

		Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली			DOC NO.: MCF/RBL/QMF 8002 REV NO: 02 DATE: 28-05-2021		
ROLLING STOCK CERTIFICATE(NON AC COACH)							
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-2022 /1590							
RLY	WR	COACH NO	225626/C	DATE OF DISPATCH			23-Mar-22
Type	LWSCN1	Shell No.	21G116	DISPATCH TO	Sr.DME/C&W/PL/MMCT		FUR.NO.
1	Railway Board's Order No.			:2021 (C)/142/2,Dt-		07.09.2021	
2	Tare Weight & Carrying Capacity of Coach :						
S.N	COACH TYPE	LWSCN1	LWS	LWSCZ	LDSLR	LSLRD	
I	Tare Weight	41.24	40.66	40.5	38.19	38.19	
II	Seating	80	100	120	36	37	
III	Sleeping	80	NIL	NIL	2	4	
IV	Luggage	NIL	NIL	NIL	4	4	
3	Special feature:						
S.N	DESCRIPTION					MAKE/SUPPLIER	
I	Epoxy flooring in lavatory					M/S-ACME INDIA DELHI	
II	Anti slip friendly Grab Bar					M/S-ACME INDIA DELHI	
III	Provision of Health Faucet in lavatories					M/S-ACME INDIA DELHI	
IV	Washbasin counter Top (Corian of Duport or Montelli)					M/S-ACME INDIA DELHI	
V	GFRE ceiling instead of NFTC					M/S-ACME INDIA DELHI	
VI	DGFRP panels instead of LP panels					M/S-ACME INDIA DELHI	
VII	Honey Comb partition frame with DGFRP sheet instead of FRP sheet					M/S-ACME INDIA DELHI	
VII	Venturi arrangement in lavatory					M/S-ACME INDIA DELHI	
IX	Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiv.)letter no. MC/LHB/Brake, DT. 27.09.18						
4	Smart feature:NIL						
5	SHELL LEADING DIMENSIONS:						
S.N	DESCRIPTION						DIMENSION (MM)
I	Maximum Length over body						23540
II	Maximum Width over body						3240
III	Maximum height from Rail Level						4039
IV	CBC height/Buffer Height from Rail level 1105 +0/-10						NPP/PP 1104/1097
6	TRACEABILITY OF SHELL ITEMS:						
S.N	ITEM			MAKE/SUPPLIER	SERIAL NO		
I	Under frame	Front	PP END	M/S-RAIL TECH	4		
		Part	NPP END	M/S-RAIL TECH	4		
		Complete		M/S-RAIL TECH	4		
II	Lav. side wall			M/S-RAIL TECH	LAV.1	-----	LAV.2
				M/S-RAIL TECH	LAV.3	-----	LAV.4
III	Side wall	LH SIDE		M/S-RAIL TECH	5		
		RH SIDE		M/S-RAIL TECH	5		
IV	End wall	PP END		M/S-RAIL TECH	-----		
		NPP END		M/S-RAIL TECH	-----		
V	Roof			M/S-RAIL TECH KIT	----		
VI	Centre Buffer Coupler			M/S-FRONTIER	NPP/PP	160P2/193P2	
VII	Buffer			N/A	NPP/PP	N/A	
7	AIR BRAKE TEST REPORT:						
S.N	ITEM	DESCRIPTION			SPEC. VALUE		OBSERVED
I	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .			6 – 10 sec.		07 SEC
		Max. pressure in BC			3.0 ±0.15 kg/cm ² .		3.0 kg/cm ²
		All Brake are applied			OK		OK
II	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min.			No brake application		OK
III	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.			Brake must apply		OK
IV	Handbrake(Parking brake)for generator car	1.Apply hand brake			1.Hand Bk. Indicator should be red		OK
		2.Release hand brake			2. Hand Bk. indicators should be green		OK
8	PAINTING DETAILS:						
S.N	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)		AVERAGE GLOSS VALUE SIDE WALL/END WALL	DATE OF COMPLETION
I	Paint	P.U	M/S-GSI	M/S-GSI		74/97	21-Dec-21
II	Insulation-	Satisfactory		ANTIGRAFFITE COATING- YES		WET ON WET- YES	
9	COACH FURNISH DETAILS :						
S.N	ACTIVITIES	FIRM			TURNKEY/WORK CONTRACT/SUPPLY&APPLY		
I	Coach Furnishing	M/S-ACME INDIA DELHI			TURNKEY		
II	Air Brake	M/S-ACME INDIA			TURNKEY		
III	Bio toilet & flushing	M/S-VEDANSH ENT.			SUPPLY&APPLY		
IV	Epoxy in lav.	M/S-ACME INDIA DELHI			TURNKEY		
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		Modern Coach Factory Raebareli		DOC NO.: MCF/RBL/QMF 8002	
		आधुनिक रेल डिब्बा कारखाना, रायबरेली		REV NO: 02 DATE: 28.05.2021	
ROLLING STOCK CERTIFICATE(NON AC COACH)					
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-2022 /1590					
RLY	WR	COACH NO	225626/C	DATE OF DISPATCH	
Type	LWSCN1	Shell No.	21G116	DISPATCH TO	Sr.DME/C&W/PL/MMCT
10	MODIFICATION (IF ANY)		: NIL		
11	DEVIATION (IF ANY)		: NIL		
12	ITEM FITTED ON THE COACH ON TRIAL		: NIL		
S.N	ITEM PARTICULARS		PURPOSE	REPORT	REFERENCE &
				Frequency	PERIOD OF TRIAL
I					
13.A	TRACEABILITY OF FURNISHING ITEMS:(common items for all coach)				
S.N	ITEM		MAKE/SUPPLIER	SERIAL NO(NPP/PP)	
I	Air Brake Module		M/S-KBI	1948-12-2021	
II	Distribution valve		M/S-KBI	15672-11-2021	
III	Pull box		M/S-KBI		
IV	FIBA		M/S-ESCORTS	2021-12-2773/2021-12-2642	
V	Foot Step		M/S-FRONTTEK INDS FARIDABAD		
VI	Decoupling arrangement		M/S-K.SIDHU JALANDHAR		
VII	Floor board		M/S-MAGNUS POLYWOOD PUNJAB		
VIII	PVC		M/S-ACME INDIA DELHI		
IX	Lavatory inlay		M/S-ACME INDIA DELHI		
X	UIC Vestibule (PPE)		M/S-SUNCREST KOLKATA		
XI	UIC Vestibule (NPPE)		M/S-SUNCREST KOLKATA		
XII	Gangway bridge mounting (PPE)		M/s-SWASTIK STEEL MUMBAI		
XIII	Gangway bridge mounting (NPPE)		M/s-SWASTIK STEEL MUMBAI		
XIV	Body Side Window		M/S-ACME INDIA DELHI		
XV	Emergency Window		M/S-ACME INDIA DELHI		
XVI	Lavatory/hopper Window		M/S-ACME INDIA DELHI		
XVII	Roof Ceiling		M/S-ACME INDIA DELHI		
XVIII	Door way /gang way ceiling		M/S-ACME INDIA DELHI		
XIX	Lav. panel		NA		
XX	Side wall panel		M/S-ACME INDIA DELHI		
XXI	Body Side Doors		M/S-ACME INDIA DELHI		
XXII	Vestibule Door(PPE)		M/S-JBM FARIDABAD		
XXIII	Vestibule Door(NPPE)		M/S-JBM FARIDABAD		
XXIV	Bio Tank		M/S-CEMCON CASTING		
XXV	Pressurized flushing (ele. Pneu.)		M/S-CEMCON		
XXVI	Auxiliary Water Tank		M/S-SHIVALIK FAST MOHALI		
XXVII	Under Slung Water Tank (2X685L)		M/S-COSTAL STEEL		
XXVIII	Under Slung Water Tank (1X685L)		M/S-COSTAL STEEL		
XXIX	Health Faucet		M/S-KAPCO VALES JALANDHAR		
XXX	Lotah Filler Tap		M/S-KAPCO VALES JALANDHAR		
XXXI	Controlled discharge tap		M/S-AGMECO PVT.LTD,U.K.		
XXXII	Lavatory Modules		NA		
XXXIII	Lavatory Doors		M/S-ACME INDIA DELHI		
XXXIV	Fire Extinguisher		M/S-AMTEX SAFETY SYSTEM DELHI	22675/22670	
XXXV	Seat & Berth		M/S-ACME INDIA DELHI		
XXXVI	Venturi grill		M/S-ACME INDIA DELHI		
13.B	TRACEABILITY OF FURNISHING ITEMS:(items for variant wise)				
I	Partition panel		M/S-ACME INDIA DELHI		
II	Partition pillar		M/S-ACME INDIA DELHI		
III	Water purifier		M/S-ACME INDIA DELHI		
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	MODERN COACH FACTORY, RAEBARELI	DOC NO.: MCF/RBL/QMF 8002
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	DATE: 28.05.2021	

ROLLING STOCK CERTIFICATE (NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-22/ **1590**

RLY	W	R	-	Coach No.	2	2	5	6	2	6	/	C	-	DATE OF DISPATCH	2	3	0	3	2	0	2	2
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DISPATCH	Sr.DME/C&W/PL/MMCT	Type	L	W	S	C	N	1	Shell No.	2	1	G	1	6	2	FUR.NO	LSCNG-692
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14. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	212762				212761			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL - 1471				MIPL - 1414			
Bolster no.	MCF/RBL/LS-5 - 3238				MCF/RBL/LS-5 - 1061			
Axle No	21 K - 3269 RWF		21 K - 4550 RWF		21 K - 4314 RWF		21 K - 3253 RWF	
Wheel Dia	918.64	918.52	918.60	918.50	918.59	918.53	918.70	918.53
Wheel Disc No	KLW 07-21 00169-212952	KLW 07-21 00213-213049	KLW 07-21 00017-213049	KLW 07-21 00122-213049	KLW 07-21 00226-212795	KLW 06-21 00049-212691	KLW 06-21 00268-212691	KLW 07-21 00008-212951
R.B. Nos.	08-21 421265	08-21 421909	08-21 419940	07-21 416937	08-21 420758	08-21 420623	08-21 421153	07-21 416227
CTRB Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

15. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	AVADH RAIL Sr.NO.- 06-21 13580	AVADH RAIL Sr.NO.- 06-21 13748	AVADH RAIL Sr.NO.- 06-21 13742	AVADH RAIL Sr.NO.- 05-21 13054

16. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	AB-(57041,56842)	AB-(56853,56982)
2.	Primary outer Spring	CMAFJ	07-21-1100-(236,277,254,226)	07-21-1100-(276,284,238,274)
3.	Primary Inner Spring	CMAFJ	06-21-1101-(262,270,269,108)	06-21-1101-(264,273,265,268)
4.	Primary Damper	IAI	03-21-AB-(15931,13127,12171,12037)	03-21-AB-(12964,16430,11712,12120)
5.	Secondary Damper	GABRIEL	06-21-(2620,2365)	07-21-(2617,2612)
6.	Lateral Damper	IAI	11-18-229439	01-20-297766
7.	Brake Cylinder	KBI	A-(7089,6494,6501,7088)-K29	A-(7087,6496,6500,7093)-K29
8.	Brake Caliper	KBI	2921465225,2921434885,2921454895,2921474905	2921475270,2921414896,2921404894,2921455024
9.	Brake Disc	KBI	24273298-0013-49-21,24273299-0015-49-21, 24273299-0008-49-21,24273298-0067-49-21	24273297-0017-48-21,24273297-0021-48-21, 24273296-0071-48-21,24273297-0018-48-21
10.	Ball Joint Control Arm	AR+BASANT/AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RNG		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	09-21-D-(6637,6567)	09-21-D-(6737,6531)
17.	Check Valve	KNORR	11-21-32270	11-21-31325
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	JUR+GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	953,608,1365,1322	767,1469,834,854
22.	Control Arm Lower	SF	1324,1294,854,1552	1272,964,1092,1024
23.	Phonic Wheel	KBI	K-11-21	K-11-21

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GSTIN : 03ACBPK3400D1ZM
Excise Regn. No. ACBPK3400DXM001

G. S. INDUSTRIES

APPROVED BY

**N.S.I.C.
R.D.S.O.**

**ISO 9001-2015
ISO 14001-2015**

D-146, FOCAL POINT EXTENSION, JALANDHAR-144004

PHONE : (O) 0181-5081474
(M) 99882-65025, 99884-55459
Website : www.gspaints.com
e-mail : info@gspaints.com

WARRANTY CERTIFICATE

Date:- 22/12/2021

To,
DY.CME/FP&PAINT
MODERN COACH FACTORY,
RAEBARELI, LALGANJ-229120

Sub:- PERFORMANCE WARRANTY CERTIFICATE

PO NO. 06201016101340 DATED 22-SEP-20

NAME OF WORK: - PU BASED WET ON WET PAINT FOR EXTERIOR PAINTING OF COACHES IN SUPPLY AND APPLY SHALL BE AS PER SPECIFICATION MMDTS-18034 REV-2. APP SHALL BE AS PER MDTs 48279 REV-1, ANTI GRAFFITI WILL COMPLY REQUIREMENTS OF RDSO SPEC-M&C/PCN/127/2009.

DEAR SIR,

With reference to above, we do here by confirm the warranty for six years of the date of application of delivered below mentioned coaches vide your above referred purchase order after application & due inspection at your end.

SR.	SHELL NO.	FURNISHING NO.	COACH NO.	Railway NO.	DATE OF COMPLETION
1. 174.	LWSEN 210162	LSEN(4)- 692			06/12/2021 21/12/2021

The warranty is applicable from date of dispatch against the below mention defects as per MCF specification no. MMDTS 18034 REV-2

- Gloss level value of applied paint-initial 95 unit(on the date of painting) and minimum 90%,85%,75% & 70% of initial gloss after 6 months, one years, four years and six years respectively from the date of application.
- Decolonization of paint film.
- Cracking of paint film.
- Peeling of paint film.
- Blistering of the paint film.
- The coach is warranted 6years for gloss retention, premature failure in colour retention (colour fading) or thatches/peel-off and blistering etc.,

NOTE: it is certified that gloss value:

- Before antigraffiti gloss value: 97.65
- After antigraffiti gloss value: 74.15

Thanking you,

G. S. INDUSTRIES

Ant. Signatory

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		225626/C
RAILWAY		WR	ELECT. FIT DATE	22-03-2022	MCF FUR. NO.	SCN-G-692
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, NL,LAP CHARGING SOCKETS					OK
3.	WORKING OF ACCIDENTAL, EMERGENCY LIGHTS.					OK
4.	RAILWAY CARRIAGE FAN					OK
5.	WHEEL SLIDE PROTECTION SYSTEM (WSP)					OK
6.	WORKING OF 9 KVA TRANSFORMER					OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.					OK
8.	SAFETY :					--
8.1.	FUSES AND THEIR RATING					OK
8.2.	CONTROL CIRCUIT					OK
8.3.	POWER CIRCUIT					OK

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: HIND On Board: H355.21.1099(LH) HT Panel: H355.21.1099(HV)	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: VIMAL Sr no.: VTC-R-3089 LHB-2552	RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	01
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001,Alt –B.	OK
04.	Provision of Pump equipment with pump box. Make: KIND Sr no : KIND/ASY/21080045 Pump 1: 21080089 Pump 2: 21080090	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: LIGHT ENGG. SL.no.: 2108R1410	As per Spec. EDTS186 Rev-a Am-2, & drg no. CC71328 & LW70020	01
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: IC Sr. no.: 07/21/0076	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : INDORAIL	EDTS-328 REV-C,AM-4,Type- II,COR-2	01 SET
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
09.	Battery fuse box +ve Make : NEC	As per LW 71001,Alt- H	01
10.	Battery fuse box –ve Make : RADIANT ELECTRICALS	As per LW 71002,Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: ANKUR	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	01
12.	Provision of batteries Type: 110 V, 120 AH VRLA SMF Battery Set. Make: HBL Lug Date: 08/21	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: KAPSONS	As per Drg. No. ICF/SK-7-6-158,alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1,am-1.	30
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: ENSAVE	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1 .Type-B1. Drg. No. CC76453.	26
15.	Fitment of LED Light fittings for Night Light with berth indication Type-E (1 watt). Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1, ICF/STB-7-6-053.Type- E. Drg. No. CC76461	10
16.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
17.	Fitment of LED Light fittings for PACIL. Make: KAVERI	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
18.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
19.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
20.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
21.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10
22.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
23.	Provision of Switch plate assembly along with mobile charging sockets. Make: RECORD	EDML-086, Rev-5, Am-1, Table-1, Item-3.	20
24.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3 ph, 50 Hz). Make: 1.(NPP): PRIME ELECT. 2.(PP): PRIME ELECT.	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	01 SET
25.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
26.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : KNORR Sr no : 3521210827	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

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