PANTOhealth Solution

from Unipart Rail

Predictive Maintenance solutions for Overhead Line.

Real-time monitoring, analytical simulation and predictive maintenance solutions for pantographs and overhead line catenary.

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PANTOhealth

SERVING THE WORLD'S RAILWAYS

Create intelligent maintenance plans which deliver time and cost savings through online monitoring and analytical simulation.

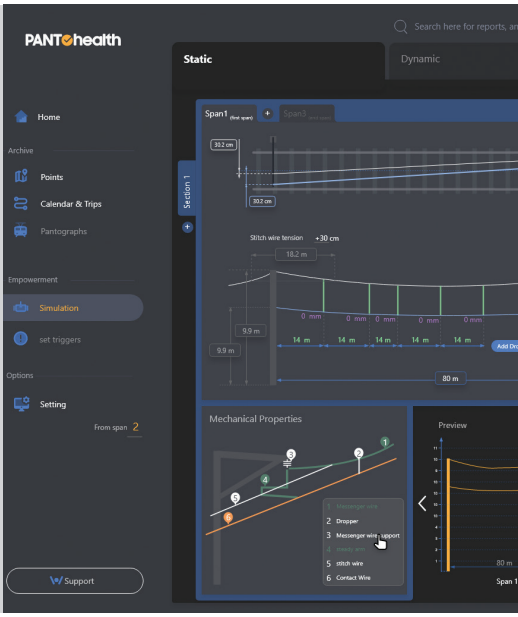
PANTOhealth combines simulation software and IoT to deliver software solutions for monitoring and predictive maintenance of pantographs and catenary.

PANTOsim - Simulation Software

PANTOsim is a simulation software, validated in accordance with EN 50318, designed to support infrastructure owners and enabling them to:

- Understand the impact of defects in the OLE system
- Support and verify new Overhead Line designs
- Verify behaviour and impact of new trains and pantographs
- Verify behaviour of new Overhead Line components - eg. droppers

Using a unique analytical solution, instead of a Finite Element Method, the PANTOsim solution simulates the effect of different defects in the pantograph and catenary interaction, enabling users to identify problematic areas, estimate parameters and monitor trends.



PANTOsystem - Online Monitoring

The PANTOsystem is a combination of hardware and software installed on the pantograph to collect real-time data, including acceleration, height and stagger, temperature and location.

The data is analysed via Machine Learning algorithms, which enable the system to estimate the trend of damages and predict maintenance plans for both pantographs and catenary.

Through the utilisation of this intelligent data, operators will have complete visibility of the quality of the infrastructure and the ability to create an optimum maintenance plan for repair and/or replacement.

PANTOPack

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For more information on PANTOhealth monitoring solutions, please contact **innovation@unipartrail.com**

PANTOhealth

Unipart Rail

Jupiter Building, First Point, Balby Carr Bank,
Doncaster DN4 5JQ

Tel: +44 (0) 1302 731400

email: enquiries@unipartrail.com

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