



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4032	DISPATCH DATE				09.10.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143615	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
	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 <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	ADVANCE	86/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			FAIVELEY		
	iii.	CDTS			--		
	iv.	SEAT & BERTH			SUTLEJ		
	v.	BODY SIDE DOORS			JBM		
	vi.	SALOON COMPTT DOORS			--		
	vii.	VESTIBULE SLIDING DOOR			KALSI		
	viii.	WATER TANKS			RAIL FAB		
	ix	UIC VESTIBULE			SUNCREAST		
	x	LUGGAGE RACK			HANSPAL		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			PREMIER POLYFILM		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 2 of 3

11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4032		NR		LWSCZ		143615/C		22-09-2015	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	156690					156691				
	ii.	<b>Frame No.</b>	FIAT-4254					FIAT-4116				
	iii.	<b>Bolster No.</b>	5106-P					5086-GT				
	iv.	<b>Axle No.</b>	128039/988		125925/477			128762/990		128687/989		
	v.	<b>Wheel Dia.</b>	917.50	917.50	917.00	917.00	916.00	916.00	915.00	915.00		
	vi.	<b>Wheel Disc No.</b>	6232-00067	6232-00056	6197-00057	6213-00360	6229-00055	6148-00033	06149-00129	6232-00187		
	vii.	<b>R.B. Nos.</b>	22849	22517	01211	22519	22144	22942	15987	17081		
	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>				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner			
i.	<b>Make &amp; nos.</b>	DN-12-6-1522	DN-12-6-1478	DN-12-6-1617	DN-12-6-1462	DN-12-5-1507	DN-12-6-1425	DN-12-7-1837	DN-12-6-1502			
ii.	<b>Ht. at test load</b>	503	467	503	464	503	463	505	465			
iii.	<b>Align .deviation</b>	17	3	17	6	22	4	23	5			
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			L&S-13-3			L&S-13-3			L&S	
	ii.	Primary inner Spring			L&S-13-2			L&S-13-2			L&S	
	iii.	Primary Damper			25160,25290,25178,25454			25275,25452,25430,23723			KONI	
	iv.	Secondary damper			6010,6165			5616,5660			KONI	
	v.	Lateral Damper			380			438			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			H15001/600,H15005/600, H15013/600,H15007/600			G15119/600,G15139/600, G15137/600,G15140/600			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									GMT	
	xv.	Secondary rubber pad									TESPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
11.4	i.	Modification / Trial (if any):						NIL				
	ii.	Deviations (if any):						NIL				

LWSCZ-4032



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4024	DISPATCH DATE				10.10.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143616	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
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	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	86/88	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
i.	BRAKE EQUIPMENT			FAIVELEY			
iii.	CDTS			--			
iv.	SEAT & BERTH			SUTLEJ			
v.	BODY SIDE DOORS			JBM			
vi.	SALOON COMPTT DOORS			--			
vii.	VESTIBULE SLIDING DOOR			KALSI			
viii.	WATER TANKS			RAIL FAB			
ix	UIC VESTIBULE			FRIKMART			
x	LUGGAGE RACK			HANSPAL			
XI	FLOOR BOARD			TAYAL			
XII	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 2 of 3

11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4024		NR		LWSCZ		143616/C		24-09-2015	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	156704						156705			
	ii.	<b>Frame No.</b>	FIAT-4022						SCI-FM-232			
	iii.	<b>Bolster No.</b>	5133-GT						5121-P			
	iv.	<b>Axle No.</b>	126183/471		126607/480		126357/474		126401/474			
	v.	<b>Wheel Dia.</b>	917.00	917.00	915.50	915.50	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	<b>Wheel Disc No.</b>	6212-00087	6213-00198	6212-00044	6148-00003	6213-00050	6213-00022	6213-00159	6213-00188	6213-00188	6213-00188
	vii.	<b>R.B. Nos.</b>	21702	21182	21534	21958	21829	21711	16839	21706	21706	21706
	viii.	<b>R.B. Make</b>	SKF		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>				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner			
i.	<b>Make &amp; nos.</b>	DN-13-5-3771	DN-13-2-1797	DN-13-2-3020	DN-13-2-1908	DN-13-2-3174	DN-13-2-1758	DN-12-1-2714	DN-13-2-1756			
ii.	<b>Ht. at test load</b>	502	466	502	463	507	464	505	466			
iii.	<b>Align .deviation</b>	23	10	26	12	13	12	14	12			
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			L&S-13-2			L&S-13-2			L&S	
	ii.	Primary inner Spring			L&S-13-2			L&S-13-2			L&S	
	iii.	Primary Damper			25857,25979,25922,25823			25822,26011,25855,25846			KONI	
	iv.	Secondary damper			6149,5885			5562,5987			KONI	
	v.	Lateral Damper			411			461			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			F15042/600,F15049/600 F15056/600,F15054/600			F15103/600,F15135/600 F15116/600,F15124/600			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									GMT	
	xv.	Secondary rubber pad									TESPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	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							

LWSCZ-4024



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4009	DISPATCH DATE				10.10.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143617	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
	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	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	ADVANCE	87/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			FAIVELEY		
	iii.	CDTS			RAIL FAB		
	iv.	SEAT & BERTH			SUTLEJ		
	v.	BODY SIDE DOORS			JBM		
	vi.	SALOON COMPTT DOORS			--		
	vii.	VESTIBULE SLIDING DOOR			KALSI		
	viii.	WATER TANKS			RUBICONE, RAIL FAB		
	ix	UIC VESTIBULE			SUNCREAST		
	x	LUGGAGE RACK			HANSPAL		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4009		NR		/,LWSCZ		143617/C		23-09-2015	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	156604					156603				
	ii.	<b>Frame No.</b>	FIAT-4166					FIAT-4008				
	iii.	<b>Bolster No.</b>	4992-VT					4990-VT				
	iv.	<b>Axle No.</b>	128241/991		C-4081			128316/991		128623/989		
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00
	vi.	<b>Wheel Disc No.</b>	6213-00023	6197-00073	6212-00078	6213-00115	6148-00014	06149-00021	6196-00144	6213-00067		
	vii.	<b>R.B. Nos.</b>	03826	03019	03856	03185	03836	04057	04199	03944		
	viii.	<b>R.B. Make</b>	TIM		TIM			TIM		TIM		
	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-12-8-1741	G-13-4-4211	DN-12-8-1987	G-13-4-4548	DN-13-2-3137	G-13-4-4203	DN-13-2-3066	G-13-4-4394			
ii.	<b>Ht. at test load</b>	506	467	506	466	502	466	503	466			
iii.	<b>Align .deviation</b>	12	20	13	25	17	12	18	13			
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			L&S-13-3			L&S-13-3			L&S	
	ii.	Primary inner Spring			L&S-12-5			L&S-12-5			L&S	
	iii.	Primary Damper			287,44,276,156			294,296,269,328			GEREP	
	iv.	Secondary damper			5168,5148			5109,5294			KONI	
	v.	Lateral Damper			304			310			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			15094/600,15077/600,15097/600,15058/600			F15113/600,F15125/600,F15114/600,F15123/600			FTI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									MGN	
	xi.	Traction center make									EMSON,SARITA	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									GMT,MGN	
	xiv.	Traction centre elastic									GMT	
	xv.	Secondary rubber pad									TESPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	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							

LWSCZ-4009



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4023	DISPATCH DATE				30.09.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143612	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
	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	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	ADVANCE	86/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			FAIVELEY		
	iii.	CDTS			--		
	iv.	SEAT & BERTH			SUTLEJ		
	v.	BODY SIDE DOORS			JBM		
	vi.	SALOON COMPTT DOORS			--		
	vii.	VESTIBULE SLIDING DOOR			KALSI		
	viii.	WATER TANKS			RAIL FAB		
	ix	UIC VESTIBULE			SUNCREAST		
	x	LUGGAGE RACK			HANSPAL		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 2 of 3

11.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4023	NR	LWBAC	143612	19-09-2015			
11.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	156608				156621			
	ii.	Frame No.	FIAT-3912				FIAT-3870			
	iii.	Bolster No.	4970-VT				4988-VT			
	iv.	Axle No.	128794/990	127895/987	127781/987	125847/477				
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	917.00	917.00	916.50	916.00
	vi.	Wheel Disc No.	6197-00150	6194-00165	6198-00065	6212-00157	6229-00028	06149-00216	6194-00170	6194-00101
	vii.	R.B. Nos.	02264	21844	30107	30101	03517	03610	02541	03893
	viii.	R.B. Make	SKF		SKF		SKF		SKF	
	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-12-8-2178	G-13-4-4245	DN-12-9-2370	G13-4-4224	DN-12-2-1398	DN-13-2-1774	DN-13-2-2991	DN-12-12-1386	
ii.	Ht. at test load	505	467	506	466	504	463	503	464	
iii.	Align .deviation	17	16	17	17	15	6	18	9	
11.3	<b>Items traceability:</b>									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	L&S-13-3		L&S-13-3		L&S			
	ii.	Primary inner Spring	L&S-13-2		L&S-13-2		L&S			
	iii.	Primary Damper	538,560,275,534		160,600,705,518		GEREP			
	iv.	Secondary damper	1286,1134		1150,1097		GEREP			
	v.	Lateral Damper	494		471		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	15128/600,15141/600,15131/600,15140/600		15051/600,15103/600,15057/600,15109/600		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					GMT			
	xiv.	Traction centre elastic					GMT			
	xv.	Secondary rubber pad					TESPAK			
	xvi.	Rubber spring					GMT			
	xvii.	Anti roll bar make					EMSON			
	xviii.	Ball joint roll link					SARITA			
	xix.	Fork make					EMSON			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

LWSCZ-4023





रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4031	DISPATCH DATE				25.09.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143611	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
	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	1102		
	v)	Buffer/CBC (Make )	ESCORTS	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	85/86		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			FAIVELEY		
	iii.	CDTS			--		
	iv.	SEAT & BERTH			SUTLEJ		
	v.	BODY SIDE DOORS			--		
	vi.	SALOON COMPTT DOORS			--		
	vii.	VESTIBULE SLIDING DOOR			KALSI		
	viii.	WATER TANKS			RAIL FAB		
	ix	UIC VESTIBULE			FRIKMART		
	x	LUGGAGE RACK			HANSPAL		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 2 of 3

11.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4031	NR	LWSCZ	143611	21-09-2015			
11.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	156649				156648			
	ii.	Frame No.	FIAT-4259				FIAT-4263			
	iii.	Bolster No.	5033-VT				5060-GT			
	iv.	Axle No.	128049/988	125900/477	128667/989	126100/475				
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	917.00	917.00	918.00	918.00
	vi.	Wheel Disc No.	6212-00024	6213-00134	6198-00224	6213-00058	6198-00160	6213-00063	6229-00142	6229-00181
	vii.	R.B. Nos.	1204	02358	02907	22832	30239	30156	34167	30127
	viii.	R.B. Make	SKF		SKF		SKF		SKF	
	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-12-9-2050	DN-12-8-218	DN-12-9-2759	DN-12-8-1468	DN-12-8-2229	DN-13-02-1810	DN-12-8-2688	DN-13-2-1795	
ii.	Ht. at test load	508	461	510	463	504	465	506	462	
iii.	Align .deviation	11	2	10	3	13	10	17	11	
11.3	<b>Items traceability:</b>									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	L&S-13-3		L&S-13-3		L&S			
	ii.	Primary inner Spring	L&S-13-2		L&S-13-2		L&S			
	iii.	Primary Damper	688,392,332,318		686,1658,456,481		GEREP			
	iv.	Secondary damper	5566,5598		5530,5607		KONI			
	v.	Lateral Damper	456		431		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	G15134/600,G15144/600, G15135/600,G15143/600		G15129/600,G15124/600, G151208600,G151308600		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					GMT			
	xiv.	Traction centre elastic					GMT			
	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					

LWSCZ-4031



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4030	DISPATCH DATE				26.09.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143614	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
	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	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	87/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			KBI		
	iii.	CDTS			--		
	iv.	SEAT & BERTH			SUTLEJ		
	v.	BODY SIDE DOORS			JBM		
	vi.	SALOON COMPTT DOORS			--		
	vii.	VESTIBULE SLIDING DOOR			KALSI		
	viii.	WATER TANKS			RAIL FAB		
	ix	UIC VESTIBULE			ELASTOMER		
	x	LUGGAGE RACK			HANSPAL		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

11.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4030	NR	LWBAC	143614/C	17-09-2015			
11.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	156684				156685			
	ii.	Frame No.	FIAT-4065				SCI-FM-227			
	iii.	Bolster No.	5077-GT				5066-GT			
	iv.	Axle No.	128517/983	126062/475	126318/474	129104/992				
	v.	Wheel Dia.	915.50	916.00	916.00	916.00	916.00	916.00	915.50	915.50
	vi.	Wheel Disc No.	6212-00168	6219-00155	6191-00056	6219-00088	6191-00188	6219-00005	6191-00075	6219-00207
	vii.	R.B. Nos.	21690	23412	22856	22923	23036	22901	22666	23376
	viii.	R.B. Make	SKF		SKF		SKF		SKF	
	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-12-6-1531	G-12-8-2848	DN-10-6-2102	G-12-8-2818	DN-12-5-1595	G-12-08-3052	DN-12-5-1591	G-12-08-2726	
ii.	Ht. at test load	511	466	509	466	505	467	506	465	
iii.	Align .deviation	22	17	19	17	17	9	15	8	
11.3	<b>Items traceability:</b>									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	L&S-13-2		L&S-13-2		L&S			
	ii.	Primary inner Spring	L&S-13-2		L&S-13-2		L&S			
	iii.	Primary Damper	25149,25424,26174,25164		25440,25315,25339,25196		KONI			
	iv.	Secondary damper	6187,5690		5938,5976		KONI			
	v.	Lateral Damper	533		877		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	1597/691,1638/691,1596/691,1635/691		1639/691,1698/691,1626/691,1499/691		KBI			
	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					GMT			
	xiv.	Traction centre elastic					GMT			
	xv.	Secondary rubber pad					TESPAK			
	xvi.	Rubber spring					GMT			
	xvii.	Anti roll bar make					EMSON			
	xviii.	Ball joint roll link					SARITA			
	xix.	Fork make					EMSON			
11.4	i.	Modification / Trial (if any):					NIL			
	ii.	Deviations (if any):					NIL			

LWSCZ-4030



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4020	DISPATCH DATE				26.09.2015
2.	Railway	NR	Type	LWSCZ	Coach No.	143613	
3.	Booked to	SSE/C&W/NDLS					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	106	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LJ90001))						
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	1105		
v)	Buffer/CBC (Make )	ESCORTS		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	ADVANCE	86/88		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
i.	BRAKE EQUIPMENT			FAIVELEY			
iii.	CDTS			--			
iv.	SEAT & BERTH			SUTLEJ			
v.	BODY SIDE DOORS			JBM			
vi.	SALOON COMPTT DOORS			--			
vii.	VESTIBULE SLIDING DOOR			KALSI			
viii.	WATER TANKS			RUBICONE, RAIL FAB			
ix	UIC VESTIBULE			SUNCREAST			
x	LUGGAGE RACK			HANSPAL			
XI	FLOOR BOARD			TAYAL			
XII	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 2 of 3

11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4020		NR		LWBAC		143613/C		14-09-2015	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	156617						156618			
	ii.	<b>Frame No.</b>	FIAT-3869						FIAT-3894			
	iii.	<b>Bolster No.</b>	5018-VT						5020-VT			
	iv.	<b>Axle No.</b>	125973/475		126803/468		126309/474		127824/987			
	v.	<b>Wheel Dia.</b>	916.00	916.50	916.00	916.00	917.00	917.00	917.00	917.00		
	vi.	<b>Wheel Disc No.</b>	6213-00023	6197-00067	6213-00154	6213-00185	6198-00049	06149-00031	6212-00085	6197-00091		
	vii.	<b>R.B. Nos.</b>	03430	04019	04016	03192	03903	03869	03614	03272		
	viii.	<b>R.B. Make</b>	TIM		TIM		TIM		TIM			
	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-13-1-3080	G-13-4-4228	DN-13-1-3091	G-13-4-4509	DN-13-1-2990	G-13-4-4248	DN-13-1-2252	G-13-4-4492			
ii.	<b>Ht. at test load</b>	504	468	506	467	504	465	504	466			
iii.	<b>Align .deviation</b>	15	16	17	20	15	15	17	15			
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			L&S-13-3			L&S-13-3			L&S	
	ii.	Primary inner Spring			L&S-12-05			L&S-12-05			L&S	
	iii.	Primary Damper			609,165,991,641			120,224,616,191			GEREP	
	iv.	Secondary damper			5267,5102			5505,5504			KONI	
	v.	Lateral Damper			158			300			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			15083/600,15084/600,15119/600,15098/600			15030/600,15021/600,15041/600,15039/600			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									GMT,MGN	
	xiv.	Traction centre elastic									GMT,MGN	
	xv.	Secondary rubber pad									TESPAK	
	xvi.	Rubber spring									BHAM	
	xvii.	Anti roll bar make									EMSON	
	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				

LWSCZ-4020