKS			RUBICON,RAILFAB		
	v	FLOOR BOARD,PVC			TAYAL,RESPONSIVE		
	vi	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				
			4007		NF		LWSCN		14428		06-08-2014				
12.1	Wheel & Axle Details:		PP Side						NPP Side						
	i.	Bogie No.	146685						146686						
	ii.	Frame No.	FIAT-3178						FIAT-3273						
	iii.	Bolster No.	3854-P						4052-P						
	iv.	Axle No.	Z-3737			128108/984			Z-3528		126825/468				
	v.	Wheel Dia.	917.00	917.00	918.00	918.00	917.00	917.00	916.50	917.00					
	vi.	Wheel Disc No.	035-11605	149-11605	329-11605	280-11600	116-10568	175-11605	039-11605	240-10559					
	vii.	R.B. Nos.	36361	36046	36441	35967	35889	36229	35989	36013					
	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	
i.	Make & nos.		DN-14-1-125	DN-14-1-156	DN-14-1-138	DN-14-1-157	DN-14-1-268	DN-14-1-173	DN-14-1-382	DN-14-1-286					
ii.	Ht. attest load		513	471	514	472	515	472	515	470					
iii.	Align .deviation		10	10	11	11	9	11	11	12					
12.3	Items traceability:														
Sno.		Item				PP Side Bogie				NPP side Bogie				Make	
i.		Primary Outer Spring				G-13-11A				G-13-11A				GF	
ii.		Primary inner Spring				G-13-11				G-13-11				GF	
iii.		Primary Damper												KONI	
iv.		Secondary damper												GEREP	
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					



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4017	DISPATCH DATE				20.9.2014
2.	Railway	NFR	Type	LS3	Coach No.	14429	
3.	Booked to	SSE/C&W/GHY					
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	GS	86/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:	Make					
I	BRAKE EQUIPMENT	FAIVELEY					
ii	SEAT & BERTH	AAR KAY					
lii	BODY SIDE DOORS	JBM					
lv	WATER TANKS	RUBICON, RAILFAB					
v	FLOOR BOARD	TAYAL					
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			
			4017	NFR	LGS	14429	21-07-2014			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	146624				146625			
	ii.	Frame No.	FIAT-3253				FIAT-3019			
	iii.	Bolster No.	3832-P				3705-VT			
	iv.	Axle No.	128001/988		126349/747		Z-3368		129020/986	
	v.	Wheel Dia.	915.00	915.00	915.00	915.00	916.00	916.00	917.00	917.00
	vi.	Wheel Disc No.	062-10583	027-10533	240-11611	127-10570	181-10579	344-11607	144-11607	092-11600
	vii.	R.B. Nos.	36146	36095	36058	36488	36012	36190	36038	36478
	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-12-13-227	G-12-13-209	G-12-13-115	G-12-13-404	G-12-13-191	G-12-13-311	G-12-13-171	G-12-13-312	
ii.	Ht. attest load	515	469	513	467	519	469	514	470	
iii.	Align .deviation	4	20	3	19	1	20	1	17	
12.3	Items traceability:									
	S no.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			G-13-11		G-13-11		GF	
	ii.	Primary inner Spring			G-13-11		G-13-11		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							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							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.	4014	DISPATCH DATE				15.10.2014
2.	Railway	NFR	Type	LS3	Coach No.	14430	
3.	Booked to	SSE/C&W/GHY					
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)	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	86/87		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			FAIVELEY			
li	SEAT & BERTH			AAR KAY FOAMS			
lii	BODY SIDE DOORS			JBM			
lv	WATER TANKS			RUBICON			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
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	
			4014		NFR		LS3		14430		20-09-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146803						146804			
	ii.	Frame No.	FIAT-3427						FIAT-3426			
	iii.	Bolster No.	161/P/ASR						4208-GT			
	iv.	Axle No.	126045/415			105742/627			105853/621		128931/986	
	v.	Wheel Dia.	915.50	915.00	916.00	916.00	917.00	917.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	259-11603	086-51782	198-11603	100-11603	232-10568	094-10568	290-11610	232-11605	290-11610	232-11605
	vii.	R.B. Nos.	01549	00989	01337	01217	00839	00616	00495	00553	00495	00553
	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-4-14-224	G-4-14-336	G-4-14-234	G-4-14-393	G-4-14-216	G-4-14-335	G-4-14-243	G-4-14-344			
ii.	Ht. attest load	514	469	513	469	513	468	515	470			
iii.	Align .deviation	5	14	2	14	7	12	6	11			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-13-11		G-13-11		GF			
	ii.	Primary inner Spring			G-13-11		G-13-11		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							FTI			
	viii.	Brake Disc							KBI			
	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			
	xiv.	Traction centre elastic							SGA			
	xv.	Secondary rubber pad							TESPAK			
	xvi.	Rubber spring							MTC			
	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					