

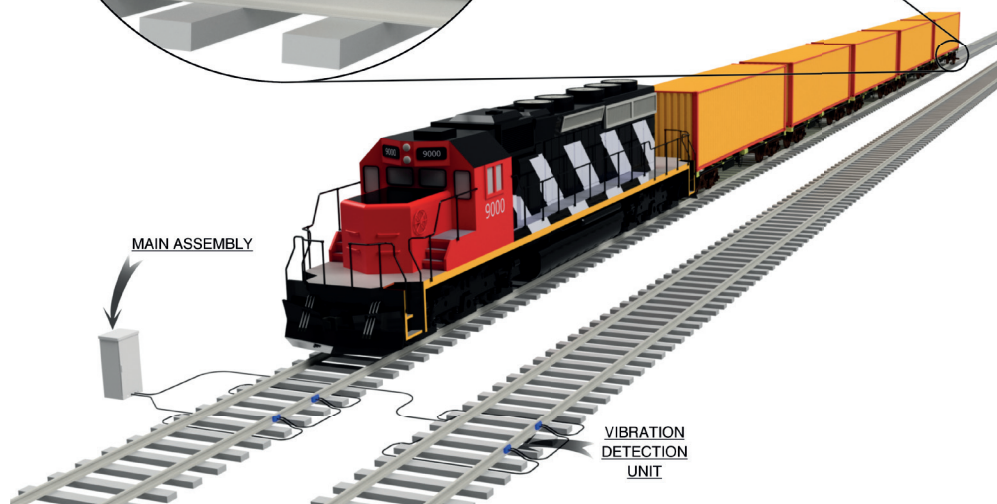
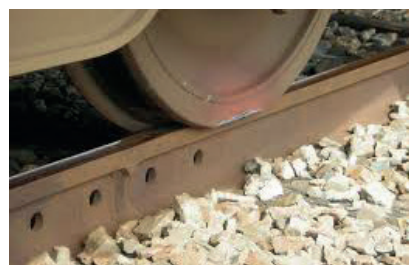
Flat Wheel Detection

[FWD]

NGRT Flat Wheel Detection (FWD) is a system designed to detect flat wheels on the train cars when crossing the vibration detection unit. A flat wheel has the potential to cause extensive damage to the rail network, such as broken rails and in worst case scenario a derailment.

A flat spot, or flat wheel is a fault in railroad wheel shape. A flat spot occurs when a rail vehicle's wheel set is dragged along the rail after the wheel/axle has stopped rotating. Flat spots are usually caused by use of the emergency brake, or slip and slide conditions that causes wheels to lock up while the train is still moving. Flat spots are more common in the autumn and winter when the rails are slippery. Flat spots can also be caused by faulty brakes or wheel set bearings.

If the flat spot is very large, strands of molten metal may have got stuck on one side of the flat spot, making it impossible for the wheel to turn due to insufficient clearance between the rolling surface and the brake block. In this case, the wheel set must be replaced immediately. With NGRT FWD our Clients will be given an alert, whereby the maintenance team will know on which car/axel there is a flat wheel.



Key Benefits

- Identifying exact axel which has flat wheel
- Early warning before it becomes a major problem
- Preventive maintenance
- Can be combined with other NGRT applications
- Low maintenance and repair costs
- Modular structure
- Local and remote diagnostics
- Low power consumption