



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4026	DISPATCH DATE				28.11.2014
2.	Railway	NER	Type	LS3	Coach No.	14503	
3.	Booked to	SSE/C&W/GKP					
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 )	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	90/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			AAR KAY FOAMS		
	iii	BODY SIDE DOORS			JBM & SUKATA		
	iv	WATER TANKS			RAIL FAB		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला

12.	<b>Bogie Details:</b>		<b>Shell No.</b>	<b>Railway</b>	<b>Type</b>	<b>Coach No.</b>	<b>Dispatch Date</b>			
			4026	NER	LS3	14503/C	20-11-2014			
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>				<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	146951				146952			
	ii.	<b>Frame No.</b>	SCI/FM-53				SCI/FM-48			
	iii.	<b>Bolster No.</b>	4323-VT				4119			
	iv.	<b>Axle No.</b>	RWF-110174		106627/632		105855/627		126983/476	
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.000
	vi.	<b>Wheel Disc No.</b>	109-10582	081-10568	140-10533	319-63309	321-10568	295-10559	039-10570	076-10568
	vii.	<b>R.B. Nos.</b>	29312	29299	30269	36760	02658	36877	02646	30557
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF	
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING							
12.2	<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>	G14-3-136	G14-3-255	G14-3-041	G14-3-254	G14-3-162	G14-3-298	G14-3-157	G14-3-130	
ii.	<b>Ht. attest load</b>	515	470	514	469	516	471	515	471	
iii.	<b>Align .deviation</b>	4	20	4	19	5	16	6	20	
12.3	<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-14-4		G-14-4		GF	
	ii.	Primary inner Spring			G-14-4		G-14-4		GF	
	iii.	Primary Damper							KONI	
	iv.	Secondary damper							GEREP	
	v.	Lateral Damper							KONI	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper							KBI	
	viii.	Brake Disc							KBI,FTI	
	ix.	Ball joint Control arm							MGN	
	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							TESPAK	
	xvi.	Rubber spring							GMT	
	xvii.	Anti roll bar make							EMSON	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							EMSON	
12.4	i.	<b>Modification / Trial (if any):</b>			NIL					
	ii.	<b>Deviations (if any):</b>			NIL					



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4027	DISPATCH DATE				18.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14505	
3.	Booked to	SSE/C&W/GKP					
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 )	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	89/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT		FAIVELEY			
	ii	SEAT & BERTH		AAR KAY FOAMS			
	iii	BODY SIDE DOORS		JBM & SUKATA			
	iv	WATER TANKS		RAIL FAB			
	v	FLOOR BOARD		TAYAL			
	VI	PVC		RESPONSIVE			
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4027		NER		LS3		14505		17-10-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146869						146870			
	ii.	Frame No.	FIAT-3503						FIAT-3495			
	iii.	Bolster No.	4265-VT						4959-VT			
	iv.	Axle No.	105956/631			125722/473			129249/982		R-2236	
	v.	Wheel Dia.	916.00	916.00	916.50	917.00	916.00	916.00	916.50	916.00		
	vi.	Wheel Disc No.	201-11600	229-10582	356-10579	323-11611	234-63301	159-11611	108-10570	004-10568		
	vii.	R.B. Nos.	32156	31752	31762	27526	31758	31746	31757	38014		
	viii.	R.B. Make	SKF			SKF			SKF		SKF	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
12.2	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.	G14-3-047	G14-3-082	G14-3-076	G14-3-025	G14-3-012	G14-3-081	G14-3-045	G14-3-049			
ii.	Ht. attest load	514	469	513	471	515	469	514	469			
iii.	Align .deviation	5	11	4	10	3	8	4	9			
12.3	Items traceability:											
	S no.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-4		G-14-4		GF			
	ii.	Primary inner Spring			G-13-11		G-13-11		GF			
	iii.	Primary Damper							SACHS			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							FTI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							SGA			
	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							TESPAK			
	xvi.	Rubber spring							GMT			
	xvii.	Anti roll bar make							EMSON			
	xviii.	Ball joint roll link							SARITA			
	xix.	Fork make							EMSON			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					

LS3-4027



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				19.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14502	
3.	Booked to	SSE/C&W/GKP					
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 )	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	87/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			KBI			
ii	SEAT & BERTH			AAR KAY FOAMS			
iii	BODY SIDE DOORS			JBM & SUKATA			
iv	WATER TANKS			RAIL FAB			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	<b>Bogie Details:</b>		<b>Shell No.</b>	<b>Railway</b>	<b>Type</b>	<b>Coach No.</b>	<b>Dispatch Date</b>			
			4020	NER	LS3	14502	07-10-2014			
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>				<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	146845				146846			
	ii.	<b>Frame No.</b>	FIAT-3322				FIAT-3491			
	iii.	<b>Bolster No.</b>	3983-P				4262-VT			
	iv.	<b>Axle No.</b>	128299/991		125985/475		126585/481		127055/476	
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	916.00	916.00	916.50	916.00
	vi.	<b>Wheel Disc No.</b>	017-11603	189-11600	181-10583	153-63301	030-10579	090-61077	310-11603	312-11603
	vii.	<b>R.B. Nos.</b>	36740	36746	36651	36990	37644	37656	27601	37969
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF	
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING							
12.2	<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>	G-14-4-250	G-14-4-367	G-14-4-240	G-14-4-345	G-14-4-220	G-14-4-334	G-14-4-225	G-14-4-384	
ii.	<b>Ht. attest load</b>	513	469	514	469	514	468	512	469	
iii.	<b>Align .deviation</b>	1	14	3	15	5	16	3	14	
12.3	<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-14-4		G-14-4		GF		
	ii.	Primary inner Spring		G-12-11		G-12-11		GF		
	iii.	Primary Damper						KONI		
	iv.	Secondary damper						GEREP		
	v.	Lateral Damper						KONI		
	vi.	Yaw Damper						NIL		
	vii.	Brake cylinder & Caliper						KBI		
	viii.	Brake Disc						KBI		
	ix.	Ball joint Control arm						SGA		
	x.	Lateral Bump stop						GMT		
	xi.	Traction center make						EMSON,SARITA		
	xii.	Traction lever make						SARITA		
	xiii.	Ball joint traction lever						GMT		
	xiv.	Traction centre elastic						SGA		
	xv.	Secondary rubber pad						TESPAK		
	xvi.	Rubber spring						MTC		
	xvii.	Anti roll bar make						EMSON		
	xviii.	Ball joint roll link						SARITA		
	xix.	Fork make						EMSON		
12.4	i.	<b>Modification / Trial (if any):</b>				NIL				
	ii.	<b>Deviations (if any):</b>				NIL				

LS3-4020



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

**ROLLING STOCK CERTIFICATE**

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4012	DISPATCH DATE				20.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14504	
3.	Booked to	SSE/C&W/GKP					
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 <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	86/86		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			FAIVELEY			
ii	SEAT & BERTH			AAR KAY FOAMS			
lii	BODY SIDE DOORS			JBM & SUKATA			
lv	WATER TANKS			RAIL FAB			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



**रेल डिब्बा कारखाना, कपूरथला**  
Rail Coach Factory , Kapurthala

<b>12.</b>	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>		
			4012		NER		LS3		14504		15-10-2014		
<b>12.1</b>	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>					
	i.	<b>Bogie No.</b>	146865					146866					
	ii.	<b>Frame No.</b>	FIAT-3405					FIAT-3509					
	iii.	<b>Bolster No.</b>	4203-GT					4251-VT					
	iv.	<b>Axle No.</b>	105916/631		W-4537			126504/481		106272/629			
	v.	<b>Wheel Dia.</b>	917.00	917.00	916.00	916.00	917.00	917.00	917.00	917.00			
	vi.	<b>Wheel Disc No.</b>	160-10568	081-11603	007-10568	066-10568	326-11605	230-10558	062-11611	225-11603			
	vii.	<b>R.B. Nos.</b>	00465	00368	00927	01320	36599	35820	00904	00925			
	viii.	<b>R.B. Make</b>	TIMKEN		TIMKEN			TIMKEN		TIMKEN			
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING										
<b>12.2</b>	<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	Outer	Inner		
i.	<b>Make &amp; nos.</b>	G-14-4-193	G-14-4-376	G-14-4-232	G-14-4-325	G-14-4-239	G-14-4-311	G-14-4-191	G-14-4-340				
ii.	<b>Ht. attest load</b>	514	471	512	470	515	470	515	471				
iii.	<b>Align .deviation</b>	6	12	4	11	5	12	6	11				
<b>12.3</b>	<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-13-11			G-13-11			GF		
ii.		Primary inner Spring			G-13-11			G-13-11			GF		
iii.		Primary Damper									KONI		
iv.		Secondary damper									GEREP		
v.		Lateral Damper									KONI		
vi.		Yaw Damper									NIL		
vii.		Brake cylinder & Caliper									FTI		
viii.		Brake Disc									KBI		
ix.		Ball joint Control arm									SGA		
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									TESPAK		
xvi.		Rubber spring									GMT		
xvii.		Anti roll bar make									EMSON		
xviii.		Ball joint roll link									SARITA		
xix.		Fork make									EMSON		
12.4	i.	<b>Modification / Trial (if any):</b>			NIL								
	ii.	<b>Deviations (if any):</b>			NIL								





रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4019	DISPATCH DATE				20.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14501	
3.	Booked to	SSE/C&W/GKP					
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 )	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	88/88			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:				Make		
I	BRAKE EQUIPMENT			KBI			
ii	SEAT & BERTH			AAR KAY FOAMS			
iii	BODY SIDE DOORS			JBM & SUKATA			
iv	WATER TANKS			RAIL FAB			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

12.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>		
			4019		NER		LS3		14501		30-09-2014		
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>					
	i.	<b>Bogie No.</b>	146835					146836					
	ii.	<b>Frame No.</b>	FIAT-3489					FIAT-3229					
	iii.	<b>Bolster No.</b>	4211-VT					4230-VT					
	iv.	<b>Axle No.</b>	128956/986		105961/631			106606/632		128523/983			
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vi.	<b>Wheel Disc No.</b>	010-61077	281-10583	235-63307	268-10583	020-10582	024-10570	071-10583	150-63301			
	vii.	<b>R.B. Nos.</b>	36175	27990	36525	36784	27985	37370	36348	27988			
	viii.	<b>R.B. Make</b>	SKF			SKF			SKF		SKF		
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING										
12.2	<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	Outer	Inner	
i.	<b>Make &amp; nos.</b>	G-14-4-227	G-14-4-337	G-14-4-236	G-14-4-318	G-14-4-208	G-14-4-342	G-14-4-202	G-14-4-332				
ii.	<b>Ht. attest load</b>	515	470	515	469	514	469	515	470				
iii.	<b>Align .deviation</b>	5	13	5	13	3	10	1	7				
12.3	<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-13-11			G-13-11			GF		
	ii.	Primary inner Spring			G-13-11			G-13-11			GF		
	iii.	Primary Damper									SACHS		
	iv.	Secondary damper									GEREP		
	v.	Lateral Damper									KONI		
	vi.	Yaw Damper									NIL		
	vii.	Brake cylinder & Caliper									KBI		
	viii.	Brake Disc									KBI		
	ix.	Ball joint Control arm									SGA		
	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									TESPAK		
	xvi.	Rubber spring									GMT		
	xvii.	Anti roll bar make									EMSON		
	xviii.	Ball joint roll link									SARITA		
	xix.	Fork make									EMSON		
12.4	i.	<b>Modification / Trial (if any):</b>									NIL		
	ii.	<b>Deviations (if any):</b>									NIL		



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4029	DISPATCH DATE				22.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14506	
3.	Booked to	SSE/C&W/GKP					
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 )	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	89/89			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:				Make		
I	BRAKE EQUIPMENT			FAIVELEY			
li	SEAT & BERTH			AAR KAY FOAMS			
lii	BODY SIDE DOORS			JBM, SUKATA			
lv	WATER TANKS			RUBICONE			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

12.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4029		NER		LS3		14506		14-10-2014	
12.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	146861						146862			
	ii.	<b>Frame No.</b>	FIAT-3510						FIAT-3481			
	iii.	<b>Bolster No.</b>	174-P/ASR						3869-P			
	iv.	<b>Axle No.</b>	125640/377		128291/991		127864/987		127948/988			
	v.	<b>Wheel Dia.</b>	917.00	917.00	917.00	917.00	916.00	916.00	917.00	917.00		
	vi.	<b>Wheel Disc No.</b>	165-11610	282-11611	088-11605	259-11611	156-61077	013-10570	123-63302	010-11605		
	vii.	<b>R.B. Nos.</b>	31583	36223	31592	36220	38084	36590	31353	36411		
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF			
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
12.2	<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>	G-14-4-226	G14-4-313	G-14-4-237	G14-4-323	G-14-4-223	G14-4-358	G-14-4-252	G14-4-338			
ii.	<b>Ht. attest load</b>	516	469	515	470	514	470	514	471			
iii.	<b>Align .deviation</b>	3	14	6	15	4	13	3	12			
12.3	<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-13-11			G-13-11			GF	
	ii.	Primary inner Spring			G-13-11			G-13-11			GF	
	iii.	Primary Damper									KONI	
	iv.	Secondary damper									GEREP	
	v.	Lateral Damper									KONI	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper									FTI	
	viii.	Brake Disc									KBI	
	ix.	Ball joint Control arm									SGA	
	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									TESPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
12.4	i.	<b>Modification / Trial (if any):</b>						NIL				
	ii.	<b>Deviations (if any):</b>						NIL				

LS3-4029



# 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				29.12.2014
2.	Railway	NER	Type	LS3	Coach No.	14507	
3.	Booked to	SSE/C&W/GKP					
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 )	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	86/87		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:					Make	
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			CPF		
	iii	BODY SIDE DOORS			JBM		
	iv	WATER TANKS			RAIL FAB,RUBICON		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



# रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

<b>12.</b>	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			4030		NE		LS3		14507/C		21-11-2014	
<b>12.1</b>	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>					<b>NPP Side</b>				
	i.	<b>Bogie No.</b>	146965					146966				
	ii.	<b>Frame No.</b>	SCI/FM-51					SCI/FM-64				
	iii.	<b>Bolster No.</b>	4339-VT					4352-VT				
	iv.	<b>Axle No.</b>	128421/983		129305/982			Z-3329		128237/991		
	v.	<b>Wheel Dia.</b>	916.00	916.00	916.00	916.00	917.00	917.00	918.00	918.00	918.00	918.00
	vi.	<b>Wheel Disc No.</b>	319-63307	321*63307	148-63305	124-10568	012-10533	334-10559	292-51916	020-51910	51916	51910
	vii.	<b>R.B. Nos.</b>	37352	30181	37990	07800	13947	36804	31110	37102	31110	37102
	viii.	<b>R.B. Make</b>	SKF		SKF			SKF		SKF		
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
<b>12.2</b>	<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.	<b>Make &amp; nos.</b>	G-14-3-181	G-14-3-058	G-14-3-106	G-14-3-181	G-14-3-011	G-14-3-064	G-14-3-104	G-14-3-069			
ii.	<b>Ht. attest load</b>	515	470	513	469	514	471	512	472			
iii.	<b>Align .deviation</b>	4	10	5	11	3	10	2	8			
<b>12.3</b>	<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-14-4		G-14-4		GF			
	ii.	Primary inner Spring			G-14-4		G-13-4		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							FTI,KBI			
	ix.	Ball joint Control arm							MGN			
	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							TESPAK			
	xvi.	Rubber spring							GMT			
	xvii.	Anti roll bar make							EMSON			
	xviii.	Ball joint roll link							SARITA			
	xix.	Fork make							EMSON			
12.4	i.	<b>Modification / Trial (if any):</b>					NIL					
	ii.	<b>Deviations (if any):</b>					NIL					

LS3-4030