



रेल डिब्बा कारखाना, कपूरथला

Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6001	DISPATCH DATE			18.05.17
2.	Railway	NR	Type	LWFCZAC/HS	Coach No.	163876
3.	Booked to	SSE/C&W/NDLS				
4.	Tare Weight of Coach	40.28 T				
5.	Carrying Capacity	Seating	78	Sleeping	NIL	Luggage
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)	ESCORT	Fiba Device	NA	
7.	Air Brake Testing:					
	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:					
	8.1	PAINT	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE	
			PU PAINT	GS	87/81/89	
	8.2	APPLICATION OF PCN-123				SATISFACTORY
	8.3	INSUALTION				SATISFACTORY
9.	Traceability of Furnishing Items:					
	i.	BRAKE EQUIPMENT			Make KBI	
	iii.	BIO-TOILET			RAIL FAB+JSL LIFE STYL LTD	
	iv.	SEATS			SUTLEJ	
	v.	BODY SIDE DOORS			KNOR BREMES	
	vi.	SALOON COMPTT DOORS			KALSI	
	vii.	VESTIBULE SLIDING DOOR			HANSPAL	
	viii.	WATER TANKS			(AUX)AMIT ,KUTEER & (U/S) SHIVALIK	
	ix	UIC VESTIBULE			HUBNER INTERFACE	
	x	LUGGAGE RACK			HANSPAL	
	XI	FLOOR BOARD			OVPL	
	XII	PVC			RESPONSIVE	
10.						
	10.1	Modification / Trail (if any): 1. Fire/Smoke Detection with Alarm System as per RDSO Spec No. RDSO/2013/CG-09 Rev:03, Supplied and Commissioned by M/S. Sanrok , Delhi. Contact No. 9810566723. 2.CCTV Surveillance System as per ICF Specification No. ICF/MD/SPEC-269,issue status:01,Rev 05 Supplied and Commissioned by M/S Punjab Radio Jalandhar Punjab Contact No. 9815068700. 3.Infotainment System Supplied and Commissioned by M/S. Megh Doot Media New Delhi (Contact No.09810772892) 4. Automatic Body Side Door supply and commissioned by M/S. Knor Bremes contact No09810428390) 5.Vinyl Wrapping supplied and fitted by. M/S.Techno Expert Jalandhar , Punjab , Contact No. 9317550000 6.Intercar Gang way supply and commissioned by M/S. Hubner Interface Contact No. 08027735154/5155 .				



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11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			6001		NR		LWFCZAC(HS)		163876		28-06-2016	
11.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	166472					166473				
	ii.	Frame No.	FIAT-4872					FIAT-4879				
	iii.	Bolster No.	C-5826-VT					5845-PS				
	iv.	Axle No.	K-6392		K-6438		N-0821		K-3526			
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vi.	Wheel Disc No.	7298-00154	7277-00031	7277-00093	7272-00123	6204-00157	7277-00007	07298-00042	7272-00030		
	vii.	R.B. Nos.	03437	05217	04772	03389	05325	05331	06307	06086		
	viii.	R.B. Make	TIM		TIM		TIM		TIM			
	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-15-05-04	RSK-15-03-132	RSK-15-05-011	RSK-15-03-169	RSK-15-05-018	RSK-15-03-122	RSK-15-05-016	RSK-15-03-129			
ii.	Ht. at test load	509	466	511	464	512	464	510	465			
iii.	Align .deviation	10	32	13	35	15	23	17	25			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			L&S-12-5			L&S-12-5			L&S	
	ii.	Primary inner Spring			L&S-13-2			L&S-13-2			L&S	
	iii.	Primary Damper			0953,0949,0692,0882			0927,0930,0702,0935			KNORR	
	iv.	Secondary damper			0332,0349			0350,0339			KNORR	
	v.	Lateral Damper			0143			0147			KNORR	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			J5244/688,J9194/688 J9242/688,J9195/688			J9243/688,J9192/688 J9245/688,J9193/688			KBI	
	viii.	Brake Disc									KBI	
	ix.	Ball joint Control arm									GMT	
	x.	Lateral Bump stop									MGN	
	xi.	Traction center make									EMSON	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									MGN	
	xiv.	Traction centre elastic									SGA	
	xv.	Secondary rubber pad									TESPACK	
	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				

LWFCZAC/HS-6001



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6002	DISPATCH DATE				18.05.17
2.	Railway	NR	Type	LWFCZAC/HS	Coach No.	163877	
3.	Booked to	SSE/C&W/NDLS					
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)	CBC Height	Specified : 1105 +0 /-15 mm	1102	1104		
	v)	CBC (Make)	ESCORT	Fiba Device	NA		
7.	Air Brake Testing:						
	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	87/88/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT			FAVELLY		
	iii.	BIO-TOILET			RAIL TECH+ORIENTAL PVT LTD		
	iv.	SEATS			SUTLEJ		
	v.	BODY SIDE DOORS			KNOR BREMES		
	vi.	SALOON COMPTT DOORS			KALSI		
	vii.	VESTIBULE SLIDING DOOR			HANSPAL		
	viii.	WATER TANKS			(AUX)RAIL TECH,MANOJ & (U/S) AMIT		
	ix	UIC VESTIBULE			SSIPL/HUBNER INTERFACE		
	x	LUGGAGE RACK			RAIL TECH		
	XI	FLOOR BOARD			TAYAL		
	XII	PVC			RESPONSIVE		
10.	10.1 Modification / Trail (if any): 1. Fire/Smoke Detection with Alarm System as per RDSO Spec No. RDSO/2013/CG-09 Rev:03, Supplied and Commissioned by M/S. Sanrok , Delhi. Contact No. 9810566723. 2.CCTV Surveillance System as per ICF Specification No. ICF/MD/SPEC-269,issue status:01,Rev 05 Supplied and Commissioned by M/S Punjab Radio Jalandhar Punjab Contact No. 9815068700. 3.Infotainment System Supplied and Commissioned by M/S. ACTIVE Media ADI (Contact No.09873639552) 4. Automatic Body Side Door supply and commissioned by M/S. Knor Bremes contact No09810428390) 5.Vinyl Wrapping supplied and fitted by. M/S.Techno Expert Jalandhar , Punjab , Contact No. 9317550000 6.Intercar Gang way supply and commissioned by M/S. Hubner Interface Contact No. 08027735154/5155 .						



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11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			6002		NR		LWFCZAC(HS)		163877		13-07-2016	
11.1	Wheel & Axle Details:		PP Side				NPP Side					
	i.	Bogie No.	166538				166539					
	ii.	Frame No.	FIAT-4867				FIAT-4897					
	iii.	Bolster No.	5870-PS				5651-PS					
	iv.	Axle No.	128401/983		127856/987		128983/986		128310/991			
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	7299-00021	7275-00001	7299-00068	7275-00006	7275-00021	7299-00061	7275-00057	7293-00115		
	vii.	R.B. Nos.	02954	03961	02978	03879	06438	03916	03155	04074		
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN			
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	<u>Secondary suspension load deflection Values:</u>											
Description		Secondary 1		Secondary 2		Secondary 1		Secondary 2				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	Make & nos.	RSK-15-5-07	RSK-15-9-95	RSK-15-5-05	RSK-15-9-40	RSK-15-5-05	RSK-15-9-120	RSK-15-5-003	RSK-15-9-018			
ii.	Ht. at test load	508	467	510	466	508	466	509	466			
iii.	Align .deviation	9	42	7	41	15	36	19	38			
11.3	<u>Items traceability:</u>											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			RSK-15-10		RSK-15-11		RSK			
	ii.	Primary inner Spring			RSK-14-05		RSK-14-05		RSK			
	iii.	Primary Damper			0841,0859,0839,0779		0635,0651,0673,0736		KNORR			
	iv.	Secondary damper			1315,1484		1420,1422		GEREP			
	v.	Lateral Damper			0394		0318		KNORR			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper			B16163/R00,B16159/R00 B16158/R00,B16147/R00		B16177/R00,B16166/R00 B16175/R00,C16029/R00		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,MGN			
	xiv.	Traction centre elastic							GMT			
	xv.	Secondary rubber pad							TESPACK			
	xvi.	Rubber spring							GMT			
	xvii.	Anti roll bar make							EMSON, SARITA			
	xviii.	Ball joint roll link							SARITA			
	xix.	Fork make							SARITA			
11.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					

LWFCZAC/HS-6002