

No. : 2023/Dev.Cell/IMM1/1 (E-3417347)

Dated: 16/01/2023

**The Principal Chief Mechanical Engineers  
All Zonal Railways**

**Sub: Control of online cases of Hot Boxes**

There has been a steep rise in the online cases of Hot Boxes in recent months compared to last the financial year.

The issue was discussed in a high-level meeting recently and it was felt that in addition to design upgradation and maintenance interventions for CTRB, attempts at timely detection are also necessary to avoid the consequences of Hot Box cases.

RDSO has recently issued a comprehensive specification of Hot Axle Box Hot Wheel Detector system (HAHW). This specification has several enhanced functionalities to capture potential cases of hot axle and also cases like brake binding and other hot wheel occurrences with a high degree of accuracy through multiple sensors. This specification has been framed after detailed deliberation with the manufacturer of similar equipment used in advanced railroads. However, since HAHW of such specification has never been tried on Indian Railways, it would require Proof-of-Concept (POC) through detailed and monitored validation trials.

Meanwhile, Zonal Railways have also been trying limited functionality Hot Box Detectors on a local level. Recent reports from SR & DFC have shown encouraging results for these limited functionality Hot Box detectors.

In view of the above, Zonal railways are advised to take the advantage of efforts made at DFC and SR to continue installing limited functionality Hot Box detectors, as an immediate measure to mitigate the risk associated with Hot Boxes, till such time RDSO's comprehensive specification of HAHW devices is ready for general proliferation after successful completion of Proof-of-Concept through detailed and monitored validation trials. These may be installed at critically identified locations by ZRs.

This issues with the approval of Board [M/TRS].

**(Paras Mehendiratta)**  
**Dy. Director/Dev.**  
**रेलवे बोर्ड/ Railway Board**