



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6016	DISPATCH DATE				<b>30.06.16</b>
2.	Railway	NR	Type	<b>LWSCN1</b>	Coach No.	<b>163231</b>	
3.	Booked to		<b>SSE/C&amp;W/NDLS</b>				
4.	Tare Weight of Coach		<b>41.239 T</b>				
5.	Carrying Capacity	Seating	80	<b>Sleeping</b>	80	Luggage	<b>NIL</b>
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	1102		
	v)	Buffer/CBC (Make )	<b>ESCORT</b>	<b>Fiba Device</b>	<b>NA</b>		
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		<b>GS</b>	<b>85//86</b>		
	8.2	APPLICATION OF PCN-123	<b>SATISFACTORY</b>				
	8.3	INSUALTION	<b>SATISFACTORY</b>				
9.	Traceability of Furnishing Items:				Make		
	I	BRAKE EQUIPMENT		<b>FAVELLY</b>			
	ii	SEAT & BERTH		<b>OVPL</b>			
	lii	BODY SIDE DOORS		<b>JBM,</b>			
	lv	WATER TANKS		<b>SHIVALIK,KUTEER,</b>			
	v	FLOOR BOARD		<b>TAYAL</b>			
	vi	PVC FLOORING		<b>RESPONSIVE</b>			
	vii	UIC VESTIBULE		<b>KRP</b>			
	viii	VESTIBULE SLIDING DOOR		<b>HP</b>			
	IX	BIOTOILETS		<b>RAIL FAB</b>			
	X	LP SHEET		<b>PL</b>			
10.							
	10.1	Modification / Trail (if any):			NIL		
	10.2	Deviations if any:			NIL		



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11.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6016	NR	LWSCN	163231	07-06-2016			
11.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	166479				166480			
	ii.	Frame No.	FIAT-4364				FIAT-4335			
	iii.	Bolster No.	A-5673-PS				5859-VT			
	iv.	Axle No.	K-3239		K3355		K-3848		N-0776	
	v.	Wheel Dia.	916.00	916.00	916.00	916.50	917.00	917.00	916.00	916.00
	vi.	Wheel Disc No.	7291-00095	07302-00163	7276-00030	7277-00213	7277-000061	7291-00022	07302-00125	07291-00056
	vii.	R.B. Nos.	07096	05273	05451	05661	05523	04357	04812	05064
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	<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.	Make & nos.	DN-14-5-844	RSK-15-09-180	DN-14-5-799	RSK-15-09-230	DN-14-04-906	RSK-15-09-202	DN-14-04-905	RSK-15-09-189	
ii.	Ht. at test load	516	469	514	471	512	742	513	472	
iii.	Align .deviation	9	8	12	8	9	4	9	4	
11.3	<b>Items traceability:</b>									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	G-14-11		G-14-11		GF			
	ii.	Primary inner Spring	G-15-02		G-15-02		GF			
	iii.	Primary Damper	884,898,911,762		0887,0895,0879,0697		KNORR			
	iv.	Secondary damper	150,138		079,0111		GEREP			
	v.	Lateral Damper	0154		0160		KNORR			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	D16031/600,D16087/600 D16045/600,D16073/600		D16047/600,D16035/600 D16032/600,D16040/600		FTI			
	viii.	Brake Disc					KBI			
	ix.	Ball joint Control arm					GMT			
	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					GMT			
	xv.	Secondary rubber pad					BHAM			
	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.	6017	DISPATCH DATE				<b>30.06.16</b>
2.	Railway	NR	Type	<b>LWSCN1</b>	Coach No.	<b>163221</b>	
3.	Booked to		<b>SSE/C&amp;W/NDLS</b>				
4.	Tare Weight of Coach		<b>41.239 T</b>				
5.	Carrying Capacity	Seating	80	<b>Sleeping</b>	80	Luggage	<b>NIL</b>
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	1104		
	v)	Buffer/CBC (Make )	<b>ESCORT</b>	<b>Fiba Device</b>	<b>NA</b>		
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	<b>PU PAINT</b>	<b>GS</b>	<b>87/87</b>		
	8.2	APPLICATION OF PCN-123	<b>SATISFACTORY</b>				
	8.3	INSUALTION	<b>SATISFACTORY</b>				
9.	Traceability of Furnishing Items:		Make				
	I	BRAKE EQUIPMENT	<b>FAVELLY</b>				
	ii	SEAT & BERTH	<b>OVPL</b>				
	lii	BODY SIDE DOORS	<b>JBM,</b>				
	lv	WATER TANKS	<b>SHIVALIK,KUTEER,AMIT</b>				
	v	FLOOR BOARD	<b>TAYAL</b>				
	vi	PVC FLOORING	<b>RESPONSIVE</b>				
	vii	UIC VESTIBULE	<b>ESCORT</b>				
	viii	VESTIBULE SLIDING DOOR	<b>HP</b>				
	IX	BIOTOILETS	<b>m.k.precision</b>				
	X	LP SHEET	<b>--</b>				
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>	
			6017		NR		LWSCN		163221		15-06-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	166499					166500				
	ii.	<b>Frame No.</b>	FIAT-4488					FM-521				
	iii.	<b>Bolster No.</b>	5858-PS					5653-PS				
	iv.	<b>Axle No.</b>	N-0818		N-0678		K-6783		N-5978			
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.50	917.00	917.00	917.00	916.00	916.00		
	vi.	<b>Wheel Disc No.</b>	7274-00197	7274-00136	7274-00137	6204-00013	7276-00085	7304-00005	7280-00139	7280-00051		
	vii.	<b>R.B. Nos.</b>	04186	03343	05676	04621	03813	04791	03309	03446		
	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>	DN-14-3-902	RSK-15-9-214	DN-14-5-824	RSK-15-9-240	DN-14-5-803	RSK-15-9-224	DN-14-1-296	RSK-15-9-172			
ii.	<b>Ht. at test load</b>	515	471	514	472	515	470	515	468			
iii.	<b>Align .deviation</b>	10	10	9	8	14	6	12	6			
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-14-1			G-14-1			GF	
	ii.	Primary inner Spring			G-15-4			G-15-4			GF	
	iii.	Primary Damper			0899,0855,0696,0928			0789,0903,0915,0795			KNORR	
	iv.	Secondary damper			48,80			107,94			GEREP	
	v.	Lateral Damper			269			380			KNORR	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			C16193/600,D16088/600 C16191/600,D16090/600			C16164/600,D16072/600 C16192/600,D16070/600			FTI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									GMT	
	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									WINLANE	
	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				

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	6019	DISPATCH DATE				<b>30.06.16</b>
2.	Railway	<b>NR</b>	Type	<b>LWSCN1</b>	Coach No.	<b>163228</b>	
3.	Booked to		<b>SSE/C&amp;W/NDLS</b>				
4.	Tare Weight of Coach		<b>41.239 T</b>				
5.	Carrying Capacity	Seating	80	<b>Sleeping</b>	80	Luggage	<b>NIL</b>
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	1105		
	v)	Buffer/CBC (Make )	<b>FAVELLY</b>	<b>Fiba Device</b>	<b>NA</b>		
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		<b>VIBGYOR</b>	<b>85/87</b>		
	8.2	APPLICATION OF PCN-123	<b>SATISFACTORY</b>				
	8.3	INSUALTION	<b>SATISFACTORY</b>				
9.	Traceability of Furnishing Items:					Make	
	I	BRAKE EQUIPMENT			<b>KBI</b>		
	ii	SEAT & BERTH			<b>OVPL</b>		
	lii	BODY SIDE DOORS			<b>SUKATA</b>		
	lv	WATER TANKS			<b>SHIVALIK,KUTEER,AMIT</b>		
	v	FLOOR BOARD			<b>TAYAL</b>		
	vi	PVC FLOORING			<b>RESPONSIVE</b>		
	vii	UIC VESTIBULE			<b>KRP/ESCORT</b>		
	viii	VESTIBULE SLIDING DOOR			<b>HP</b>		
	IX	BIOTOILETS			<b>MK PRECISION</b>		
	X	LP SHEET			<b>-</b>		
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>	
			6019		NR		LWSCN		163228		23-06-2016	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	166518						166519			
	ii.	<b>Frame No.</b>	FIAT-4210						FIAT-4903			
	iii.	<b>Bolster No.</b>	5872-PS						5690-VT			
	iv.	<b>Axle No.</b>	K-5845			129661/986			K-3522		N-0721	
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.00	917.00	917.50	917.00	917.00		
	vi.	<b>Wheel Disc No.</b>	7271-00056	7291-00053	6204-00208	7272-00121	07298-00142	7276-00091	7291-00029	7279-00170		
	vii.	<b>R.B. Nos.</b>	05525	03694	05406	06250	05076	05249	04907	04944		
	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>	DN-14-1-456	RSK-15-9-239	DN-14-1-814	RSK-15-9-154	DN-14-1-538	RSK-15-9-231	DN-14-1-527	RSK-15-9-241			
ii.	<b>Ht. at test load</b>	511	472	510	472	516	472	516	471			
iii.	<b>Align .deviation</b>	9	4	11	7	11	5	8	2			
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-14-11			G-14-11			GF	
	ii.	Primary inner Spring			G-15-9			G-15-9			GF	
	iii.	Primary Damper			0663,0807,0866,0846			0655,0647,0639,0649			KNORR	
	iv.	Secondary damper			175,129			171,48			GEREP	
	v.	Lateral Damper			0379			185			KNORR	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			3560/691,3571/691 3581/691,3577/691			3563/691,3572/691 3562/691,3570/691			KBI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									GMT	
	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									GMT	
	xv.	Secondary rubber pad									BHAM	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	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				

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