



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4005	DISPATCH DATE				18.11.2014
2.	Railway	NR	Type	LWFCZAC	Coach No.	143879	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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	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 <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	VIBGYOR	89/89			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:				Make		
i.	BRAKE EQUIPMENT			FAVELLY			
iii.	CDTS			AIKON			
iv.	FLOOR,SEAT & BERTH,PVC			NARBADA,SATLEJ,RESPONSIVE			
v.	BODY SIDE DOORS			JBM			
vi.	SALOON COMPTT DOORS			HANSPAL			
vii.	VESTIBULE SLIDING DOOR			KALSI			
viii.	WATER TANKS			SHIVALIK, KUTEER			
ix	UIC VESTIBULE			CEMCON			
x	LUGGAGE RACK,LP PANNEL			HANSPAL, NA			
10.							
10.1	Modification / Trail (if any):			NIL			
10.2	Deviations if any:			NIL			



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12.	<b>Bogie Details:</b>		<b>Shell No.</b>	<b>Railway</b>	<b>Type</b>	<b>Coach No.</b>	<b>Dispatch Date</b>			
			4005	NR	LWFCZAC	143879	30-09-2014			
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>				<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	146833				146834			
	ii.	<b>Frame No.</b>	FIAT-3460				FIAT-3480			
	iii.	<b>Bolster No.</b>	3893-VT				4089-GT			
	iv.	<b>Axle No.</b>	128382/991	125600/377	126501/481	126981/476				
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	<b>Wheel Disc No.</b>	162-11611	096-11600	182-10582	094-10583	181-10582	296-10559	165-11611	247-10570
	vii.	<b>R.B. Nos.</b>	31347	31345	31403	32331	36783	37671	36529	37673
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF	
	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>	
i.	<b>Make &amp; nos.</b>	G-12-4A-1090	G-12-4-1729	G-12-4A-1095	G-12-4-1678	G-12-4-996	G-12-4-1909	G-12-4-986	G-12-4-1682	
ii.	<b>Ht. attest load</b>	511	467	511	467	511	467	511	466	
iii.	<b>Align .deviation</b>	2	19	2	17	6	22	3	19	
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		G-12-6		G-12-6		GF		
	ii.	Primary inner Spring		G-12-5		G-12-5		GF		
	iii.	Primary Damper						SACHS		
	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						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.	<b>Modification / Trial (if any):</b>				NIL				
	ii.	<b>Deviations (if any):</b>				NIL				

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4003	DISPATCH DATE			18.11.2014	
2.	Railway	NR	Type	LWFCZAC	Coach No.	143877	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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	1098	1090			
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 <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	VIBGYOR	89/87		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
i.	BRAKE EQUIPMENT			FAVELLY			
iii.	CDTS			DARSHAN			
iv.	FLOOR,SEAT & BERTH,PVC			NARWADA,SATLEJ,RESPONSIVE			
v.	BODY SIDE DOORS			JBM			
vi.	SALOON COMPTT DOORS			AIR FLOW			
vii.	VESTIBULE SLIDING DOOR			KALSI			
viii.	WATER TANKS			AMIT &SHIVALIK			
ix	UIC VESTIBULE			CEMCON			
x	LUGGAGE RACK,LP PANNEL			RAIL TECH ,NA			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



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12.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4003		NR		LWFCZAC		143877		26-09-2014	
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	146825					146826				
	ii.	<b>Frame No.</b>	FIAT-3110					FIAT-3461				
	iii.	<b>Bolster No.</b>	4216-VT					4224-VT				
	iv.	<b>Axle No.</b>	126137/471		128245/991		106555/632		105806/627			
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vi.	<b>Wheel Disc No.</b>	094-63301	173-10582	037-11611	091-11605	201-11611	057-61077	170-10570	180-10568		
	vii.	<b>R.B. Nos.</b>	00984	00934	01301	00967	00861	01004	00923	01010		
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF			
	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>			
i.	<b>Make &amp; nos.</b>	G-12-4-911	G-12-4-1907	G-12-4-1063	G-12-4-1816	G-12-4-1069	G-12-4-1789	G-12-4-1124	G-12-4-1861			
ii.	<b>Ht. attest load</b>	512	467	512	468	511	469	510	468			
iii.	<b>Align .deviation</b>	6	20	7	20	11	21	8	22			
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			G-12-6			G-12-6			GF	
	ii.	Primary inner Spring			G-12-6			G-12-6			GF	
	iii.	Primary Damper									SACHS	
	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									GMT	
	x.	Lateral Bump stop									GMT	
	xi.	Traction center make									EMSON	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									SGA	
	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.	<b>Modification / Trial (if any):</b>			NIL							
	ii.	<b>Deviations (if any):</b>			NIL							

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4004	DISPATCH DATE			18.11.2014	
2.	Railway	NR	Type	LWFCZAC	Coach No.	143878	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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	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 <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	VIBGYOR	89/89			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:			Make			
i.	BRAKE EQUIPMENT			FAVELLY			
iii.	CDTS			AIKON'			
iv.	FLOOR,SEAT & BERTH,PVC			TAYAL,SATLEJ,RESPONSIVE			
v.	BODY SIDE DOORS			JBM			
vi.	SALOON COMPTT DOORS			AIR FLOW			
vii.	VESTIBULE SLIDING DOOR			KALSI			
viii.	WATER TANKS			KUTEER &SHIVALIK			
ix	UIC VESTIBULE			CEMCON			
x	LUGGAGE RACK,LP PANNEL			RAIL TECH ,KAE			
10.							
10.1	Modification / Trail (if any):			NIL			
10.2	Deviations if any:			NIL			

रेल डिब्बा कारखाना, कपूरथला



12.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4004	NR	LWFCZAC	143878	15-10-2014			
12.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	146863				146864			
	ii.	Frame No.	FIAT-3496				FIAT-3486			
	iii.	Bolster No.	4270-VT				3890-P			
	iv.	Axle No.	106236/629		W-4713		126975/476		106496/628	
	v.	Wheel Dia.	916.00	916.50	917.50	917.00	917.00	916.50	916.50	916.00
	vi.	Wheel Disc No.	023-61077	310-10582	080-11605	276-11605	125-68302	096-10582	091-10583	207-11600
	vii.	R.B. Nos.	32209	31527	36186	37970	31975	31380	36421	36353
	viii.	R.B. Make	SKF		SKF		SKF		SKF	
ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING								
12.2	<b>Secondary suspension load deflection Values:</b>									
<b>Description</b>		Secondary 1		Secondary 2		Secondary 1		Secondary 2		
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	<b>Make &amp; nos.</b>	G-12-4-1082	G-12-4-2104	G-12-4-970	G-12-4-1807	G-12-4-959	G-12-4-1856	G-12-4-1149	G-12-4-1853	
ii.	<b>Ht. attest load</b>	508	467	509	466	511	466	509	466	
iii.	<b>Align .deviation</b>	3	20	7	21	10	15	7	14	
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	G-12-6			G-12-6		GF		
	ii.	Primary inner Spring	G-12-5			G-12-5		GF		
	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						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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