



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6005	DISPATCH DATE			23.01.2017
2.	Railway	NR	Type	LWFAC	Coach No.	163007
3.	Booked to	SSE/C&W/DLI				
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	1103	1100	
	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 <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	85/86	
	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	RAIL FAB, JSL			
	iii.	SEATS/ BERTHS	AAR KAY FOAMS			
	iv.	BODY SIDE DOOR	JBM			
	v.	VESTIBULE SLIDING DOOR	JR			
	vi.	SALOON DOOR	KALSI, KALSI			
	vii.	WATER TANKS	AMIT, SHIVALIK			
	viii.	UIC VESTIBULE	KRP			
	ix	FLOOR BOARD	TAYAL			
	x	PVC FLOORING	RESPONSIVE			
10.						
	i	Modification / Trail (if any):				NIL
	ii	Deviations if any:				NIL



11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			6005		NR		LWFAC		163007		21-09-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	166839					166841				
	ii.	<b>Frame No.</b>	FIAT-5170					FIAT-5103				
	iii.	<b>Bolster No.</b>	6176-GT					6183-GT				
	iv.	<b>Axle No.</b>	P-3522		P-9115			N-0875		N-0589		
	v.	<b>Wheel Dia.</b>	917.50	917.00	916.50	916.50	917.00	917.00	916.00	916.50		
	vi.	<b>Wheel Disc No.</b>	7191-00075	00115-7301	00095-7196	00087-7301	05116-00029	07196-00172	7301-00181	7301-00067		
	vii.	<b>R.B. Nos.</b>	01619	01476	02559	03584	01096	02121	01560	02365		
	viii.	<b>R.B. Make</b>	TIMKEN		TIMKEN			TIMKEN		TIMKEN		
	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>			
			Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner		
i.	<b>Make &amp; nos.</b>	RSK-15-5-02	ABOK-16-9-39	RSK-15-5-402	ABOK-16-9-40	RSK-15-5-684	ABOK-16-9-35	RSK-15-5-410	ABOK-16-9-74			
ii.	<b>Ht. at test load</b>	512	464	512	464	512	465	510	466			
iii.	<b>Align .deviation</b>	15	11	12	10	28	12	26	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-15-10			RSK-15-10			RSK	
	ii.	Primary inner Spring			RSK-14-5			RSK-14-5			RSK	
	iii.	Primary Damper			3220,2954,3069,3113			2960,3053,2997,2916			KNORR	
	iv.	Secondary damper			0126,0365			0393,0404			SV	
	v.	Lateral Damper			0461			0122			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			G16303/600,G16337/600 G16305/600,G16334/600			G16311/600,16324/600 16309/600,G16318/600			FTI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									MGN	
	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									TECSPACK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									SARITA	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									SARITA	
11.4	i.	<b>Modification / Trial (if any):</b>					NIL					
	ii.	<b>Deviations (if any):</b>					NIL					



**ROLLING STOCK CERTIFICATE**

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6001	DISPATCH DATE			23.01.2017
2.	Railway	NR	Type	LWFAC	Coach No.	163005
3.	Booked to	SSE/C&W/DLI				
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	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 <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	85/86	
	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	RAIL FAB, JSL			
	iii.	SEATS/ BERTHS	AAR KAY FOAMS			
	iv.	BODY SIDE DOOR	NEERA			
	v.	VESTIBULE SLIDING DOOR	JR			
	vi.	SALOON DOOR	KALSI, KALSI			
	vii.	WATER TANKS	AMIT, MANOJ			
	viii.	UIC VESTIBULE	SSIPL			
	ix	FLOOR BOARD	TAYAL			
	x	PVC FLOORING	RESPONSIVE			
10.						
	i	Modification / Trail (if any):				NIL
	ii	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>			
			6001	NR	LWFAC	163005	12-10-2016			
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>				<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	166888				166900			
	ii.	<b>Frame No.</b>	FM-644				FIAT-5222			
	iii.	<b>Bolster No.</b>	6246-GT				6257-GT			
	iv.	<b>Axle No.</b>	N-7017		R-2477		R-2322		R-9512	
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.00	917.50	917.00	917.50	917.00
	vi.	<b>Wheel Disc No.</b>	00026-7196	09070-7196	00020-6QH5	03163-6QL7	00118-7301	00015-7198	00030-7198	00210-7198
	vii.	<b>R.B. Nos.</b>	05796	05353	05327	06196	04970	05553	05616	05415
	viii.	<b>R.B. Make</b>	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	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-16-6-716	ABOK-16-9-01	RSK-15-5-712	ABOK-16-9-07	RSK-16-9-607	RSK-13-2-252	RSK-16-9-721	RSK-13-2-035	
ii.	<b>Ht. at test load</b>	510	468	510	468	511	466	512	466	
iii.	<b>Align .deviation</b>	10	14	11	18	19	47	19	41	
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-15-10			RSK-15-10			RSK	
	ii.	Primary inner Spring	RSK-16-3			RSK-16-3			RSK	
	iii.	Primary Damper	4362,4360,4345,4336			4342,4344,4338,4363			KNORR	
	iv.	Secondary damper	0458,0257			0535,0645			SV	
	v.	Lateral Damper	0470			0313			SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper	4196/691,4185/691 4195/691,4184/691			4128/691,4128/691 4127/691,4125/691			KBI	
	viii.	Brake Disc							KBI	
	ix.	Ball joint Control arm							MGN	
	x.	Lateral Bump stop							MGN	
	xi.	Traction center make							EMSON	
	xii.	Traction lever make							SARITA	
	xiii.	Ball joint traction lever							MGN	
	xiv.	Traction centre elastic							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	
11.4	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.	5010	DISPATCH DATE			18.01.2017	
2.	Railway	NR	Type	LWFAC	Coach No.	163008	
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		1103	1100	
v)	Buffer/CBC (Make )				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		GS	86/87	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
i.	BRAKE EQUIPMENT						
ii.	CDTS/ BIO TOILET		RAIL FAB, JSL				
iii.	SEATS/ BERTHS		AAR KAY FOAMS				
iv.	BODY SIDE DOOR		SUKATA				
v.	VESTIBULE SLIDING DOOR		JR				
vi.	SALOON DOOR		KALSI, KALSI				
vii.	WATER TANKS		SHIVALIK, KUTEER				
viii.	UIC VESTIBULE		SSIPL				
ix	FLOOR BOARD		TAYAL				
x	PVC FLOORING		RESPONSIVE				
10.							
i	Modification / Trail (if any):				NIL		
ii	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला

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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>			
			5010	NR	LWFAC	163008	08-10-2016			
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>				<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	166890				166891			
	ii.	<b>Frame No.</b>	FIAT-5163				FIAT-5175			
	iii.	<b>Bolster No.</b>	5674-PS				5653-VT			
	iv.	<b>Axle No.</b>	R-3096		N-6357		R-3306		R-3513	
	v.	<b>Wheel Dia.</b>	916.00	916.00	917.50	918.00	918.00	918.00	918.00	918.00
	vi.	<b>Wheel Disc No.</b>	03723-6QK3	03725-6QK3	04501-6QK9	02045-6QG0	00938-6QV8	02769-5VJ6	03733-6QV3	03460-6QG8
	vii.	<b>R.B. Nos.</b>	05364	05360	05398	05357	02431	02526	05803	05721
	viii.	<b>R.B. Make</b>	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	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-16-05-1045	AFJ-16-09-83	RSK-16-05-1040	AFJ-16-09-86	RSK-16-05-1021	AFJ-16-09-84	RSK-16-05-835	AFJ-16-09-81	
ii.	<b>Ht. at test load</b>	511	468	512	466	509	468	511	468	
iii.	<b>Align .deviation</b>	3	10	7	14	11	14	12	17	
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-16-1		RSK-16-1		RSK	
	ii.	Primary inner Spring			RSK-16-3		RSK-16-3		RSK	
	iii.	Primary Damper			4258,3830,4291,4328		3847,3832,3980,3971		KNORR	
	iv.	Secondary damper			605,0273		0016,0621		SV	
	v.	Lateral Damper			302		0325		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			G16121/600,G16043/600 G16118/600,G16106/600		G16120/600,G15039/600 G16117/600,G16044/600		FTI	
	viii.	Brake Disc							FTI	
	ix.	Ball joint Control arm							MGN	
	x.	Lateral Bump stop							MGN	
	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							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.	<b>Modification / Trial (if any):</b>				NIL				
	ii.	<b>Deviations (if any):</b>				NIL				