



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 2

रोलिंग स्टॉक प्रमाण-पत्र

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6018	DISPATCH DATE			31.12.2016	
2.	Railway	WR	Type	LWLRRM(HM)	Coach No.	16859	
3.	Booked to	SSE/C&W/BCT					
4.	Tare Weight of Coach	53.4 T					
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage	3.9 T
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	1104	1104		
	v)	Buffer/CBC (Make)	ESCORT	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	APEX	85		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
	i.	BRAKE EQUIPMENT	ESCORTS				
	iii.	BIO TANK	RAIL TECH				
	iv.	SEATS/S&B	AAR KAY FOAMS				
	v.	BODY SIDE DOOR	JVR				
	vi.	VESTIBULE SLIDING DOOR	KALSI				
	vii.	CREW-GEN & GUARD ROOM DOOR	JBM/CONCEPT				
	viii.	WATER TANKS	SHIVALIK,KUTEER				
	ix	FUEL TANK	SHIVALIK				
	x	UIC VESTIBULE	KRP				
	XI	FLOOR BOARD	OVPL				
	XII	PVC	RESPONSIVE				
	XII	LP SHEET					
	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.Vinyl Wrapping supplied and fitted by. M/S.Tehno Expert Jalandhar , Punjab , Contact No. 9317550000					
	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			
			6018	WR	LWLRRM(HM)	16859	06-09-2016			
11.1	Wheel & Axle Details:		LPC-I PP Side(Guard)				LPC-II NPP Side (Non guard)			
	i.	Bogie No.	166740				166739			
	ii.	Frame No.	FIAT-4985				FIAT-5101			
	iii.	Bolster No.	6070-VT				6096-P			
	iv.	Axle No.	126938/476		K-3933		N-6577		K-3345	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	08031-6QL6	02242-6QG7	00716-6QJ9	00627-6MG6	03188-6QL7	03938-6QH4	05716-6QL7	03192-6QL7
	vii.	R.B. Nos.	01633	01058	01948	02294	01216	01547	02522	01537
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	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.	FSK-15-1-38	RSK-16-1-82	FSK-15-1-43	RSK-16-1-88	RSK-16-5-134	DN-16-4-430	RSK-16-5-114	DN-16-3-387	
ii.	Ht. at test load	508.50	467	508	468	515	467	515	467	
iii.	Align .deviation									
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			RSK-15-11		RSK-15-11		RSK	
	ii.	Primary inner Spring			L&S-15-11		L&S-15-11		L&S	
	iii.	Primary Damper			1690,1734,1662,1479		1637,1769,1549,1793		KNORR	
	iv.	Secondary damper			0133,204		0300,0144		SV	
	v.	Lateral Damper			3736		3118		KONI	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			30120/2210,31543/2122 31538/2210,30112/2212		NIL,31517/2120,31539/22 10,31497/2120,		ESCORTS	
	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							MGN	
	xiv.	Traction centre elastic							GMT	
	xv.	Secondary rubber pad							TECSPAK	
	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	

LWLRRM 6018

L



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 2

रोलिंग स्टॉक प्रमाण-पत्र

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6015	DISPATCH DATE			31.12.2016	
2.	Railway	WR	Type	LWLRRM(HM)	Coach No.	16858	
3.	Booked to	SSE/C&W/BCT					
4.	Tare Weight of Coach	53.4 T					
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage	3.9 T
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)	SANROK	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	APEX	85		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	i.	BRAKE EQUIPMENT		ESCORTS			
	iii.	BIO TANK		RAIL TECH			
	iv.	SEATS/S&B		AAR KAY FOAMS			
	v.	BODY SIDE DOOR		JVR			
	vi.	VESTIBULE SLIDING DOOR		KALSI			
	vii.	CREW-GEN & GUARD ROOM DOOR		JBM/CONCEPT			
	viii.	WATER TANKS		SHIVALIK,KUTEER			
	ix	FUEL TANK		SHIVALIK			
	x	UIC VESTIBULE		KRP			
	XI	FLOOR BOARD		TWPL			
	XII	PVC		RESPONSIVE			
	XII	LP SHEET					
	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.Vinyl Wrapping supplied and fitted by. M/S.Tehno Expert Jalandhar , Punjab , Contact No. 9317550000					
	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			
			6015	WR	LWLRRM(HM)	16858	05-09-2016			
11.1	Wheel & Axle Details:		LPC-I PP Side(Guard)				LPC-II NPP Side (Non guard)			
	i.	Bogie No.	166763				166762			
	ii.	Frame No.	FIAT-5097				FIAT-5036			
	iii.	Bolster No.	6093-P				5973-VT			
	iv.	Axle No.	N-0610		N-5852		N-0887		N-1007	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	03039-6QH9	01687-6QH1	01684-6QH1	07058-6QJ4	06890-6QH7	08301-6QM4	07059-6QJ4	01686-6QH1
	vii.	R.B. Nos.	03715	03284	01923	02502	02381	02183	01744	01242
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	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-15-12-026	RSK-16-1-076	RSK-15-12-133	RSK-16-1-47	RSK-16-5-340	DN-16-5-466	RSK-16-5-332	DN-16-5-459	
ii.	Ht. at test load	512	468	511	468	515	466	515	467	
iii.	Align .deviation	11	8	9	5	8	16	5	15	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			G-15-9		G-15-9		GF	
	ii.	Primary inner Spring			L&S-15-11		L&S-15-11		L&S	
	iii.	Primary Damper			2883,2968,3350,3430		3428,3363,3345,3431		KNORR	
	iv.	Secondary damper			0110,0113		0111,0299		SV	
	v.	Lateral Damper			0212		0196		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			34154/2210,31542/2122 34153/2210,31541/2212		34155/2210,30107/2120 34156/2210,30109/2120		ESCORTS	
	viii.	Brake Disc							MGN	
	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							MGN	
	xiv.	Traction centre elastic							GMT	
	xv.	Secondary rubber pad							TECSPAK	
	xvi.	Rubber spring							GMT	
	xvii.	Anti roll bar make							SARITA	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							SARITA	
11.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

Page 1 of 2

रोलिंग स्टॉक प्रमाण-पत्र

ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6019	DISPATCH DATE			31.12.2016
2.	Railway	WR	Type	LWLRRM(HM)	Coach No.	16860
3.	Booked to	SSE/C&W/BCT				
4.	Tare Weight of Coach	53.4 T				
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage 3.9 T
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	1100	1095	
	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	
				-		
	8.2	APPLICATION OF PCN-123	SATISFACTORY			
	8.3	INSUALTION	SATISFACTORY			
9.	Traceability of Furnishing Items:				Make	
	i.	BRAKE EQUIPMENT			ESCORTS	
	iii.	BIO TANK			RAIL TECH	
	iv.	SEATS/S&B			AAR KAY FOAMS	
	v.	BODY SIDE DOOR			JVR	
	vi.	VESTIBULE SLIDING DOOR			KALSI	
	vii.	CREW-GEN & GUARD ROOM DOOR			JBM/CONCEPT	
	viii.	WATER TANKS			MANOJ, ,KUTEER	
	ix	FUEL TANK			GAURAV	
	x	UIC VESTIBULE			KRP	
	XI	FLOOR BOARD			TAYAL	
	XII	PVC			RESPONSIVE	
	XII	LP SHEET				
	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.Vinyl Wrapping supplied and fitted by. M/S.Tehno Expert Jalandhar , Punjab , Contact No. 9317550000				
	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			
			6019	WR	LWLRRM(HM)	16860	18-08-2016			
11.1	Wheel & Axle Details:		LPC-I PP Side(Guard)				LPC-II NPP Side (Non guard)			
	i.	Bogie No.	166687				166688			
	ii.	Frame No.	FIAT-5088				FIAT-4228			
	iii.	Bolster No.	6021-VT				5990-VT			
	iv.	Axle No.	N-0895		N-0332		N-5853		P-9344	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.50	916.00	916.00	
	vi.	Wheel Disc No.	13350-00148	13352-00065	13352-00041	13352-00173	7305-00214	7280-00082	13354-00025	13352-00232
	vii.	R.B. Nos.	03439	03407	03458	03711	01091	01079	02551	02493
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	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.	FSK-15-11-27	RSK-16-1-004	FSK-15-11-53	RSK-16-1-629	RSK-16-4-326	DN-12-11-262	RSK-16-4-305	DN-12-11-284	
ii.	Ht. at test load	512.50	467	511.50	468	515	464	514	459	
iii.	Align .deviation	9	6	10	8	12	7	13	9	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			L&S-15-12		L&S-15-12		L&S	
	ii.	Primary inner Spring			L&S-15-11		L&S-15-11		L&S	
	iii.	Primary Damper			231,204,230,201		188,121,174,199		GABRIEL	
	iv.	Secondary damper			0048,0378		0425,0051		SV	
	v.	Lateral Damper			0293		0550		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			30115/2210,34221/2122 30071/2210,34207/2212		34130/2210,33959/2120 34131/2210,19126/2120		ESCORTS	
	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							GMT	
	xv.	Secondary rubber pad							TECSPAK	
	xvi.	Rubber spring							GMT	
	xvii.	Anti roll bar make							SARITA	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							SARITA	
11.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				

LWLRRM 6019

