



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4015	DISPATCH DATE			<b>16.04.2015</b>
2.	Railway	NR	Type	LWFAC	Coach No.	<b>153001</b>
3.	Booked to		SSE/C&W/NDLS			
4.	Tare Weight of Coach		<b>43.6 T</b>			
5.	Carrying Capacity	Seating	24	Sleeping	24	Luggage <b>NIL</b>
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 <sup>2</sup>		6 –10 sec	6 Sec
			Max Pressure in BC		3.00 ± 0.15 Kg/cm <sup>2</sup>	3.00
			All Brake are applied		OK	OK
7.2	Insensitivity		Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min		No brake application	OK
7.3	Sensitivity		Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.		Brake must apply	OK
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE	
8.1	PAINT		PU PAINT	ADVANCE	88/88	
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					ORIENTAL
iii.	SEATS/ BERTHS					AAR KAY FOAMS
iv.	BODY SIDE DOOR					JBM, MRC
v.	VESTIBULE SLIDING DOOR					KALSI
vi.	SALOON DOOR					KALSI
vii.	WATER TANKS					AMIT, SHIVALIK
viii.	UIC VESTIBULE					CEMCON
ix	FLOOR BOARD					NARBADA
x	PVC FLOORING					RESPONSIVE
10.						
i	Modification / Trail (if any):				NIL	
ii	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4015		NR		LWFAC		153001		07/01/2015	
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	147004						147086			
	ii.	<b>Frame No.</b>	FIAT-3637						FIAT-FM-80			
	iii.	<b>Bolster No.</b>	3865-P						4387-VT			
	iv.	<b>Axle No.</b>	Z-3285		127899/987		A-2811		126026/475			
	v.	<b>Wheel Dia.</b>	915.00	915.00	915.00	915.00	916.00	916.00	916.00	916.00		
	vi.	<b>Wheel Disc No.</b>	259-10559	185-10582	229-51908	071-51916	037-10570	271-51992	204-51908	316-51908		
	vii.	<b>R.B. Nos.</b>	31680	29908	01397	31618	36042	35883	36130	36222		
	viii.	<b>R.B. Make</b>	SKF		SKF		TIM		TIM			
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
12.2	<b>Secondary suspension load deflection Values:</b>											
<b>Description</b>		<b>Secondary 1</b>		<b>Secondary 2</b>		<b>Secondary 1</b>		<b>Secondary 2</b>				
		<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	
i.	<b>Make &amp; nos.</b>	G12-8-1989	G12-8-3627	G12-8-1969	G12-8-3458	G12-4-652	G12-11-4173	G12-4-668	G12-8-2970			
ii.	<b>Ht. attest load</b>	511	467	511	467	509	466	511	467			
iii.	<b>Align .deviation</b>	1	25	2	28	7	16	3	11			
12.3	<b>Items traceability:</b>											
	<b>Sno.</b>	<b>Item</b>			<b>PP Side Bogie</b>		<b>NPP side Bogie</b>		<b>Make</b>			
	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							GEREP/KONI			
	iv.	Secondary damper							SACHS/GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							FTI,KBI			
	ix.	Ball joint Control arm							GMT			
	x.	Lateral Bump stop							GMT,MTC			
	xi.	Traction center make							SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT,SGA			
	xiv.	Traction centre elastic							GMT,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.	<b>Modification / Trial (if any):</b>							NIL			
	ii.	<b>Deviations (if any):</b>							NIL			

LWFAC-4015



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			18.04.2015
2.	Railway	NR	Type	LWFAC	Coach No.	153002
3.	Booked to	SSE/C&W/NDLS				
4.	Tare Weight of Coach	43.6 T				
5.	Carrying Capacity	Seating	24	Sleeping	24	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	1102	
	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 <sup>2</sup>	6 –10 sec	6 Sec	
			Max Pressure in BC	3.00 ± 0.15 Kg/cm <sup>2</sup>	3.00	
			All Brake are applied	OK	OK	
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min	No brake application	OK	
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.	Brake must apply	OK	
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE	
	8.1	PAINT	PU PAINT	ADVANCE	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		ORIENTAL		
	iii.	SEATS/ BERTHS		AAR KAY FOAMS		
	iv.	BODY SIDE DOOR		SUKATA		
	v.	VESTIBULE SLIDING DOOR		KALSI		
	vi.	SALOON DOOR		KALSI		
	vii.	WATER TANKS		KUTEER, SHIVALIK		
	viii.	UIC VESTIBULE		FRIKMART		
	ix	FLOOR BOARD		TAYAL		
	x	PVC FLOORING		RESPONSIVE		
10.						
	i	Modification / Trail (if any):				NIL
	ii	Deviations if any:				NIL



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4017	NR	LWFAC	153002/C	23-01-2015			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	156070				156071			
	ii.	Frame No.	FIAT-3768				FIAT-3744			
	iii.	Bolster No.	4351-VT				4356-VT			
	iv.	Axle No.	C-3966		C-0090		B-9971		C-4495	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	348-63307	097-61077	034-63302	127-63309	037-62321	173-62314	126-63302	022-63309
	vii.	R.B. Nos.	02818	03117	03401	02924	02982	03297	02781	02794
	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.	CMFSK-13-01-170	G-12-8-2794	CMFSK-13-01-168	G-12-8-2787	CMFSK-13-01-29	G-12-8-2858	CMFSK-13-01-30	G-12-8-2824	
ii.	Ht. attest load	512	467	507.5	466	508.5	467	511	467	
iii.	Align .deviation	10	30	10	35	21	21	23	25	
12.3	Items traceability:									
	Sno.	Item		PP Side Bogie		NPP side Bogie		Make		
	i.	Primary Outer Spring		L&S-13-2		L&S-13-2		L&S		
	ii.	Primary inner Spring		L&S-13-2		L&S-13-2		L&S		
	iii.	Primary Damper						KONY		
	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		
	xi.	Traction center make						EMSON		
	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				

LWFAC-4017



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

**ROLLING STOCK CERTIFICATE**

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4012	DISPATCH DATE			<b>07.05.2015</b>	
2.	Railway	<b>NR</b>	Type	<b>LWFAC</b>	Coach No.	<b>153003</b>	
3.	Booked to	<b>SSE/C&amp;W/NDLS</b>					
4.	Tare Weight of Coach	<b>43.6 T</b>					
5.	Carrying Capacity	Seating	24	Sleeping	24	Luggage	<b>NIL</b>
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	1104		
	v)	Buffer/CBC (Make )	<b>ESCORTS</b>	<b>Fiba Device</b>	<b>NIL</b>		
7.	Air Brake Testing:		Description	Specified	Observed		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup>	6 –10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm <sup>2</sup>	3.00		
			All Brake are applied	OK	OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min	No brake application	OK		
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.	Brake must apply	OK		
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	<b>PU PAINT</b>	<b>ADVANCE</b>	<b>88/88</b>		
	8.2	APPLICATION OF PCN-123	<b>SATISFACTORY</b>				
	8.3	INSUALTION	<b>SATISFACTORY</b>				
9.	Traceability of Furnishing Items:					Make	
	i.	BRAKE EQUIPMENT				<b>KBI</b>	
	ii.	CDTS/ BIO TOILET				<b>RAIL FAB</b>	
	iii.	SEATS/ BERTHS				<b>AAR KAY FOAMS</b>	
	iv.	BODY SIDE DOOR				<b>SUKATA</b>	
	v.	VESTIBULE SLIDING DOOR				<b>KALSI</b>	
	vi.	SALOON DOOR				<b>KALSI</b>	
	vii.	WATER TANKS				<b>SHIVALIK, KUTEER</b>	
	viii.	UIC VESTIBULE				<b>FRIKMART</b>	
	ix	<b>FLOOR BOARD</b>				<b>NARBADA</b>	
	x	<b>PVC FLOORING</b>				<b>RESPONSIVE</b>	
10.							
	i	Modification / Trail (if any):				NIL	
	ii	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4012		NR		LWFAC		153003		08-01-2015	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	156020						156021			
	ii.	Frame No.	FIAT-3708						FIAT-3675			
	iii.	Bolster No.	4362-VT						4438-GT			
	iv.	Axle No.	A-2812			A-3063			A-2818		A-2870	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	917.00	917.00		
	vi.	Wheel Disc No.	205-11605	030-11607	329-11610	223-11896	179-11605	324-11605	323-11610	020-11611		
	vii.	R.B. Nos.	00859	00929	36537	36287	00993	01135	01326	00985		
	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.	YR-13-12-53	YR-13-06-06	YR-13-12-55	YR-13-06-159	YR-13-12-056	YR-13-06-166	YR-13-12-054	YR-13-06-162			
ii.	Ht. attest load	509.40	467.20	509.50	467.20	508.70	466.50	508.90	466.80			
iii.	Align .deviation	31.36	26.52	30.70	21.47	25.22	17.43	24.13	14.35			
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							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							FTIBI			
	ix.	Ball joint Control arm							MGN,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				

LWFAC-4012