



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	5033	DISPATCH DATE				26.04.2016
2.	Railway	CR	Type	LWCBAC	Coach No.	16804	
3.	Booked to	SSE/C&W/CST/M					
4.	Tare Weight of Coach	40.9 T					
5.	Carrying Capacity	Seating	NIL	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	1095	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 ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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	KBI				
	ii.	CDTS/ BIO TOILET	RAIL FAB				
	iii.	SEATS/ BERTHS	AMIR CHAND				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	HP				
	vii.	WATER TANKS	AMIT & SHIVALIK, KUTEER, E C BLADES				
	viii.	UIC VESTIBULE	SUNCREAST				
	ix	FLOOR BOARD	NARBADA				
	X	PVC	RESPONSIVE				
	Xi	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	
			5033		CR		LWCBAC		16804		18-02-2016	
11.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	166165					166166				
	ii.	Frame No.	FIAT-4625					FIAT-4577				
	iii.	Bolster No.	5276-P					5504-P				
	iv.	Axle No.	127969/988		128016/988		128029/988		125584/377			
	v.	Wheel Dia.	916.00	916.50	916.00	916.00	917.00	917.00	916.50	917.00		
	vi.	Wheel Disc No.	06230-00091	06234-00075	7222-00168	6223-00017	06223-00219	6227-00097	06234-00142	7273-00131		
	vii.	R.B. Nos.	23381	05217	22857	22377	01764	06098	02310	23373		
	viii.	R.B. Make	SKF		SKF		SKF		SKF			
	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-15-3-375	RSK-15-9-074	RSK-15-3-299	RSK-15-9-455	RSK-15-3-298	RSK-15-9-2021	RSK-15-3-448	RSK-15-9-458			
ii.	Ht. at test load	512	467	512	467	510	468	509	468			
iii.	Align .deviation	17	45	19	47	16	43	15	41			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			RSK-14-5			RSK-14-5			RSK	
	ii.	Primary inner Spring			RSK-14-5			RSK-14-5			RSK	
	iii.	Primary Damper			2321,2311,1993,2323			2258,2127,2236,2117			GEREP	
	iv.	Secondary damper			281,264			227,261			GEREP	
	v.	Lateral Damper			3384			3743			KONI	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			2034/691,2099/691 2037/691,2097/691			2035/691,2100/691 2033/691,2098/691			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									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									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.	5039	DISPATCH DATE				27.04.2016
2.	Railway	CR	Type	LWCBAC	Coach No.	16803	
3.	Booked to	SSE/C&W/CST/M					
4.	Tare Weight of Coach	40.9 T					
5.	Carrying Capacity	Seating	NIL	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)	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 ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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	89/90		
	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				
	iii.	SEATS/ BERTHS	AMIR CHAND				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vii.	WATER TANKS	AMIT & SHIVALIK, KUTEER, E C BLADES				
	viii.	UIC VESTIBULE	SUNCREAST				
	ix	FLOOR BOARD	NARBADA				
	X	PVC	RESPONSIVE				
	Xi	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	
			5039		CR		LWCBAC		16803		25-02-2016	
11.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	166191						166192			
	ii.	Frame No.	FIAT-4652						FIAT-4317			
	iii.	Bolster No.	5258-P						5554-P			
	iv.	Axle No.	K-3045			K-3834			K-3979		K-3515	
	v.	Wheel Dia.	916.00	916.50	917.00	917.00	915.50	916.00	916.00	915.50		
	vi.	Wheel Disc No.	6206-00147	06229-00198	06229-00227	06150-00016	6227-00199	06234-00152	06229-00023	06234-00164		
	vii.	R.B. Nos.	01134	01263	05334	01743	05298	03085	02498	02247		
	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-15-5-327	RSK-15-9-108	RSK-15-5-412	RSK-15-9-059	RSK-15-5-418	RSK-15-9-095	RSK-15-5-340	RSK-15-9-40			
ii.	Ht. at test load	511	467	511	468	508	466	509	467			
iii.	Align .deviation	8	41	9	46	10	20	12	24			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			RSK-14-5			RSK-14-5			RSK	
	ii.	Primary inner Spring			RSK-14-5			RSK-14-5			RSK	
	iii.	Primary Damper			604,773,758,831			755,619,782,816			GEREP	
	iv.	Secondary damper			1269,1235			1204,1217			GEREP	
	v.	Lateral Damper			3302			3667			KONI	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			M15033/600,M15040/600 M15026/600,M15034/600			M15039/600,M15010/600 M15019/600,M15008/600			FTI	
	viii.	Brake Disc									KBI	
	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									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									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.	5044	DISPATCH DATE				28.4.2016
2.	Railway	CR	Type	LWCBAC	Coach No.	16802	
3.	Booked to	SSE/C&W/CSTM					
4.	Tare Weight of Coach	40.9 T					
5.	Carrying Capacity	Seating	NIL	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	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 ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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	FAVELLY				
	ii.	CDTS/ BIO TOILET	RAIL FAB				
	iii.	SEATS/ BERTHS	AMIR CHAND				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON SLIDING DOOR	KALSI				
	vii.	WATER TANKS	AMIT & SHIVALIK				
	viii.	UIC VESTIBULE	SUNCREAST				
	ix	FLOOR BOARD	NARBADA				
	X	PVC	RESPONSIVE				
	Xi	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	
			5044		CR		LWCBAC		16802		02-02-2016	
11.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	166096					166097				
	ii.	Frame No.	FIAT-4628					FIAT-4571				
	iii.	Bolster No.	5393-VT					5476-P				
	iv.	Axle No.	128879/990		126641/480			126187/471		126238/471		
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	6226-00116	6227-00072	06234-00011	07297-00019	6226-00099	7216-00077	06234-00095	06230-00155		
	vii.	R.B. Nos.	01549	02659	02485	05023	02435	01159	01821	01571		
	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-15-3-002	G-12-8-3650	RSK-15-3-73	G-12-8-3374	RSK-15-3-75	G-12-8-3646	RSK-15-3-100	G-12-8-3300			
ii.	Ht. at test load	508	468	510	470	512	470	510	471			
iii.	Align .deviation	14	13	15	14	8	11	5	7			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			RSK-14-5			RSK-14-5			RSK	
	ii.	Primary inner Spring			RSK-11-5			RSK-11-5			RSK	
	iii.	Primary Damper			2090,1118,2129,269			2087,250,1636,1641			GEREP	
	iv.	Secondary damper			4588,4283			4419,4438			KONI	
	v.	Lateral Damper			23			433			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			M15100/600,M15077/600 M15116/600,M15064/600			M15117/600,M15063/600 M15097/600,M15071/600			FTI	
	viii.	Brake Disc									KBI	
	ix.	Ball joint Control arm									GMT	
	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									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									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.	5052	DISPATCH DATE				30.4.2016
2.	Railway	CR	Type	LWCBAC	Coach No.	16805	
3.	Booked to		SSE/C&W/CSTM				
4.	Tare Weight of Coach		40.9 T				
5.	Carrying Capacity	Seating	NIL	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	1100		
	v)	Buffer/CBC (Make)	FAVELLY	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 ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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		FAVELLY			
	ii.	CDTS/ BIO TOILET		RAIL FAB			
	iii.	SEATS/ BERTHS		ARR KAYEE			
	iv.	BODY SIDE DOOR		JBM			
	v.	VESTIBULE SLIDING DOOR		HP			
	vi.	SALOON SLIDING DOOR		KALSI			
	vii.	WATER TANKS		AMIT & SHIVALIK,KUTEER			
	viii.	UIC VESTIBULE		KRP			
	ix	FLOOR BOARD		TAYAL			
	X	PVC		RESPONSIVE			
	Xi	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			
			5052	CR	LWCBAC	16805	29-03-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166291				166292			
	ii.	Frame No.	FIAT-4138				FIAT-4283			
	iii.	Bolster No.	5645-VT				5637-VT			
	iv.	Axle No.	126680/480	114937/369	130083/986	125750/473				
	v.	Wheel Dia.	916.50	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	7290-00026	7282-00035	06223-00198	7290-00065	06229-00030	06229-00210	06150-00076	06229-00016
	vii.	R.B. Nos.	34575	05710	31245	02624	34013	05787	34194	30197
	viii.	R.B. Make	SKF		SKF		SKF		SKF	
	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.	DN-12-8-1904	RSK-15-9-494	DN-12-5-1662	RSK-15-9-482	DN-12-5-1496	RSK-15-9-510	DN-12-8-1841	RSK-15-9-488	
ii.	Ht. at test load	505	467	505	469	502	468	502	467	
iii.	Align .deviation	13	37	17	38	22	37	18	31	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	RSK-13-2		RSK-13-2		RSK			
	ii.	Primary inner Spring	RSK-11-11		RSK-11-11		RSK			
	iii.	Primary Damper	1419,1620,1369,1361		1341,1332,1457,1522		GEREP			
	iv.	Secondary damper	1232,988		1008,972		GEREP			
	v.	Lateral Damper	3368		3670		KONI			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	L15050/600,L15078/600 L15082/600,L15085/600		L15083/600,L15076/600 L15078/600,L15074/600		FTI			
	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					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					SARITA			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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