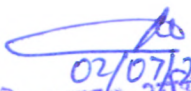
		Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली			DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018		
ROLLING STOCK CERTIFICATE (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21 /1249							
RLY	WCR	COACH NO	215514/C	DATE OF DISPATCH		12-Mar-21	
Type	LWS	Shell No.	20F152	DISPATCH TO	Sr.DME/C&W/JBP	FUR.NO.	DDG-644
1. Railway Board's Order No. 2019/M (C)/142/2, Date- 03.09.2019 2. Tare weight of coach : 40.66 Tonnes 3. Carrying Capacity : (a) Seating: 100 (c) Luggage: NIL 4. Special feature:							
S NO	ITEMS					MAKE/SUPPLIER	
A	Cushion transverse side luggage rack which can serve as seat during rush					M/S-NITIN NDLS	
B	Honey comb partition frame.					M/S-MILTON LTD	
C	DGFRP/GFRE paneling.					M/S-MCF/RBL	
D	Lavatory with DGFRP/GFRE paneling.					M/S-MCF/RBL	
E	Additional Hand hold.					M/S-MCF/RBL	
F	Counter top wash basin.					M/S-MCF/RBL	
G	Gel coating & Anti Graffiti measures.					M/S-MCF/RBL	
H	Air spring in secondary suspension (capacity-140KN).					M/S-TAYAL & CO	
I	Fire Extinguishers					M/S-AMTEX INDS	
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)						
K	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						
5. SHELL LEADING DIMENSIONS:							
S NO	DESCRIPTION					DIMENSION (MM)	
1	Maximum length over body					23700	
2	Maximum width over body					3240	
3	Maximum height from Rail Level					4039	
4	CBC height/Buffer height from Rail level 1105 +0/-10					NPP/PP	1104/1102
6. TRACEABILITY OF SHELL ITEMS:							
S NO	ITEM		MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front	PP END	M/S-CHENNAI RADHA	----		
		Part	NPP END	M/S-CHENNAI RADHA	----		
		Complete		M/S-CHENNAI RADHA	----		
2	Lav. side wall		PP END	M/S-CHENNAI RADHA	LAV.1	-----	LAV.2
			NPP END	M/S-CHENNAI RADHA	LAV.3	-----	LAV.4
3	Side wall	LH SIDE		M/S-CHENNAI RADHA	4		
		RH SIDE		M/S-CHENNAI RADHA	4		
4	End wall	PP END		M/S-OMAX REWARI	-----		
		NPP END		M/S-MMPL	-----		
5	Roof			M/S-CHENNAI RADHA	2		
6	Centre Buffer Coupler			M/S-FRONTIETR	PP END/ NPP END	87P2/249P2	
7. AIR BRAKE TEST REPORT:							
S NO	ITEM	DESCRIPTION			SPEC. VALUE	OBSERVED	
1	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .			6 – 10 sec.	8 Sec	
		Max. pressure in BC			3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²	
		All Brake are applied			OK	OK	
2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min.			No brake application	OK	
3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.			Brake must apply	OK	
8. PAINTING DETAILS:							
S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION	
1	Paint	P.U	DEB PAINTS	M/S-DEB PAINTS	75/89	8-Mar-21	
2	Insulation			Satisfactory			


02/07/21
SSE/CC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE**Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21 - 1249**

RLY	W	C	R	-	Coach No.	2	1	5	5	1	4	/	C	-	DATE OF DISPATCH	1	2	0	3	2	0	2	1
-----	---	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/C&W/JBP	Type	L	W	S	-	-	-	Shell No.	2	0	F	1	5	2	FUR .NO	DDG- 644
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	202538				202537			
Bogie Type	LWS				LWS			
Frame no.	BEEKAY - 31				BEEKAY			
Bolster no.	MCF/RBL/LS5- 2953				MCF/RBL/LS-5 - 3003			
Axle No	21 C -3622 RWF		21 C - 3490 RWF		21 C - 4516 RWF		21 C - 4070 RWF	
Wheel Dia	917.57	917.52	917.444	917.539	917.60	917.43	917.502	917.427
Wheel Disc No	TZ 05-18 21183-8PNO	TZ 04-19 38950-9OH7	TZ 04-19 38959-9OH7	TZ 07-18 42867-8RM9	TZ 05-18 20996-8PS6	TZ 04-19 38960-9OH7	TZ 07-18 38208-8RN4	TZ 07-18 38210-8RL7
R.B. Nos.	03-20 407786	06-20 410843	07-20 416931	03-20 409149	06-20 415134	06-20 410577	03-20 410041	03-20 415917
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	TAYAL & CO. 02-20 7461	TAYAL & CO. 02-20 7610	TAYAL & CO. 02-20 7599	TAYAL & CO. 02-20 7460

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	ESCORTS	7228,7451	7456,7626
2.	Primary outer Spring	CMAFI	08-20-1100-(177,176,125,104)	08-20-1100-(195,237,52,300)
3.	Primary Inner Spring	CMAFI	08-20-1101-(112,113,105,184)	08-20-1101-(109,316,189,252)
4.	Primary Damper	IAI	02-20 (310019,309585,309803,310074)	01-20-(310247,310143,309252,309928)
5.	Secondary Damper	IAI	01-20 (296337,296407)	01-20 (296255,296117)
6.	Lateral Damper	KONI	04-19 00800	04-19 00314
7.	Brake Cylinder	FAV	B21-023,A21-181,B21-063,L18-320	A21-001,A21-160,B21-042,K20-260
8.	Brake Caliper	FAV	B-(378,375,376,377)-B	B21-(426,424,468,469)-B
9.	Brake Disc	FAV	08-20-(3921,2480,3608,3607)-D133561-300	08-20-(2482,2481,3605,3606)-D133561-300
10.	Ball Joint Control Arm	BONY		
11.	Lateral Bump Stop	BONY		
12.	Traction Centre make	RNG		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	BASANT		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	FAV	L19-(226,169)	C20- 790, C20- 876
17.	Check Valve	FAV	F20 - 143	L19- 170
18.	Anti roll bar Make	SF		
19.	Roll Link make	RF+BASANT		
20.	Fork make	SF		
21.	Control Arm Upper	NIPHA/RV	2,029,210	161219-3,101019-1,101019-3,
22.	Control Arm Lower	NIPHA/RV	0619,0619,519,519	151019-2,151019-2,151019-2,151019-2
23.	Phonic Wheel	ESCORTS	ESCORTS	ESCORTS

Signature of SSE/Bogie/QC



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE (DEEN DAYALU)
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21

RLY	WCR	COACH NO	215514/C		DATE OF DISPATCH	12-Mar-21
Type	LWS	Shell No.	20F152	DISPATCH TO	Sr.DME/C&W/JBP	FUR.NO. DDG-644

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S-FAIVELEY	C21055B
2	Distribution valve	M/S-FAIVELEY	C21554B
3	Pull box	M/S-KBI	
4	FIBA	M/S-ESCORTS	20060503,18100177
5	Foot Step	M/S-FABRICON INDS KOLKATA	
6	Decoupling arrangement	M/S-PULSAR INDS KOLKATA	
7	Floor board	M/S-SHREE RAM PNL	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
12	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-BIKRAN GZB	
15	Emergency Window	M/S-SHATABDI VADODARA	
16	Lavatory/hopper Window	M/s-AIKON HP	
17	Roof Ceiling ACP	M/s-A.B.COMPOSITE	
18	Door way /gang way ceiling ACP	M/s-A.B.COMPOSITE	
19	Body Side Doors	M/S-MSL MOHALI(1,4)+SVARN(2,3,5,6)	
20	Vestibule Door(PPE)	M/s-KALSI LDH	
21	Vestibule Door(NPPE)	M/s-KALSI LDH	
22	Bio Tank	M/s-RASANDIK-02 NOS+UNIFAB -02 NOS	
23	Pressurized flushing(ele.pneu.)	M/S-OASIS	
24	Over head water tank (4x390L)	M/S-FABRICATORS-03 NOS+AMIT MOHALI-01 NO	
25	Bib cock/controlled discharge tap	M/S-AGMECO U.K.	
26	Lavatory Doors	M/S-JVR LDH	
27	Fire Extinguisher	M/S-AMTEX INDS	26444,26771
28	Water purified (02 nos)	NIL	
29	Seat & Berth	M/S-OVPL MUMBAI	
30	Luggage Rack	M/S-NITIN NDLS	
31	Light Luggage Rack	NIL	
32	Ventury grill	NIL	
33	RFID	NIL	

02/07/21
वरिष्ठ निरीक्षक
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लालगंज)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 01
DATE: 17.04.2018

ROLLING STOCK CERTIFICATE (DEEN DAYALU)
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21

RLY	WCR	COACH NO	215514/C	DATE OF DISPATCH	12-Mar-21
Type	LWS	Shell No.	20F152	DISPATCH TO	Sr.DME/C&W/JBP
				FUR.NO.	DDG-644

13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL
--	--	----	-----	-----

16. WARRANTY:

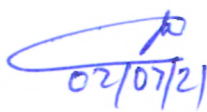
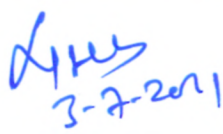

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months from the date of supply of material whichever is earlier.

NOTE:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from Application for any manufacturing /Application as per clause -4, para- V of RDSO specification no .M&C/PCN/100/2013-Given below

S.No	Time period	Gloss Retention (initial gloss >85 unit at 60°)	Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10)	Adherence of paints (with each other and with substrate) Cross-cut tape adhesion test as per ASTM D:3359/97(or latest)
1	After 1 year	80% of initial gloss	7	5B
2	After 2 year	70% of initial gloss	6	5B
3	After 3 year	60% of initial gloss	5	4B

If any imperfection is noticed or any defect arises during the warranty -period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

 02/07/21	 3-7-2021	 3/7
SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अनुसंधान विभाग
गुणवत्ता विभाग
रेडिओ का 0, रायबरेली (लालगंज)

सहायक अभियंता
Asst. Mechanical Engineer
आ. रे. डि. का. रायबरेली
MCF, RBL

सुधीर कुमार
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



DEB PAINTS PVT. LIMITED

(An ISO 14001 : 2004 & ISO 9001 : 2008 Certified Co.)

Regd. Office & Factory : METHOPARA, P.O. : GANGANAGAR, KOLKATA - 700 132 (W.B.)

Phone : 2538-3209, 2538-5602, FAX : (033) 2538-5602

E-mail : debsanjay65@gmail.com # Web. : www.debpaints.com

CIN No. : U24222WB1984PTC037257

WARRANTY CERTIFICATE

Date: 10-03-2021

TO
DY.CME/FUR/PAINT
MODERN COACH FACTORY,
RAEBARELI LALGANJ - 229120

Subject - Performance Warranty Certificates.

Ref: - P.O. No: 06190055100700 dated 20-May-20

Name of Work: Supply and Apply Of PU Paint for LHB DEEN DAYALU Type Coaches Supply and Apply Basis

Dear Sir,

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

SL.NO	SHELL NO	FURNISHING NO	COACH NO	RAILWAY NO	DATE OF COMPLETION
59	LWSDG 20F152	DDG-644	215514	WCR	20-02-2021 08-03-2021

The warranty is applicable from date of dispatch against the below mention defects as per RDSO specification no M&C/PCN/100/2013

- Gloss level value of applied paint initial 85 unit (on the date of painting) and minimum 80% 70% 86 ON of initial gloss after one year, two years, and three years respectively from the date of application.

Decolonisation of Paint Film
Cracking of Paint Film
Peeling of Paint Film
Blistering of Paint Film



For DEB PAINTS PVT LTD
(Authorized Signatory)



	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC GS COACH
(ANTYODAYA & DEENDAYALU).

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC GS COACH.

TYPE COACH	LWS/DDG	SHELL/COACH NO	215514/C
RAILWAY	WCR	ELECT. FIT DATE	11-03-2021 MCF FUR. NO.
			DDG - 644
Sr. no.	Description of tests		Remarks
1.	WORKING OF COMPARTMENT LIGHTS.		OK
2.	WORKING OF MOBILE CHARGING SOCKETS		OK
3.	WORKING OF ACCIDENTAL EMERGENCY LIGHTS& PACIL		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

Senior Section Engineer
 Quality control / Electrical
 Modern Coach Factory Raebareli





	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: SSK On Board: 20/06/042 HT Panel: 20/06/014	EDTS 333, Rev`01`.Am-1	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make : VIMAL Sr no.: VTC 3089 LHB 4457	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 wire rope assembly for Transformer.	As per EDML-152, Rev.-Nil.	OK
05.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: SIGNOTRON Sr. no.: 08201773	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.-1)	01
06.	Provision of Feeder Junction Box Make : SYSTEMS & SERVICES	EDTS-328 REV-C,AM-4,Type-II,COR-2	01 SET
07.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
08.	Battery fuse box +ve Make : INDORAIL	As per LW 71001,Alt- H	01
09.	Battery fuse box -ve Make : AECO	As per LW 71002,Alt-I	01
10.	Provision of Battery boxes/ Cradles. Make: HITECH	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	01
11.	Provision of batteries Type:110 V, 120 AH VRLA SMF Battery Set. Make: AMARA RAJA Lug Date: 06/20	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
12.	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
13.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1 .Type-B1. Drg. No. CC76453.	28
14.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
15.	Fitment of LED Light fittings for PACIL. Make: AGASTYA	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
16.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
17.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
18.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK
19.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
20.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
21.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3ph, 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.	1 SET
22.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
23.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	1 SET
24.	Provision of Anti Skid Disk Brake System.(WSP) Make : FAIVELEY Sr no : 13103	As per MDT5 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS" or" JWL-DAKO-CZ"	01 SET

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आधुनिकरेलडिब्बाकारखाना / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT)/MCF/RBL SEE(P)/MCF/RBL