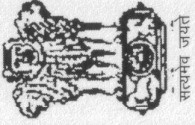
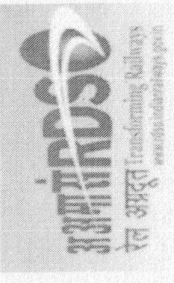


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Government of India
Ministry of Railways
Research, Designs & Standards
Organization,
LUCKNOW - 226011



No.EL/3.1.35/12

Date 17/01/2018

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, Chandrashekharpur, 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 29.12.2017 regarding failure of Taction Link in 3-phase Electric Locomotives.

Enclosed please find Minutes of the meeting held at RDSO on 29.12.2017 regarding failure of Taction Link in 3-phase Electric Locomotives.

17/1/18
(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.

**Minutes of the meeting held at RDSO on 29.12.2017 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	Ram Lakhan Gupta SSE/TRS/ELS/AQ/NGP	K. Karmakar, Sr.Exe. Marketing, KMRI
Pratibha Gupta JDSE/C&S		
Girraj Kishore ADE/C&S	Gurudas Mondal SSE/CLW	A. Chatterjee, Quality Assurance Deptt., KMRI
Santosh Kumar, SSE/Elect		

A meeting was held at RDSO on 29.12.2017 to discuss the failures of traction link push pull rod for 3-phase Electric Locomotives. During the meeting following points were discussed:

- (i) On receipt of report from Zonal Railways, the firm has examined the traction link and found it superficial crack sign. Therefore they have grinded the welding portion on interface area and again put them in service.
- (ii) M/s KMRI informed that they have grinded the following traction link with welding valley and provided in loco as given below:-

Serial no. of Traction link	Shed	Date of Grinding	Loco no.	Working in loco since
1593	TKD	16/02/2016	30356	Could not be traced
1370	TKD	16/02/2016	31607	03.03.2016
1363	TKD	16/02/2016	31196	19.12.2016
1778	BRC	22/09/2016	30476	22.06.2017

Performance of these traction links needs to be collected from concerning sheds.

- (iii) However M/s KMRI informed that they have started 100% MPT in traction link after May-2017, and now onwards no traction link with welding valley will be supplied to Railways.
- (iv) As per ABB WPS (welding procedure specification) for traction link, welding is to be done in 6 runs, whereas M/s KMRI is doing welding in 3 runs. M/s KMRI were advised to do the welding in 6 runs.
- (v) Again electrode of dia 0.9 mm is to be used as per ABB documents, whereas firm is using electrode of dia 1.2 mm. M/s KMRI was advised to use electrode of 0.9 mm dia.
- (vi) M/s KMRI informed that they are receiving tube in diameter of 139.7 mm after welding with flange machining is being done to achieve dia of 137 mm as per CLW drawing. So notch of about 2-3 mm is being formed at both the end of tube near welding. It was proposed to revise the CLW drawing and introduce a taper in 20 mm length of tube at both the ends.

(vii) During the joint audit of M/s KMRI it has come to notice that the firm has no approved QAP. They were advised to submit modified QAP as per CLW format at the earliest to CLW for approval.

(viii) M/s KMRI were asked to develop humidity controlled welding room.
(ix) Firm informed that they have got their welding procedure audited by Professor from IIT Kharagpur. As per their recommendation firm have revised their process and added following steps:

1. Stress relieving after machining.
2. Covering the weld joint with glass wool so that the weld joint cools slowly after welding.
3. Preheating both side of junction point up to 240 to 260°C before welding operation.
4. Smooth grinding of welding after each layer of welding.


(Pratibha Gupta)

For Director General/Electrical