भारत सरकार -- रेल मंत्रालय अनुसंधान अभिकल्प और मानक संगठन लखनऊ -- 226011

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



No.EL/3.2.119 (CBC)

Date 12/03/2019

- M/s Faiveley Transport Technologies India Limited, P.B. No. 39, Harita, Hosur Tamil Nadu-635 109.
- 2. M/s Frontier Alloy Steels Ltd, KM 25/5 & 6, Kalpi Road, Rania, Kanpur Dehat Kanpur-209304
- Hindusthan Engineering & Industries Ltd., Delhi Road, Bamunari P.O. –Bamunari, Distt-Hooghly (W.B.) -712250
- Raneka Industries Ltd., Plot No.15,16,17, Sector-3 (Sagore), Pithampur, Distt. Dhar (MP) Pin-454775
- Texmaco Rail & Engineering Limited (Steel Foundry), Belgharia, 24-Parganas, Kolkata-700 056
- Titagarh Wagons Ltd. (Unit: Titagarh Steels), 1, A.Q. Road, PO-Titagarh, Distt- 24 Parganas Kolkata-700119
- 7. M/s Ramakrishna forgings, Ramakrishna Chambers, 72 Shakespeare Chambers, Kolkata-700017
- 8. M/s Besco Ltd, Foundry division, Berulpur, 24 Parganas (South), Kolkata-700144
- 9. Bhilai Engineering Corporation Ltd., Hathkhoj Industrial Area, Bhilai (C.G.)-490026.
- 10. Burn Standard Co. Ltd., Howrah works, 20-22, Nityadhan, Mukherjee Road, Howrah-711 101
- 11. Jupiter Alloys & Steel (India) Ltd., Shahgunj, Chinsurah, Dist.-Hooghly-712104, West Bengal

Sub: Minutes of the meeting held at RDSO on 28.02.2019 to review the performance and reliability of CBC/Draft gear/TSC used in Electric Locomotives.

The Minutes of the meeting held at RDSO on 28.02.2019 to review the performance and reliability of CBC/Draft gear/TSC used in Electric Locomotives is enclosed for your information and necessary action please.

Encl: As above

(Pratibha gupta) for Director General/Electrical

Copy to:

- The Secretary (Elec.), Railway Board, New Delhi-110 001.
 (Kind Attn: Sri A. K. Goswami Dir/TRS)- for kind information please.
- 2. Principal Chief Electrical Engineer,
 - i. Central Railway, Mumbai, CST-400 001.
 - ii. East Central Railway, Hazipur-844 101.
 - iii. East Coast Railway, Chandrashekharpur, Bhubaneshwar-751 016.
 - iv. Eastern Railway, Fairlie Place, Calcutta-700 001.
 - v. North Central Railway, Block-A, Subedarganj, Allahabad- 211 033.
 - vi. Northern Railway, Baroda House, New Delhi-110 001.
 - vii. North Western Railway, Jaipur- 302 006
 - viii. North Eastern Railway, Gorakhpur-273001
 - ix. North East Frontier Railway, Maligaon, Guwahati-781011
 - x. South Central Railway, Secunderabad-500 071.
 - xi. South East Central Railway, Bilaspur-495 004.
 - xii. South Eastern Railway, Garden Reach, Kolkata-700 043.
 - xiii. Southern Railway, Park Town, Chennai-600 003.
 - xiv. South Western Railway, Hubli- 580020
 - xv. West Central Railway, Jabalpur-482 001.
 - xvi. Western Railway, Churchgate, Mumbai-400 020
 - xvii. Chittaranjan Locomotive Works, Chittaranjan-713 331
 - xviii. Diesel Locomotive Works, Varanasi-221 004

For kind information and necessary action please

Minutes of the meeting held at RDSO on 28.2.2019 regarding failure of CBC/Draft Gear/TSC in Electric Locomotives

Members Present:

members Present:	(2 - 1/21 - 1)			
RDSO(Smt/Shri)	Railway(Smt/Shri) H. K. Pandey SSE/DLW Sunil kumar SSE/ELS/GZB Rajendra andraskar SSE/ELS/AQ Hariyendra patel SSE/ELS/NKJ			
O. P. Kesari PEDSE				
Girraj Kishore DDSE/Mech				
Pratibha Gupta JDSE/Mech				
M. A. Khan AIE/QA(Mech)	Rajendra kumar SSE/ELS/TKD			
Santosh Kumar, SSE/Elect	Firm(Smt/Shri) Sudipto Kali M/s Faiveley Transport			
Uday Bhan yadav SSE/Elect				
Sanjay Prasad SSE/MP				
	Satish sharma M/s Frontier alloy steel			
	200/5			

A meeting was held at RDSO on 28.2.2019 to discuss the issues related to CBC/Draft Gear/TSC in Electric Locomotives. During the meeting following points were discussed:

 As per the performance received from sheds make wise FRPCPY of CBC coupler is as follows:-

Make	2016-17		2017-18			2018-19 (Upto Jan'2019)			
	Population	Failure	FRPCPY	Population	Failure	FRPCPY	Population	Failure	FRPCPY
540	453	14	3.09	531	34	6.4	497	26	6.28
FAS	455				00	6.73	363	18	5.95
BH	443	18	4.06	386	26				8.68
SN	115	5	5.35	143	4	2.80	152	11	0.00
RIL	206	18	8.74	259	30	11.6	232	26	13.44
			3.0	129	3	2.32	138	3	2.61
TEX	133	4					151	5	3.97
TITA	109	6	5.5	123	5	4.06			
ADE	18	1	5.55	27	1	3.7	59	5	10.17
	105	4	3.81	78	2	2.56	73	0	0
HEI	103			-	0	0	2	0	0
Faveley	2	0	0	2	U	0			

From above; it is seen that failure of M/s Raneka, M/s ADE, M/s Siena & M/s Frontier alloy steel make CBC is higher than other make. Representative of M/s Frontier alloy steel was asked to collect one no. failed CBC from shed and submit the investigation report.

2. Firm informed that failure of CBC and cases of stiffness in movement of CBC is due to incorrect pocket size. CLW should ensure correct pocket size during manufacture. M/s Frontier stated that they would prepare procedure for correction of pocket size in existing locomotives at shed and advise RDSO and CLW for further action within a week time.

3. Sheds informed that there is problem of breakage/loosening of M-30 bolt in M/s Frontier make H-type coupler. M/s Frontier was advised to submit the action plan for the problem.

4. Sheds were advised to have gauges for proper maintenance of H-type coupler.

Sheds informed that there is no maintenance instruction available for H-type coupler.
 M/s frontier stated that they would submit the draft maintenance instruction to RDSO for advising all Zonal Railways to follow it for ensuring uniform maintenance practice.

6. In order to avoid damage to operating handle during CRO in E-type coupler top operating handles were already provided. Sheds informed that top operated handle cannot be provided in H-type coupler. However M/s frontier stated that they have modified the drawing to include top operating handle in H-type coupler with top operated handle.

It was decided that fitment trial of the same will be done in one loco at ELS/GZB.

Motive power Dte to revise drawing accordingly.

7. It was decided during the meeting on 24.12.2018 that drawing of E-type coupler should be revised as per the AAR, but firms informed that drawing has not been revised yet. Carriage and wagon Dte may please take suitable action to revise the drawing.

(Pratibha Gupta)

For Director General/Electrical