



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 3

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6007	DISPATCH DATE				11.03.17
2.	Railway	ER	Type	LWFCZAC	Coach No.	16014	
3.	Booked to	SSE/C&W/HWH					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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)	CBC Height	Specified : 1105 +0 /-15 mm	1105	1100		
	v)	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 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	87/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT		KBI			
	iii.	BIO-TOILETS		RAIL FAB+JSL			
	iv.	SEAT & BERTH		ADVANCE SILICON			
		FLOOR		TWPL			
		PVC		RESPONSIVE			
		UIC VESTIBULE		ESCORT			
	v.	BODY SIDE DOORS		JVR			
	vi.	SALOON COMPTT DOORS		CONCEPT			
	vii.	VESTIBULE SLIDING DOOR		HANSPAL			
	viii.	WATER TANKS		(AUX)SHIVALIK,(U/S)MANOJ			
	ix	LP SHEET		HINDUSTAN			
	x	LUGGAGE RACK		RAIL TECH			
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	
			6007		ER		LWFCZAC		16014/C		14-01-2017	
11.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	176041						176042			
	ii.	Frame No.	FIAT-5351						FIAT-5394			
	iii.	Bolster No.	6557-P						6526-P			
	iv.	Axle No.	N-6090		N-6071		N-6203		N-6211			
	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.	00147-6196	00105-6193	00089-6217	00120-6217	00060-6198	00074-6225	00150-6018	00030-6136		
	vii.	R.B. Nos.	34041	35856	33882	34053	34082	38875	34928	29810		
	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-16-6-846	FSK-16-11-113	RSK-16-6-961	FSK-16-11-116	RSK-16-6-764	FSK-16-11-32	RSK-16-6-210	FSK-16-11-15			
ii.	Ht. at test load	508	465.50	508	467	507	468	508	468			
iii.	Align .deviation	17	7	19	7	7	9	5	7			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
i.		Primary Outer Spring			L&S-12-4			L&S-12-4			L&S	
ii.		Primary inner Spring			RSK-16-3			RSK-16-3			RSK	
iii.		Primary Damper			36580,36621,36549,36492			36475,36020,36564,36433			KONI	
iv.		Secondary damper			0360,0329			0283,0362			SV	
v.		Lateral Damper			0548			0299			SV	
vi.		Yaw Damper									NIL	
vii.		Brake cylinder & Caliper			K2220/691,K1348/691 K2219/691,K1346/691			K2218/691,K1347/691 K2221/691,K1345/691			KBI	
viii.		Brake Disc									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									SGA	
xiv.		Traction centre elastic									SGA	
xv.		Secondary rubber pad									TECSPAK	
xvi.		Rubber spring									GMT	
xvii.		Anti roll bar make									SARITA, EMSON	
xviii.		Ball joint roll link									SARITA	
xix.		Fork make									EMSON	
11.4	i.	Modification / Trial (if any):			NIL							
	ii.	Deviations (if any):			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.	6004	DISPATCH DATE				11.03.17
2.	Railway	ER	Type	LWFCZAC	Coach No.	16013	
3.	Booked to	SSE/C&W/LILUAH					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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)	CBC Height	Specified : 1105 +0 /-15 mm		1105	1105		
v)	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 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	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.	BIO-TOILETS				RAIL FAB+JSL		
iv.	SEAT & BERTH				ADVANCE SILICON		
	FLOOR				TAYAL/NARBADA		
	PVC				RESPONSIVE		
	UIC VESTIBULE				ESCORT		
v.	BODY SIDE DOORS				JVR		
vi.	SALOON COMPTT DOORS				CONCEPT		
vii.	VESTIBULE SLIDING DOOR				HANSPAL		
viii.	WATER TANKS				(AUX)MANOJ,(U/S) SHIVALIK		
ix	LP SHEET				--		
x	LUGGAGE RACK				RAIL TECH		
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			
			6004	ER	LWFCZAC	16013/C	06-12-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	167086				167087			
	ii.	Frame No.	FIAT-5343				FIAT-5308			
	iii.	Bolster No.	6431-GT				6434-GT			
	iv.	Axle No.	N-5955		N-0929		R-2438		R-3463	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	917.00	917.00	916.50	917.00
	vi.	Wheel Disc No.	00101-6109	00035-6048	00182-6109	00068-6109	00109-7301	00165-7301	00080-7301	00047-7301
	vii.	R.B. Nos.	05383	05235	05320	05407	94255	93421	94287	93433
	viii.	R.B. Make	TIMKEN		TIMKEN		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-16-05-084	RSK-16-05-717	RSK-16-07-1082	RSK-16-05-1009	RSK-16-06-347	RSK-16-06-612	RSK-16-05-089	RSK-16-05-649	
ii.	Ht. at test load	512	466	512	468	510	468	510	468	
iii.	Align .deviation	8	35	7	32	10	31	11	35	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			RSK-14-5		RSK-15-10		RSK	
	ii.	Primary inner Spring			RSK-16-3		RSK-16-3		RSK	
	iii.	Primary Damper			43,08,136,06		54,134,118,42		GEREP	
	iv.	Secondary damper			0678,0679		0611,608		SV	
	v.	Lateral Damper			384		413		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			3636/691,3542/691 3566/691,3543/691		3635/691,3545/691 3634/691,3544/691		KBI	
	viii.	Brake Disc							KBI	
	ix.	Ball joint Control arm							MGN	
	x.	Lateral Bump stop							GMT	
	xi.	Traction center make							SARITA	
	xii.	Traction lever make							SARITA, AFW	
	xiii.	Ball joint traction lever							SGA	
	xiv.	Traction centre elastic							SGA	
	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	
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			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.	6005	DISPATCH DATE				09.03.17
2.	Railway	ER	Type	LWFCZAC	Coach No.	16012	
3.	Booked to	SSE/C&W/LILUAH					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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)	CBC Height	Specified : 1105 +0 /-15 mm		1105	1105		
v)	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 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				KBI		
iii.	BIO-TOILETS				RAIL FAB+JSL		
iv.	SEAT & BERTH				ADVANCE SILICON		
	FLOOR				NARBADA		
	PVC				RESPONSIVE		
	UIC VESTIBULE				ESCORT		
v.	BODY SIDE DOORS				JVR		
vi.	SALOON COMPTT DOORS				CONCEPT		
vii.	VESTIBULE SLIDING DOOR				HANSPAL		
viii.	WATER TANKS				(AUX)AMIT,(U/S) AMIT		
ix	LP SHEET				HINDUSTAN		
x	LUGGAGE RACK				RAIL TECH		
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.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6005	ER	LWFCZAC	16012/C	28-11-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	167022				167023			
	ii.	Frame No.	FIAT-5245				FIAT-5267			
	iii.	Bolster No.	6343-P				6356-P			
	iv.	Axle No.	N-0634		N-0551		N-6458		N-0582	
	v.	Wheel Dia.	916.00	916.00	917.00	917.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	00050-6138	00150-6139	00132-6132	00144-6109	07025-6QJ4	07024-6QJ4	08437-6QH4	08442-6QH4
	vii.	R.B. Nos.	98160	80658	62333	80653	14692	93515	93492	87952
	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.	AFJ-16-9-72	RSK-16-5-789	AFJ-16-9-5	RSK-16-5-689	AFJ-16-9-68	RSK-16-5-857	AFJ-16-9-73	RSK-16-5-447	
ii.	Ht. at test load	512	468	512	466	511	468	511	468	
iii.	Align .deviation	20	25	18	30	20	25	20	25	
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-16-3		RSK-16-3		RSK	
	iii.	Primary Damper			24,187,154,195		163,144,322,23		GEREP	
	iv.	Secondary damper			0695,0697		0645,0784		SV	
	v.	Lateral Damper			0521		0390		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			4116/691,4145/691 4117/691,4146/691		4115/691,4146/691 4116/691,4147/691		KBI	
	viii.	Brake Disc							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							SGA	
	xiv.	Traction centre elastic							SGA	
	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	
11.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				



ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6006	DISPATCH DATE				06.03.17
2.	Railway	ER	Type	LWFCZAC	Coach No.	16011	
3.	Booked to	SSE/C&W/LILUAH					
4.	Tare Weight of Coach	39.00 T					
5.	Carrying Capacity	Seating	56	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)	CBC Height		Specified : 1105 +0 /-15 mm		1105	1105	
v)	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 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		GS	86/86	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:					Make	
i.	BRAKE EQUIPMENT			KBI			
iii.	BIO-TOILETS			RAIL FAB+JSL			
iv.	SEAT & BERTH			AMIR CHAND			
	FLOOR			NARBADA			
	PVC			RESPONSIVE			
	UIC VESTIBULE			ESCORT			
v.	BODY SIDE DOORS			JVR			
vi.	SALOON COMPTT DOORS			KALSI			
vii.	VESTIBULE SLIDING DOOR			HANSPAL			
viii.	WATER TANKS			(AUX)MANOJ,RAIL TECH,(U/S) AMIT			
ix	LP SHEET			--			
x	LUGGAGE RACK			RAIL TECH			
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.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			6006		ER		LWFCZAC		16011/C		13-02-2017	
11.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	176125					176126				
	ii.	Frame No.	FIAT-5479					FIAT-5497				
	iii.	Bolster No.	6644-GT					6656-GT				
	iv.	Axle No.	R-3346		K-6331			N-6989		N-0444		
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	917.50	917.50	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	00167-6144	00007-6044	00155-6129	00176-6129	00060-6070	00187-6008	00058-6008	00161-6008	00161-6008	00161-6008
	vii.	R.B. Nos.	77143	78092	77320	77445	88403	76310	78692	78692	78946	78946
	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.	GBD-16-7-043	GBD-16-5-321	GBD-16-7-042	GBD-16-5-330	GBD-16-7-028	GBD-16-5-340	GBD-16-7-48	GBD-16-5-306			
ii.	Ht. at test load	508	468	507	468	512	468	510	466			
iii.	Align .deviation	11	12	14	12	10	6	10	11			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			GBD-16-12			GBD-16-12			GBD	
	ii.	Primary inner Spring			RSK-16-3			RSK-16-3			RSK	
	iii.	Primary Damper			36632,36817,36829,36825			36761,36856,36881,36922			KONI	
	iv.	Secondary damper			0712,0033			0649,0550			SV	
	v.	Lateral Damper			0099			0064			SV	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			4877/691,4766/691 4878/691,4765/691			4835/691,4706/691 4836/691,4785/691			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									AWF	
	xiii.	Ball joint traction lever									MGN	
	xiv.	Traction centre elastic									SGA	
	xv.	Secondary rubber pad									TECSPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									SARITA, EMSON	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
11.4	i.	Modification / Trial (if any):						NIL				
	ii.	Deviations (if any):						NIL				

LWFCZAC-6006