

MOCV TRAIN IN MOTION WEIGHING SYSTEM



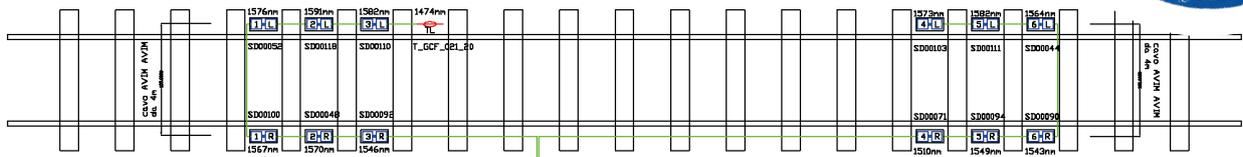
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The MOCV application enables NeuRAIL to measure the vertical load of each wheel during the transit of a train running over the instrumented rail section.

sensitive and long-life fiber-optic sensors. The weigh estimation results from the implementation of Machine Learning models developed specifically for this Application.

Each wheel passing on the track induces a strain which is read by passive, extremely

MOCV consist of 12 or more sensors installed on a flat, straight section of rail (15-20 m).



Competitive Advantages

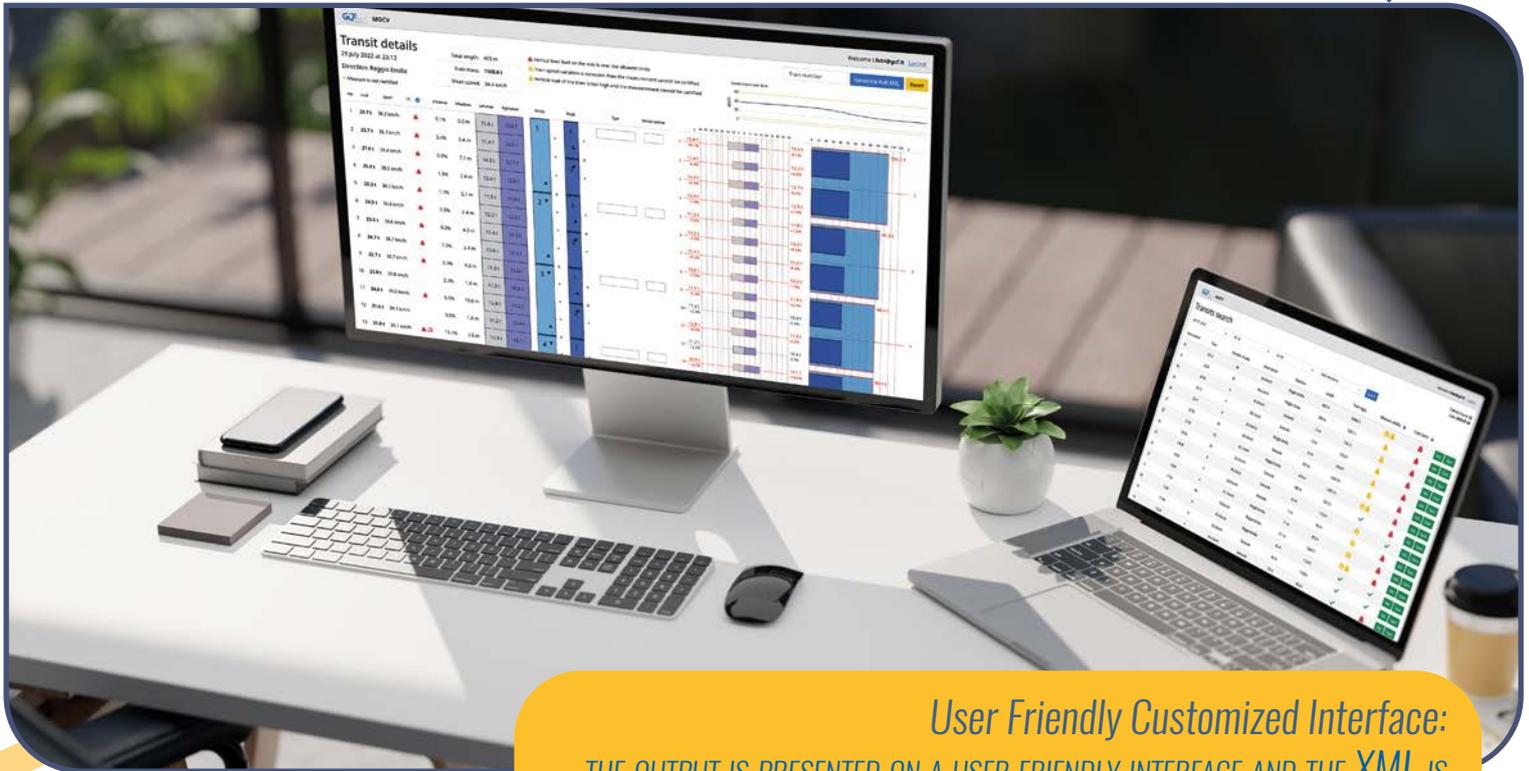
- **ACCURATE:** weighing the load of the train, the wagon, the bogie, the axle and the wheel
- **EFFECTIVE:** weighing trains in motion with high precision and real time measures
- **INCREASING SAFETY:** detecting overloaded and unbalanced trains
- **COST EFFECTIVE:** thanks to high-strength magnets, sensors can be installed without replacing the track or heavy operation
- **REMOVABLE:** using a simple mechanical tool and it leaves no 'traces' on the rail



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*User Friendly Customized Interface:
THE OUTPUT IS PRESENTED ON A USER FRIENDLY INTERFACE AND THE XML IS
GENERATED AS WELL FOR EACH TRANSIT AS REQUESTED BY EN 15654*

For each train transit,
several data are displayed:

- Train mass, direction, speed and axle counting
- Wagon load
- Bogie load
- Axle load and speed, overload and unbalance indication
- Wheel load
- Wheelbase and train length



High accuracy: Average error on wagon load estimation < 5%.
The System can be trained to detect wheel defects (e.g. flat wheels)
Initial and in service verification are carried out as stated in EN 15654-3.
Track must meet the structural and geometric requirements stated in the EN 15654-1 to guarantee high precision measurement.

MOCV is fully compliant with EN 15654 standard.

