



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6054	DISPATCH DATE				21.01.2017
2.	Railway	NR	Type	LS3	Coach No.	163509	
3.	Booked to	SSE/C&W/NDLS					
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 )	SANROK	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	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		OVPL			
	iii	BODY SIDE DOORS		JBM, SUKATA			
	iv	WATER TANKS		RAIL FAB			
	v	FLOOR BOARD		RESPONSIVE			
	VI	PVC		TWPL			
	Vii	LP SHEET		PL			
10.							
	10.1	Modification / Trail (if any):			NIL		
	10.2	Deviations if any:			NIL		



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11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			6054		NR		LS3		163509		27-12-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	167138						167140			
	ii.	<b>Frame No.</b>	FIAT-5350						FIAT-5251			
	iii.	<b>Bolster No.</b>	6495-P						6487-P			
	iv.	<b>Axle No.</b>	R-3123			R-2650			P-9777		R-2448	
	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>	00093-6133	00160-6133	00145-6132	00157-6133	00145-6018	00149-6018	00113-6179	00186-6133		
	vii.	<b>R.B. Nos.</b>	86865	86196	86870	86826	80513	83501	93369	86852		
	viii.	<b>R.B. Make</b>	SKF			SKF			SKF		SKF	
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	<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>	RSK-16-6-100	RSK-15-5-975	RSK-16-6-302	RSK-15-5-969	RSK-16-4-299	RSK-15-10-958	RSK-16-4-020	RSK-15-10-951			
ii.	<b>Ht. at test load</b>	516	469	516	469	514	464	515	470			
iii.	<b>Align .deviation</b>	5	6	6	7	10	9	12	10			
11.3	<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-14-3			G-14-3			GF	
	ii.	Primary inner Spring			RSK-16-2			RSK-16-2			RSK	
	iii.	Primary Damper			352,358,413,411			353,438,361,535			GABRIEL	
	iv.	Secondary damper			054,051			053,052			GABRIEL	
	v.	Lateral Damper			0109			0242			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			L16021/600,L16002/600 L16025/600,L16044/600			G16157/600,G16186/600 G16154/600,G16183/600			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									LWF, SARITA	
	xiii.	Ball joint traction lever									SGA	
	xiv.	Traction centre elastic									SGA	
	xv.	Secondary rubber pad									TECSPACK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									SARITA	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
11.4	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.	6052	DISPATCH DATE				21.01.2017
2.	Railway	NR	Type	LS3	Coach No.	163506	
3.	Booked to	SSE/C&W/NDLS					
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 )		SANROK		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	87/88	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:						Make
I	BRAKE EQUIPMENT						KBI
ii	SEAT & BERTH						OVPL
lii	BODY SIDE DOORS						SUKATA
lv	WATER TANKS						RAIL FAB, RUBICONE
v	FLOOR BOARD						RESPONSIVE
VI	PVC						TWPL
Vii	LP SHEET						--
10.							
10.1	Modification / Trail (if any):					NIL	
10.2	Deviations if any:					NIL	



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11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			6052		NR		LS3		163506		05-12-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	167076						167077			
	ii.	<b>Frame No.</b>	FIAT-5339						FM-626			
	iii.	<b>Bolster No.</b>	6231-GT						6407-P			
	iv.	<b>Axle No.</b>	R-3618			R-3603			N-6246		K-4181	
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.50	916.00	916.00	916.00	916.00		
	vi.	<b>Wheel Disc No.</b>	00052-6176	00018-6176	00202-7196	00087-07198	06052-6QK6	03975-6QH0	07227-6QJ6	06329-6QH7		
	vii.	<b>R.B. Nos.</b>	93363	94810	94273	93360	62901	62909	94418	94417		
	viii.	<b>R.B. Make</b>	SKF			SKF			SKF		SKF	
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	<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>	RSK-16-4-345	FSK-16-7-014	RSK-16-4-385	FSK-16-7-018	RSK-16-4-244	FSK-16-7-02	RSK-16-4-103	FSK-16-7-015			
ii.	<b>Ht. at test load</b>	513	467.50	512	467.50	515	468.50	513	467.50			
iii.	<b>Align .deviation</b>	8	9	9	10	6	8	8	8			
11.3	<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			RSK-15-11			RSK-15-11			RSK	
	ii.	Primary inner Spring			RSK-16-2			RSK-16-2			RSK	
	iii.	Primary Damper			174,511,076,317			464,269,478,350			GEREP	
	iv.	Secondary damper			205,115			221,096			GEREP	
	v.	Lateral Damper			501			418			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			3582/691,3505/691 3574/691,3514/691			3712/691,4255/691 4251/691,4257/691			KBI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									GMT,MGN	
	xi.	Traction center make									SARITA	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									SGA	
	xiv.	Traction centre elastic									SGA,GMT	
	xv.	Secondary rubber pad									TECSPACK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									SARITA	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON, SARITA	
11.4	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.	6053	DISPATCH DATE				19.01.2017
2.	Railway	NR	Type	LS3	Coach No.	163508	
3.	Booked to	SSE/C&W/NDLS					
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 )	SANROK		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	GS	86/85		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
I	BRAKE EQUIPMENT			FAIVELEY			
ii	SEAT & BERTH			OVPL			
lii	BODY SIDE DOORS			SUKATA, JBM			
lv	WATER TANKS			RAIL FAB			
v	FLOOR BOARD			RESPONSIVE			
VI	PVC			TWPL			
Vii	LP SHEET			--			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



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11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			6053		NR		LS3		163508/C		24-12-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	167141						167139			
	ii.	<b>Frame No.</b>	FIAT-4863						FIAT-5374			
	iii.	<b>Bolster No.</b>	6456-P						6444-GT			
	iv.	<b>Axle No.</b>	R-3137			K-2514			R-2337		R-3244	
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	916.00	916.50	916.0	916.00		
	vi.	<b>Wheel Disc No.</b>	00097-6133	00143-6006	00189-6139	00154-6139	00050-6137	00157-6109	00038-6108	00166-6133		
	vii.	<b>R.B. Nos.</b>	87619	81600	81563	80725	99935	80540	99926	62736		
	viii.	<b>R.B. Make</b>	SKF			SKF			SKF		SKF	
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	<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>	RSK-16-4-342	RSK-15-10-909	RSK-16-4-290	RSK-15-10-649	RSK-16-6-306	RSK-15-5-484	RSK-16-6-284	RSK-15-5-484			
ii.	<b>Ht. at test load</b>	516	472	515	470	514	479	513	479			
iii.	<b>Align .deviation</b>	6	4	7	5	7	4	6	3			
11.3	<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-14-3			G-14-3			GF	
	ii.	Primary inner Spring			RSK-16-2			RSK-16-2			RSK	
	iii.	Primary Damper			450,356,412,355			488,382,385,386			GABRIEL	
	iv.	Secondary damper			367,62			87,85			GEREP	
	v.	Lateral Damper			0110			0146			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			G16035/600,G16218/600 G16040/600,G16209/600			L16007/600,L16099/600 L16005/600,L16050/600			FTI	
	viii.	Brake Disc									FTI,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									TECSPACK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									SARITA	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
11.4	i.	<b>Modification / Trial (if any):</b>						NIL				
	ii.	<b>Deviations (if any):</b>						NIL				