



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6049	DISPATCH DATE				23.11.16
2.	Railway	NR	Type	LS3	Coach No.	163504	
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 ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00		
			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		87/90		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			FAIVELEY		
	ii	SEAT & BERTH					
	iii	BODY SIDE DOORS					
	iv	WATER TANKS					
	v	FLOOR BOARD					
	VI	PVC					
	Vii	LP SHEET					
10.							
	10.1	Modification / Trail (if any):			NIL		
	10.2	Deviations if any:			NIL		



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6049	NR	LS3	163504	22-10-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166930				166931			
	ii.	Frame No.	FIAT-5242				FIAT-5248			
	iii.	Bolster No.	159/P/ASR				142/GT/ASR			
	iv.	Axle No.	R-2439		P-9742		N-6353		R-2260	
	v.	Wheel Dia.	916.50	917.00	917.00	916.50	918.00	918.00	918.00	918.00
	vi.	Wheel Disc No.	08639-6QJ6	08659-6QJ6	08662-6QJ6	08660-6QJ6	03844-6QJ3	03974-6QH0	00135-7196	00009-7198
	vii.	R.B. Nos.	04878	04343	05707	05292	05541	06250	06234	04976
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	FSK-15-7-66	GBD-16-7-33	FSK-15-7-55	GBD-16-7-2	FSK-15-7-63	GBD-16-7-18	FSK-15-7-62	GBD-16-7-44	
ii.	Ht. at test load	516	472	515.50	471	513.50	472	512	472	
iii.	Align .deviation	8	11	7	7	9	8	7	6	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			GBD-16-8		GBD-16-8		GBD	
	ii.	Primary inner Spring			GBD-16-8		GBD-16-8		GBD	
	iii.	Primary Damper			3999,3973,4114,4302		4221,3920,4341,3879		KNORR	
	iv.	Secondary damper			035,053		0107,0135		KNORR	
	v.	Lateral Damper			0310		352		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			G16281/600,G16280/600 G16194/600,G16240/600		G16282/600,G16193/600 G16236/600,G16200/600		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							EMSON	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							SARITA, 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.	6050	DISPATCH DATE				22.11.2016
2.	Railway	NR	Type	LS3	Coach No.	163505	
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 ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00		
			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	87/88		
	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	SUKATA, JBM				
	iv	WATER TANKS	RUBICONE				
	v	FLOOR BOARD	TWPL				
	VI	PVC	RESPONSIVE				
	Vii	LP SHEET	PL				
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6050	NR	LG3	163505	22-08-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166726				166729			
	ii.	Frame No.	FIAT-4926				FIAT-4910			
	iii.	Bolster No.	6062-VT				6041-VT			
	iv.	Axle No.	N-6060		N-6329		N-5721		R-3120	
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	02250-6QG9	02288-6QG7	13351-00152	13351-00196	08283-6QM4	06036-6QK8	13351-00220	13353-00059
	vii.	R.B. Nos.	01742	03769	01211	02617	02582	00886	01960	02148
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-16-4-255	RSK-16-4-522	RSK-16-4-283	RSK-16-4-530	RSK-16-4-030	RSK-16-4-373	RSK-16-4-51	RSK-16-4-655	
ii.	Ht. at test load	513	471	515	471	513	471	515	470	
iii.	Align .deviation	2	5	2	9	6	9	6	10	
11.3	Items traceability:									
	Sno.	Item		PP Side Bogie		NPP side Bogie		Make		
	i.	Primary Outer Spring		RSK-15-5		RSK-15-5		RSK		
	ii.	Primary inner Spring		RSK-16-2		RSK-16-2		RSK		
	iii.	Primary Damper		0316,0158,160,207		159,157,161,162		GABRIEL		
	iv.	Secondary damper		57,13		22,10		GEREP		
	v.	Lateral Damper		3351		3395		KONI		
	vi.	Yaw Damper						NIL		
	vii.	Brake cylinder & Caliper		G16137/600,G16134/600 G16135/600,G16136/600		G16304/600,G16315/600 G16161/600,G16313/600		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						MGN		
	xiv.	Traction centre elastic						GMT		
	xv.	Secondary rubber pad						PRAG		
	xvi.	Rubber spring						GMT		
	xvii.	Anti roll bar make						SARITA, EMSON		
	xviii.	Ball joint roll link						SARITA		
	xix.	Fork make						SARITA		
11.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	6038	DISPATCH DATE				19.11.2016
2.	Railway	NR	Type	LS3	Coach No.	163502	
3.	Booked to	SSE/C&W/					
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)	FAIVELEY	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 ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00		
			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	85/86		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			FAIVELEY		
	li	SEAT & BERTH			SAVITRI		
	lii	BODY SIDE DOORS			SUKATA, JBM		
	lv	WATER TANKS			RUBICONE		
	v	FLOOR BOARD			OVPL		
	VI	PVC			RESPONSIVE		
	Vii	LP SHEET			PL		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			6038		NR		LS3		163502/C		26-10-2016	
11.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	166936						166937			
	ii.	Frame No.	FIAT-5146						FIAT-5276			
	iii.	Bolster No.	6302-P						6311-GT			
	iv.	Axle No.	P-9763			P-9342			Y-6155		P-9769	
	v.	Wheel Dia.	916.00	916.00	916.50	917.00	917.00	917.00	916.00	916.50		
	vi.	Wheel Disc No.	02995-6QG7	05163-6QM3	00017-6QH5	07043-6QJ4	03724/6QK3	03469-6QG8	07045-6QJ4	07572-6QK4		
	vii.	R.B. Nos.	04284	05207	06384	04012	06184	05493	06491	04300		
	viii.	R.B. Make	TIMKEN			TIMKEN			TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	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.	FSK-15-7-67	GBD-16-7-3	FSK-15-7-60	GBD-16-7-19	FSK-15-7-19	GBD-16-7-39	FSK-15-7-69	GBD-16-7-57			
ii.	Ht. at test load	516	472	510	472	514.50	472	512.50	472			
iii.	Align .deviation	7	11	7	9	8	7	8	9			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			G-14-3			G-14-3			GF	
	ii.	Primary inner Spring			G-15-9			G-15-9			GF	
	iii.	Primary Damper			3859,3899,3870,4351			4355,4358,3839,3902			KNORR	
	iv.	Secondary damper			109,188			0036,0038			KNORR	
	v.	Lateral Damper			498			232			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			G16170/600,G16204/600 G16203/600,G16168/600			G16244/600,G16252/600 G16241/600,G16254/600			FTI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									MGN	
	xi.	Traction center make									SARITA, EMSON	
	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.	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.	6047	DISPATCH DATE				24.11.2016
2.	Railway	NR	Type	LS3	Coach No.	163503	
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 ²		6 –10 sec	6 Sec	
			Max Pressure in BC		3.00 ± 0.15 Kg/cm ²	3.00	
			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	SEAT & BERTH			OVPL			
lii	BODY SIDE DOORS			SUKATA, JBM			
lv	WATER TANKS			RUBICONE			
v	FLOOR BOARD			TWPL			
VI	PVC			RESPONSIVE			
Vii	LP SHEET			PL			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6047	NR	LS3	163503/C	07-11-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166955				166958			
	ii.	Frame No.	FIAT-5279				FIAT-5272			
	iii.	Bolster No.	6331-P				6278-GT			
	iv.	Axle No.	N-0915		K-6163		N-0707		P-9337	
	v.	Wheel Dia.	917.50	917.50	916.00	916.00	916.00	916.00	917.00	917.00
	vi.	Wheel Disc No.	00177-6044	00093-6105	01109-6QG5	02749-5VJ6	01552-6QH2	01480-6QK1	07288-6QK0	00674-6MG6
	vii.	R.B. Nos.	06165	06151	05397	05498	04362	03869	05178	05510
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	FSK-15-9-25	RSK-15-9-89	FSK-15-9-12	RSK-15-9-288	FSK-15-7-30	RSK-15-9-257	FSK-15-7-06	RSK-15-9-256	
ii.	Ht. at test load	515.50	471	516	472	513	472	515	471	
iii.	Align .deviation	8	5	8	5	8	3	8	6	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			GBD-16-8		GBD-16-8		GBD	
	ii.	Primary inner Spring			RSK-16-2		RSK-16-2		RSK	
	iii.	Primary Damper			4062,4248,3943,4283		3814,4136,4320,4348		KNORR	
	iv.	Secondary damper			025,056		032,033		GEREP	
	v.	Lateral Damper			487		0330		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			H16197/600,H16284/600 H16199/600,H16282/600		H16201/600,H16283/600 H16200/600,H16286/600		FTI	
	viii.	Brake Disc							FTI,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							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.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

