



ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4024	DISPATCH DATE			06.04.2015
2.	Railway	SR	Type	LWSCZAC	Coach No.	14161
3.	Booked to	SSE/C&W/PER				
4.	Tare Weight of Coach	40.28 T				
5.	Carrying Capacity	Seating	78	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 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	88/88	
8.2	APPLICATION OF PCN-123		SATISFACTORY			
8.3	INSUALTION		SATISFACTORY			
9.	Traceability of Furnishing Items:			Make		
i.	BRAKE EQUIPMENT			FAIVELEY		
iii.	CDTS			DARSHAN		
iv.	SEAT & BERTH			SUTLEJ		
v.	BODY SIDE DOORS			JBM		
vi.	SALOON COMPTT DOORS			CONCEPT		
vii.	VESTIBULE SLIDING DOOR			KALSI		
viii.	WATER TANKS			AMIT & SHIVALIK		
ix	UIC VESTIBULE			CEMCON		
x	LUGGAGE RACK			HANSPAL		
XI	FLOOR BOARD			NARBADA		
XII	PVC			PREMIER POLYFILM		
10.						
10.1	Modification / Trail (if any):				NIL	
10.2	Deviations if any:				NIL	



12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4024	SR	LWSCZAC	14161	09-03-2015			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	156180				156181			
	ii.	Frame No.	FIAT-3715				FIAT-3810			
	iii.	Bolster No.	4545-GT				4541-GT			
	iv.	Axle No.	A-3155		A-2918		A-3041		B-9634	
	v.	Wheel Dia.	916.50	916.00	917.00	916.50	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	320-63307	125-61077	253-10583	161-10582	236-63309	035-10583	257-10568	247-10533
	vii.	R.B. Nos.	38077	25251	37680	25121	25537	27525	36588	25530
	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.	CIAF-1091495 14-17	HZ-13-005	CIAF-1091495 14-72	HZ-13-009	CIAF-1091495 14-31	HZ-13-076	CIAF-109149 514-42	HZ-13-062	
ii.	Ht. at test load	510	465	510	468	512	465	512	463.80	
iii.	Align .deviation	14	45.90	15	52.20	19	35	20	37.70	
12.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			YR-10-10		YR-10-10		YR	
	ii.	Primary inner Spring			FSK-12-12		FSK-12-12		FSK	
	iii.	Primary Damper							KONI	
	iv.	Secondary damper							GEREP	
	v.	Lateral Damper							GEREP	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper							FTI	
	viii.	Brake Disc							FTI,KBI	
	ix.	Ball joint Control arm							SGA,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							SARITA	
12.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				

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Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4021	DISPATCH DATE			07.04.2015
2.	Railway	SR	Type	LWSCZAC	Coach No.	14160
3.	Booked to	SSE/C&W/PER				
4.	Tare Weight of Coach	40.28 T				
5.	Carrying Capacity	Seating	78	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 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	88/88	
8.2	APPLICATION OF PCN-123		SATISFACTORY			
8.3	INSUALTION		SATISFACTORY			
9.	Traceability of Furnishing Items:			Make		
i.	BRAKE EQUIPMENT			FAIVELEY		
iii.	CDTS			AIKON		
iv.	SEAT & BERTH			SUTLEJ		
v.	BODY SIDE DOORS			JBM		
vi.	SALOON COMPTT DOORS			CP		
vii.	VESTIBULE SLIDING DOOR			KALSI		
viii.	WATER TANKS			AMIT & SHIVALIK		
ix	UIC VESTIBULE			CEMCON		
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	



12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4021	SR	LWSCZAC	14160	16-03-2015			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	156216				156217			
	ii.	Frame No.	FIAT-3826				FCI-FM-135			
	iii.	Bolster No.	4601-P				4537-GT			
	iv.	Axle No.	A-2851		B-9894		B-9867		Z-3076	
	v.	Wheel Dia.	916.00	9160.0	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	080-10579	085-10579	011-10579	063-63301	354-10582	070-10568	139-63307	117-10533
	vii.	R.B. Nos.	02243	01400	02210	02373	02177	02367	02420	02614
	viii.	R.B. Make	TIM		TIM		TIM		TIM	
	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.	YR-13-12-079	BPS-2013-036	YR-13-12-078	BPS-2013-102	YR-13-12-080	BPS-2013-180	YR-13-12-077	BPS-2013-06	
ii.	Ht. at test load	512	467	511	468	507	468	509	468	
iii.	Align .deviation	31	25	35	31	25	22	22	22	
12.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			YR-10-10		YR-10-10		YR	
	ii.	Primary inner Spring			BPS-2013		BPS-2013		BPS	
	iii.	Primary Damper							GEREP	
	iv.	Secondary damper							KONI	
	v.	Lateral Damper							GEREP	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper							FTI	
	viii.	Brake Disc							FTII	
	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							SARITA	
12.4	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.	4017	DISPATCH DATE			02.05.2015
2.	Railway	SR	Type	LWSCZAC	Coach No.	14159
3.	Booked to	SSE/C&W/PER				
4.	Tare Weight of Coach	40.28 T				
5.	Carrying Capacity	Seating	78	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	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 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	85/87	
	8.2	APPLICATION OF PCN-123	SATISFACTORY			
	8.3	INSUALTION	SATISFACTORY			
9.	Traceability of Furnishing Items:				Make	
	i.	BRAKE EQUIPMENT			KBI	
	iii.	CDTS			AMIT	
	iv.	SEAT & BERTH			SUTLEJ	
	v.	BODY SIDE DOORS			JBM	
	vi.	SALOON COMPTT DOORS			KALSI	
	vii.	VESTIBULE SLIDING DOOR			CP	
	viii.	WATER TANKS			SHIVALIK, KUTEER	
	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	



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Rail Coach Factory , Kapurthala

12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4017	SR	LWSCZAC	14159	30-03-2015			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	146376				146053			
	ii.	Frame No.	FIAT-3060				SIMEN-008			
	iii.	Bolster No.	HEI-108				3451-P			
	iv.	Axle No.	RWF-110304	RWF-110514		RWF-110051		S-6390		
	v.	Wheel Dia.	918.00	918.00	918.00	918.00	916.50	916.00	917.00	917.00
	vi.	Wheel Disc No.	292-51910	256-51916	308-51916	070-51910	266-46433	335-51782	107-50859	254-50800
	vii.	R.B. Nos.	77344	91528	40546	09096	03831	03734	03821	03492
	viii.	R.B. Make	SKF		SKF		TIMKEN		TIMKEN	
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.	CHAFJ-14-09-70	CHAFJ-14-05-73	CHAFJ-14-09-68	CHAFJ-14-05-83	CHAFJ-14-09-69	CHAFJ-14-05-79	CHAFJ-14-09-92	CHAFJ-14-05-30	
ii.	Ht. attest load	508	466	509	468	509	468	510	468	
iii.	Align .deviation	15	12	16	12	10	7	11	7	
12.3	Items traceability:									
	Sno.	Item		PP Side Bogie		NPP side Bogie		Make		
	i.	Primary Outer Spring		G-13-03		G-13-03		GF		
	ii.	Primary inner Spring		L&S-12-5		L&S-13-02		L&S		
	iii.	Primary Damper						GEREP,SV		
	iv.	Secondary damper						GEREP,SACHS		
	v.	Lateral Damper						SACHS		
	vi.	Yaw Damper						NIL		
	vii.	Brake cylinder & Caliper						KBI		
	viii.	Brake Disc						FTI		
	ix.	Ball joint Control arm						MGN,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						SARITA		
	xviii.	Ball joint roll link						SARITA		
	xix.	Fork make						EMSON		
12.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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