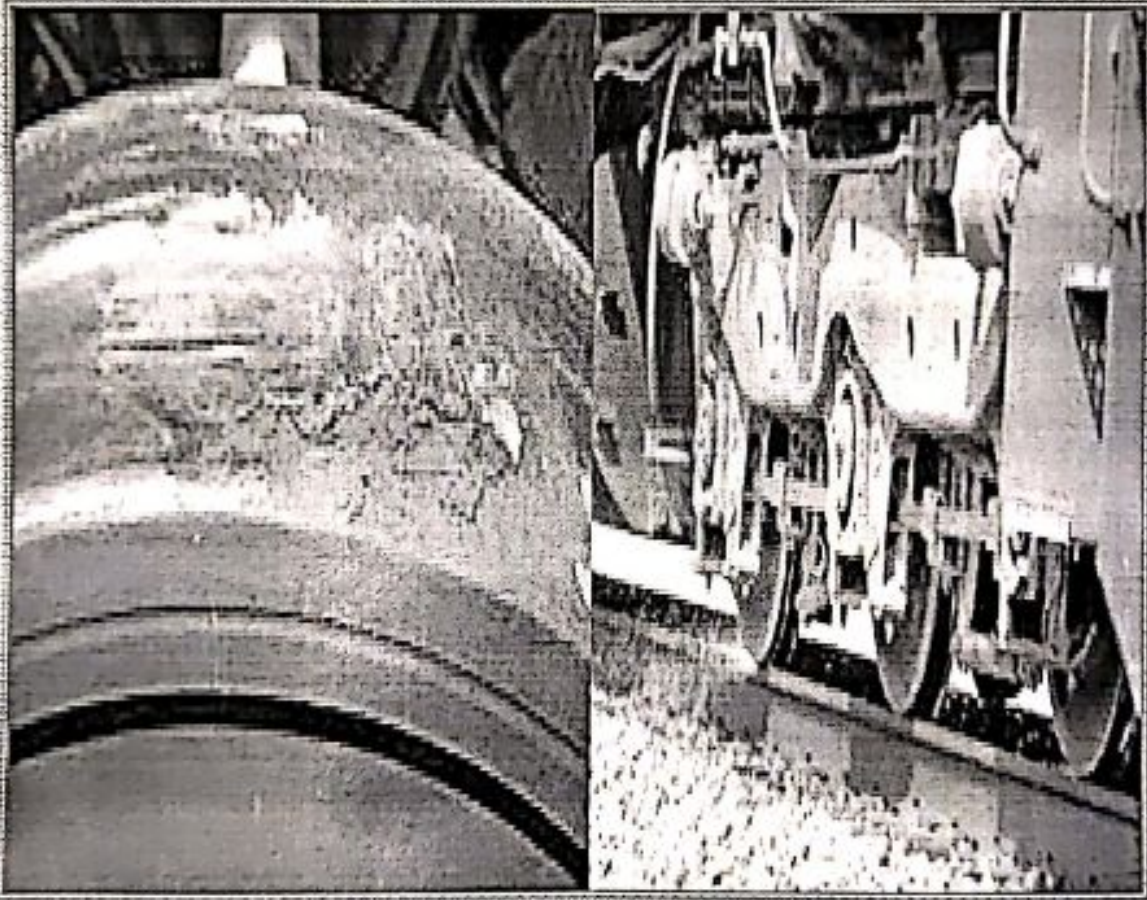


संरक्षा शाखा
सोलापुर मंडल



Safety Branch
Solapur Division

संरक्षा परिपत्र
Safety Circular
07/2021-22



विषय: फ्लैट पहिया घटना की रोकथाम

Sub:- Prevention of incidence of Flat Wheel.

दिनांक/Date : 13.07.21

All concern/SUR Division

SAFETY CIRCULAR NO.07/2021-22

SUB: Prevention of Incidence of Flat Wheel.

There have been several instances where flat tyre has been caused extensive damage to track by causing rail fractures and weld failures resulting in to serious accidents.

A. PREVENTIVE MEASURES

- (i) The TXR staff in Depot/sick lines must check the flatness of wheel tread with the help of tyre defect gauge. The permissible flat on wheel tread is limited to 60 mm for goods and 50 mm for coaching stock/locomotive. All train examination staff should adhere to the provisions of Rule 2.8.4, 3.2.2 and 'S' 4.21.1 "Tyre defects" of part IV IRCA Conference rules for coaching stock and Para 4.18.1 of Part 3 of IRCA conference Rules for Freight Stock.
- (ii) Proper Functioning of distributor valves in wagons/coaches shall be ensured at depots by field units at every examination point.
- (iii) Before movements of loads from loading / unloading points, it should be ensured by the train crew that all wagons are in released condition including hand brakes.
- (iv) Follow the load table and related conditions as pr JPO from Sr.DME, Sr.DEE & Sr.DOM dt. 27.07.2020.
- (v) While working load from Roadside stations, the train crew should ensure release of hand brakes.
- (vi) LP to ensure that air flow indicator white needle coincide with fixed reference needle.
- (vii) **Loco pilot shall ensure proper release time in Goods and Passenger trains after each brake application before moving.**
- (viii) Working of sanders and availability of sand shall be checked before starting train so that stalling of train can be prevented.
- (ix) **Loco pilot shall demand banker in case he is not confident to clear the gradient.**
- (x) **Loco Pilot shall not take undue efforts to clear the section once the train is stalled. It must be ensured that load is fully released before taking traction.**

B. DETECTION OF FLAT TYRE

- (i) The Loco pilot and Guard should be vigilant in detection of unusual / hammering sound in the formation.
- (ii) Carriage and wagon staff during 'Rolling In/Rolling Out Examination' of all major train examination points to detect flat face on wheel tyre in train while in motion.
- (iii) At stations where C&W staffs are deployed for checking of under gear at exit and entry points should also be vigilant to detect flat tyre in passenger and goods trains passing through the stations.
- (iv) **Station Operating staff, while exchanging all right signals shall be vigilant and attentive to hear any unusual / hammering sound in the running train and make efforts to stop and examine the train. If they hear such sound, they should start counting the location of such a wagon (counting it as one) till the brake van. It will demarcate the location of such a wagon in moving train and communicate it to control and next station.**
- (v) Traffic / Engineering Gatemen and Engineering gangs shall also be vigilant and attentive to hear any unusual / hammering sound on a running train. They should communicate the matter to SM of the station ahead.

- (vi) Engineering staff and Supervisors while at work site or doing trolley inspection should also be vigilant to detect any unusual / hammering sound on a running train. They should adapt necessary steps to stop the train at the station ahead and get the wagon / coach / loco examined.
- (vii) On board staff like TTEs, Coach Attendants, AC Mechanics and other Supervisors / Officers travelling by the train can also detect any unusual / hammering sound in the respective coach.

C. ROLE OF STAFF AFTER DETECTION OF FLAT TYRE

(a) Loco Pilot and Guard of the train

- (i) On detecting / getting information about the hammering sound on the formation in the block section, the train crew shall cautiously clear the train from the section to station. The train should preferably be admitted in loop line.
- (ii) If no C&W staff is posted at the station and if it is likely to take more time for C&W staff to come, the train crew will examine the train and the extent of wheel flat should be measured by a measuring scale with marking of 50 mm and 60 mm for coaching / loco and wagons respectively. Train crew (LPs,ALPs and Guards) must be trained in measuring the extent of flatness in tyre.
- (iii) If the flatness exceeds the permissible limit, the defective vehicle should be detached or the entire load be moved as is operationally feasible to the nearest point of attention at restricted speed.

(b) Mechanical (C&W) staff

- (i) C&W staff where ever available should examine the train and if flat tyre is confirmed, further action should be initiated accordingly.

(c) Operating staff

- (i) Under no circumstances, ASM shall allow the train to run with a suspected flat tyre, once the information is received.
- (ii) Detachment will be done after flat tyre is certified by LP and Guard after measurement in consultation with section controller in case C&W staff is not available.
- (iii) While stabling loads at road side stations, it shall be stabled in loop line opposite to station building so that passing trains can be observed clearly.

(d) Function of Control Office.

- (i) The section controller after getting information from the SM shall stop the train at the next station where loop line is available for examination by LP and Guard duly taking the advice seriously as reported by stations and advice C&W controller, Deputy Controller and Chief Controller.
- (ii) Deputy Controller shall co-ordinate with Engineering Control and depute the SSE / JE (P.Way) of Engineering department to inspect the rear block section.
- (iii) Controllers to be educated regarding hauling capacity of locomotives and gradient in the section. Load chart and signal 'OFF' condition to be displayed in front of Controllers for their awareness and handy information.
- (iv) **Bankers shall be provided wherever demanded by Loco pilot.**

(e) Engineering Control and P.Way staff.

- (i) Engineering control shall co-ordinate with Traffic Control in alerting SSE / JE (P.Way) and getting the section examined for any probable Weld / Rail failure.
- (ii) In case any flat tyre is confirmed, If necessary USFD testing of rails and welds to be carried out at the earliest.
- (iii) If warranted necessary speed restriction shall be imposed and necessary corrective action shall be initiated.


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