



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4015	DISPATCH DATE			30.6.2014
2.	Railway	WR	Type	LWACCN	Coach No.	131480
3.	Booked to	SSE/C&W/BCT				
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	NEROLAC	87/88	
	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			AMIT	
	iii.	SEATS/ BERTHS			AAR KAY	
	iv.	BODY SIDE DOOR			JBM	
	v.	VESTIBULE SLIDING DOOR			JBM	
	vi.	SALOON DOOR / COMPTT.DOOR			SUKATA	
	vii.	WATER TANKS			EC BLADE, AMIT & SHIVALIK	
	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:				WATER TANK GAUGE REMOVED



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Rail Coach Factory , Kapurthala

Shell No.:- 4015

RLY	WR	Type	LWACCN	Coach No.	131480
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6.0 Wheel & Axle details:

Items	PP Side				Non PP Side			
Bogie No.	146187				146188			
Frame No.	FIAT-2921				FIAT-2791			
Bolster No.	3668-GT				3682-VT			
Axle No.	RWF-109036		RWF-109668		RWF-110534		RWF-110320	
Wheel Diameter	918.00	918.00	918.00	918.00	917.00	917.00	918.00	918.00
Wheel Disc No.	304-51916	313-50798	305-50854	147-51781	002-51777	184-51777	131-51781	004-51781
R.B. Nos.	03380	03466	03469	03329	03624	03337	03756	03817
R. B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
RB Type	CARTRIDGE TAPER ROLLER BEARING							

6.1 Secondary suspension load deflection Values:

Description	Bogie PP side				Bogie NPP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & nos.	CMFSK-01-13-8836	CVFSK-12-12-9513	CMFSK-01-13-8836	CVFSK-12-12-9513	CMFSK-01-13-8836	CVFSK-12-12-9513	CMFSK-01-13-8836	CVFSK-12-12-9513
Ht. Attest Load	515	463	512	466	512	465	510	465
Align. deviation	7	43	9	41	17	31	15	32

6.2 Component traceability:

SNO	ITEM	PP Side Bogie	NPP side Bogie	Make
1	Primary Outer Spring batch no.	HZ-12	HZ-12	HZ
2	Primary inner Spring batch no	HZ-12	HZ-12	HZ
3	Primary Damper			SV
4	Secondary damper			SACHS
5	Lateral Damper			KONI
6	Brake cylinder & Caliper	H-6981/691,H-6332/691, H-7022/691,H-6333/691	H-6982/691,H-6327-691, H-6568/691,H-6309/691	KBI
7	Brake Disc			FTI
8	Ball joint Control arm			SGA
9	Lateral Bump stop			GMT
10	Traction center make			SARITA
11	Traction lever make			SARITA
12	Ball joint traction lever			GMT
13	Ball joint Traction centre			SGA
14	Secondary rubber pad			TESPAK
15	Rubber spring			GMT
16	Anti roll bar make			SARITA
17	Roll link make			SARITA
18	Fork make			EMSON

LWACCN-4015



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4020	DISPATCH DATE			30.6.2014	
2.	Railway	WR	Type	LWACCN	Coach No.	131460	
3.	Booked to	SSE/C&W/BCT					
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	
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			
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			TAYAL			
x	PVC FLOORING			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):			NIL			
10.2	Deviations if any:			WATER TANK GAUGE REMOVED			



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Rail Coach Factory , Kapurthala

Shell No.:-4020

Date: 12-02--2014

RLY	WR	Type	LWACCN	Coach No.	1314460
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6.0 Wheel & Axle details:

Items	PP Side				Non PP Side			
Bogie No.	146106				146107			
Frame No.	FIAT-2847				FIAT-2905			
Bolster No.	3281-VT				3613-VT			
Axle No.	RWF-110117		RWF-109023		RWF-108904		S-6411	
Wheel Diameter	918.00	918.00	917.00	917.50	918.00	917.50	918.00	917.50
Wheel Disc No.	031-50854	306-48032	181-48028	088-50859	042-46433	043-46889	066-48032	363-48028
R.B. Nos.	03741	03543	03322	025650	02187	03416	03771	02404
R. B. Make	TIM		TIM		TIM		TIM	
RB Type	CARTRIDGE TAPER ROLLER BEARING							

6.1 Secondary suspension load deflection Values:

Description	Bogie PP side				Bogie NPP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & nos.	G13-4-0631	G13-5-5276	G13-4-0666	G13-05-5317	G13-4-0639	G13-5-5159	G13-4-0626	G13-5-5074
Ht. Attest Load	514	468	512	466	511	466	511	467
Align. deviation	17	20	18	17	17	24	19	23

6.2 Component traceability:

SNO	ITEM	PP Side Bogie	NPP side Bogie	Make
1	Primary Outer Spring batch no.	L&S-02-13	L&S-02-13	L&S
2	Primary inner Spring batch no	L&S-02-12	L&S-02-12	L&S
3	Primary Damper			SACH
4	Secondary damper			GEREP
5	Lateral Damper			GEREP
6	Brake cylinder & Caliper	N13047/600,N13048/600 N13047/600,N13049/600	N13120/600,N13109/600 N13121/600,N13108/600	FTI
7	Brake Disc			FTI
8	Ball joint Control arm			SGA
9	Lateral Bump stop			GMT
10	Traction center make			SARITA
11	Traction lever make			SARITA
12	Ball joint traction lever			SGA
13	Ball joint Traction centre			GMT
14	Secondary rubber pad			TESPAK
15	Rubber spring			GMT
16	Anti roll bar make			SARITA
17	Roll link make			SARITA
18	Fork make			EMSON

LWACCN-4020



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4022	DISPATCH DATE			30.6.2014	
2.	Railway	WR	Type	LWACCN	Coach No.	131470	
3.	Booked to	SSE/C&W/BCT					
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	86/88	
	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		
	iv.	BODY SIDE DOOR			JBM		
	v.	VESTIBULE SLIDING DOOR			JBM		
	vi.	SALOON DOOR / COMPTT.DOOR			SUKATA		
	vii.	WATER TANKS			AMIT & E C BLADE		
	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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12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4022		WR		LWACCN		131470		15-5-14	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	146408					146414				
	ii.	Frame No.	FIAT-3070					FIAT-2741				
	iii.	Bolster No.	103HEI					130HEI				
	iv.	Axle No.	RWF-109284		W-4682		RWF-110262		W-4705			
	v.	Wheel Dia.	916.00	916.00	916.00	916.20	916.50	916.00	916.00	916.50	916.50	
	vi.	Wheel Disc No.	154/63 307	248/63 307	114/63 307	237/62 314	247/63 309	115/60 301	802/63 302	249/6330 9		
	vii.	R.B. Nos.	08984	07336	08988	09152	08788	08534	07867	08834		
	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-13-3-0600	G-13-3-4449	G-13-3-0605	G-13-3-4457	G-13-4-4707	G-13-4-5108	G-13-4-849	G-13-4-5116			
ii.	Ht. attest load	511	467	512	465	515	466	513	468			
iii.	Align .deviation	17	4	15	5	15	21	15	18			
12.3	Items traceability:											
	S no.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			L&S-2-13		L&S-2-13		L&S			
	ii.	Primary inner Spring			L&S-12-5		L&S-12-5		L&S			
	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							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							