



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4076	DISPATCH DATE			26.11.2014	
2.	Railway	NFR	Type	LWACCN	Coach No.	14135	
3.	Booked to	SSE/C&W/GHY					
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	89/90		
	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		VIBHU			
	iii.	SEATS/ BERTHS		AAR KAY FOAMS			
	iv.	BODY SIDE DOOR		JBM			
	v.	VESTIBULE SLIDING DOOR		JBM			
	vi.	SALOON DOOR		NA			
	vii.	WATER TANKS		AMIT & SHIVALIK			
	viii.	UIC VESTIBULE		KRP			
	ix	FLOOR BOARD		TAYAL			
	X	PVC		RESPONSIVE			
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	
			4076		NFR		LWACCN		14135		30-10-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146903						146904			
	ii.	Frame No.	FIAT-3483						FIAT-3533			
	iii.	Bolster No.	4115-GT						4238-VT			
	iv.	Axle No.	Z-3022			Z-3123			Z-3822		Z-3026	
	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.	040-11603	324-11603	029-11603	237-11611	352-11603	013-11603	118-11603	031-11603		
	vii.	R.B. Nos.	27491	27486	27494	27482	35809	35946	36516	35828		
	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.	YR-13-12-069	YR-13-11-53	YR-13-12-052	YR-13-11-54	YR-13-12-061	YR-13-11-57	YR-13-12-053	YR-13-11-58			
ii.	Ht. attest load	512	465.20	514	465.50	513.60	462	510	466.50			
iii.	Align .deviation	8.08	38.72	9.27	32.00	4.03	30.31	6.47	29.16			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			YR-13-11		YR-13-11		YR			
	ii.	Primary inner Spring			YR-13-12		YR-13-12		YR			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							SACHS			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							FTI			
	viii.	Brake Disc							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							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					

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4051	DISPATCH DATE				02.12.2014
2.	Railway	NFR	Type	LWACCN	Coach No.		14136
3.	Booked to		SSE/C&W/GHY				
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	88/89		
	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 & JBM	
	v.	VESTIBULE SLIDING DOOR				JBM	
	vi.	SALOON DOOR				NA	
	vii.	WATER TANKS				AMIT & SHIVALIK	
	viii.	UIC VESTIBULE				KRP	
	ix	FLOOR BOARD				TAYAL	
	X	PVC				RESPONSIVE	
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	
			4051		NF		LWACCN		14136/C		30-10-2014	
12.1	Wheel & Axle Details:		PP Side				NPP Side					
	i.	Bogie No.	146905				146906					
	ii.	Frame No.	FIAT-3521				FIAT-3523					
	iii.	Bolster No.	4183-GT				3937-					
	iv.	Axle No.	Z-3254		Z-3726		Z-3818		Z-3970			
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	020-11603	112-11603	368-11603	280-16339	069-11611	045-11603	286-11603	010-11603	11603	11603
	vii.	R.B. Nos.	36454	36138	36062	36112	35914	36126	36009	36630	36630	36630
	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.	YR-13-12-50	YR-13-11-27	YR-13-12-51	YR-13-11-32	YR-13-12-58	YR-13-11-51	YR-13-12-49	YR-13-11-50	YR-13-11-50	YR-13-11-50	
ii.	Ht. attest load	513.40	465.40	511.50	464.20	511.60	464.00	514.30	464.00	514.30	464.00	
iii.	Align .deviation	8.08	33.58	10.98	464.20	11.53	24.91	9.91	22.82	9.91	22.82	
12.3	Items traceability:											
Sno.		Item		PP Side Bogie		NPP side Bogie		Make				
i.	Primary Outer Spring		YR-13-11		YR-13-11		YR					
ii.	Primary inner Spring		YR-13-12		YR-13-12		YR					
iii.	Primary Damper						KONI					
iv.	Secondary damper						SACHS					
v.	Lateral Damper						KONI					
vi.	Yaw Damper						NIL					
vii.	Brake cylinder & Caliper						FTI					
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						GMT					
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						EMSON					
12.4	i.	Modification / Trial (if any):				NIL						
	ii.	Deviations (if any):				NIL						

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	4071	DISPATCH DATE				03.12.2014
2.	Railway	NFR	Type	LWACCN	Coach No.	14134	
3.	Booked to	SSE/C&W/GHY					
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			FAIVELEY			
ii.	CDTS/ BIO TOILET			ESCORTS			
iii.	SEATS/ BERTHS			AAR KAY FOAMS			
iv.	BODY SIDE DOOR			JBM			
v.	VESTIBULE SLIDING DOOR			JBM			
vi.	SALOON DOOR			NA			
vii.	WATER TANKS			KUTEER & SHIVALIK			
viii.	UIC VESTIBULE			KRP			
ix	FLOOR BOARD			TAYAL			
X	PVC			RESPONSIVE			
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	
			4071		NF		LWACCN		14134/C		28-10-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146895						146896			
	ii.	Frame No.	ECBT-870						ECBT-871			
	iii.	Bolster No.	4248-VT						4252-VT			
	iv.	Axle No.	127909/988			Z-3250			106383/629		126564/481	
	v.	Wheel Dia.	916.00	916.00	917.50	918.00	915.50	915.50	916.00	916.00		
	vi.	Wheel Disc No.	304-16339	207-11603	167-11603	161-11603	265-11603	128-11603	381/11609	205-11596		
	vii.	R.B. Nos.	32093	32141	32058	32026	01197	00063	01008	01120		
	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.	YR-13-12-018	YR-13-11-76	YR-13-12-011	YR-13-11-81	YR-13-12-020	YR-13-11-79	YR-13-12-017	YR-13-11-83			
ii.	Ht. attest load	514	465.30	511.30	464.10	510	467.50	510	465.40			
iii.	Align .deviation	13.68	30.33	12.30	28.62	19.55	36.32	19.70	31.45			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			YR-13-11		YR-13-11		YR			
	ii.	Primary inner Spring			YR-13-12		YR-13-12		YR			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							SACHS			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							FTI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							MGN,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							

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4074	DISPATCH DATE				04.12.2014
2.	Railway	NFR	Type	LWACCN	Coach No.		14137
3.	Booked to		SSE/C&W/GHY				
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	86/87	
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						STONE INDIA
iii.	SEATS/ BERTHS						SAVITRI
iv.	BODY SIDE DOOR						SUKATA & JBM
v.	VESTIBULE SLIDING DOOR						J R ENGG.
vi.	SALOON DOOR						NA
vii.	WATER TANKS						AMIT & SHIVALIK
viii.	UIC VESTIBULE						KRP
ix	FLOOR BOARD						TAYAL
X	PVC						RESPONSIVE
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	
			4074		NFR		LWACCN		14137/C		20-11-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146925						146926			
	ii.	Frame No.	ECBT-882						ECBT-876			
	iii.	Bolster No.	3976-VT						4320-VT			
	iv.	Axle No.	Z-3378			Z-3961			RWF-109605		Z-3540	
	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.	032-62321	132-11600	148-10570	276-10576	066-10579	001-10582	220-10582	320-10559		
	vii.	R.B. Nos.	36213	01419	27698	28711	32015	32350	30341	36783		
	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.	YR-13-12-021	YR-13-11-90	YR-13-12-023	YR-13-11-86	YR-13-12-024	YR-13-11-83	YR-13-12-024	YR-13-11-89			
ii.	Ht. attest load	512.10	464	511.90	463.40	510	464.70	512.30	467.40			
iii.	Align .deviation	7.24	28.70	7.31	35.42	7.35	27.27	7.62	27.94			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			YR-13-11		YR-13-11		YR			
	ii.	Primary inner Spring			YR-13-12		YR-13-12		YR			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							SACHS			
	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							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					

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