

भारत सरकार – रेल मंत्रालय
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Government of India
Ministry of Railways
Research, Designs & Standards
Organization,
LUCKNOW - 226011



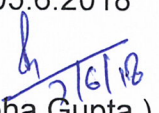
No.EL/3.1.35/12

Date 07/06/2018

Central Railway, Mumbai CST-400 001.
Northern Railway, Baroda House, New Delhi-110 001.
North Central Railway, Block A2, Allahabad- 211 033
Eastern Railway, Fairlie Place, Kolkata -700 001.
East Central Railway, Hazipur-844101.
East Coast Railway, Chandrashekharapur, Bhubaneswar-751016.
Southern Railway, Park Town, Chennai-600 003.
South Central Railway, Secunderabad-500 371.
South Eastern Railway, Garden Reach, Kolkata -700 043.
South Western Railway, 4th Floor, Laxmi Balakrishna Square
Complex, Railway Station Road, Hubli- 580 020 (Karnataka).
South East Central Railway, Bilaspur-495004
Western Railway, Churchgate, Mumbai-400 020.
West Central Railway, Jabalpur-482001.
Chittaranjan Locomotive Works, Chittaranjan-713 331 (WB)

Sub: Minutes of the meeting held at RDSO on 05.6.2018 regarding failure of Taction Link in 3-phase Electric Locomotives.

Enclosed please find Minutes of the meeting held at RDSO on 05.6.2018 regarding failure of Taction Link in 3-phase Electric Locomotives.


(Pratibha Gupta)
For Director General /Elect

Encl; As above

(a) The Secretary (Elect.), Railway Board, New Delhi-110 001- for kind information please.

(b) M/s Kharagpur Metal Reforming Ind. Pvt. Ltd. Belavadi Post, Mysore – 570 018- for information and necessary action please.

(c) Tirupati Engg. Works, 71/D, Netaji subhash Road, (Gupta mansion 2nd floor), Kolkata-700001

(d) Kaypee equipments pvt. Ltd. 46/6/2, Chattarjee Para Lane, Kadamtala, howrah- 711101

(e) Satya industries, 11/D Chetla central road, Kolkata-700027

Minutes of the meeting held at RDSO on 05.6.2018 regarding failure of Taction Link in 3-phase Electric Locomotives

Members Present:

RDSO(Smt/Shri)	Railway(Smt/Shri)	Firm(Smt/Shri)
O. P. Kesari PEDSE	V. Surendranath DEE/ELS/LGD	Ashis Chatterjee Asstt. QA/KMRI
Pratibha Gupta JDSE/C&S	K. Sukumar JEE/ELS/LGD	K. Karmakar KMRI
Santosh Kumar, SSE/Elect	Chhotelal chauhan JE/ELS/BIA	Goutam Banerjee Executive, kaypee Equipments
	Naresh Barot SSE/ELS/BRC	Samir Kumar Datta GM/Marketing/TEW
	Pralay ambade SSE/ELS/AQ	

A meeting was held at RDSO on 05.6.2018 to discuss the failures of traction link for 3-phase Electric Locomotives. During the meeting following points were discussed:

(i) Failure details received from sheds / Railways are as follow:

Rly/S hed	Particulars	Make								
		KMRI			TEW			KPE		
		15-16	16-17	17-18	15-16	16-17	17-18	15-16	16-17	17-18
BIA	Population	116	160	202	18	18	18	NIL		
	Failure	2	11	0	0	0	0			
	FRPCPY	1.72	6.88	0.00	0.00	0.00	0.00			
KYN	Population	NIL		128	NIL			NIL		
	Failure			2						
	FRPCPY			1.56						
LGD	Population	174	264	335	80	84	87	NIL		
	Failure	5	28	53	0	0	01			
	FRPCPY	2.87	10.60	15.82	0.00	0.00	1.15			
NR	Population	242	286	306	NIL			NIL		
	Failure	10	18	8						
	FRPCPY	4.13	6.29	2.61						
WCR	Population	172	227	254	0	3	32	NIL		
	Failure	1	7	0	0	0	0			
	FRPCPY	0.581	3.08	0.00	0.00	0.00	0.00			
AQ	Population	220	232	257	93	93	92	1	1	1
	Failure	8	20	18	0	2	2	0	0	0
	FRPCPY	3.63	8.62	7.0	0	2.15	2.17	0	0	0
BRC	Population	94	140	166	2	14	14	NIL		
	Failure	0	2	14	0	0	0			
	FRPCPY	0	1.43	8.48	0	0	0			

Failures of M/s KMRI both under warranty and out of warranty are increasing.

- (ii) DEE/ELS/LGD informed that as per the minutes of meeting held on 29/12/2017, M/s KMRI has done grinding in 9 traction link with welding valley defect. But out of 9, 5 traction link again failed in MPT. Remaining 4 traction link are provided in locos, details are as follows:

SN	Loco No.	Position	Traction Link No.	Date of fitment
1	30274	1	2983-04-17	12.01.2018
2	30250	1	2571-07-17	09.02.2018
3	30250	2	2815-07-17	09.02.2018
4	30559	1	2866-08-17	20.03.2018

Performance of the traction link provided after grinding is to be closely monitored.

- (iii) During last meeting on 29.12.2017, some reliability action plan was suggested to M/s KMRI such as:

- Welding should be done in 6 layers.
- Use 0.9 mm dia electrode of for welding.
- CLW was advised to revise the drawing to introduce taper in 20 mm length at both the end.

Other firms are also advised to follow the suggested reliability action plan.

- (iv) M/s KMRI informed that they have modified the welding procedure as per MoM since February-2018. Serial no. for WAG-9 / WAP-7 is 3391 and for WAP-5 is 182.

- (v) PED suggested that changing schedule of traction link can only be ascertain if age profile is available. It was advised that all the sheds should send the details in following format:

Loco Type		≥12 years	8-10 years	6-8 years	4-6 years	2-4 years	1-2 years
WAG-9	Existing Population						
	Failure after						
WAP-7	Existing Population						
	Failure after						
WAP-5	Existing Population						
	Failure after						

- (vi) Representative of ELS / BRC informed that they have audited M/s KMRI on January-2018. Important points noted during audit are as follows:

- Welder was not aware about pre-heating temperature of electrode.
- Internal check sheet does not containing stage inspection record.
- Firm has no record of under warranty failed traction link.

- (vii) Firms were also advised to do fatigue test to analyze the life of traction link.

(Pratibha Gupta)

For Director General/Electrical