AssetWise® Rail Condition Analytics

Linear Analytics for Small to Medium Sized Rail Owners

AssetWise Rail Condition Analytics unlocks the potential of your organization's data with predictive maintenance strategies using the latest innovations in linear analytics. With pre-configured data-import, analytical and decision support tools, it enables small to medium-sized rail and transit agencies to benefit from optimized rail maintenance strategies using data you already own, accelerating your return on investment while maintaining linear assets – now and in the future. The application helps improve renewal decisions relating to track and other maintenance-of-way assets with minimal time and cost, driving greater efficiency, easier compliance with state of good repair regulations, and enhanced operational performance. Designed to help track managers turn railroad data into actionable information, the cloud-based application uses automated key condition score reporting plus visibility into past maintenance activities, to help predict and validate future decisions that improve service, safety, and reliability. With AssetWise Rail Condition Analytics you can confidently increase the value of maintenance activities, and maximize your available budget by targeting the completion of the right work, in the right place, at the right time.

Benefits of AssetWise Rail Condition Analytics to Railroads:

- Improved service, safety, and reliability.
- Rapid deployment, reduced costs, and accelerated ROI.
- Additional insight from existing datasets.
- Future-proofed maintenance decisions.
- Easier state of good repair reporting and compliance.

BIG DATA AND THE INTERNET OF THINGS

Data collection systems such as track geometry vehicles can produce many gigabytes of data in a day. AssetWise Rail Condition Analytics therefore supports the management of datasets containing hundreds of thousands of surveys that can be terabytes in size, efficiently storing, linking to, and correlating this data for rapid access and analysis, enabling you to make timely and accurate maintenance decisions.

DATA ANALYSIS

AssetWise Rail Condition Analytics has a library of more than 200 linear network-aware data processing rules and commands that can be applied to extract actionable information. These rules can find clusters of defects, trend track degradation to plan surfacing, and much more. In addition, these rules can be combined to perform sophisticated data analysis extracting further value from existing data you already own.

DATA VISUALIZATION

Data visualization is critical in transforming vast quantities of complex linear data into actionable information that users can readily access, understand, and utilize. Straight line diagram visualization features provide you with instant access to an informative representation of any combination of configured data types at any location on the railroad network.

SOURCE DATA INTEGRATION

AssetWise Rail Condition Analytics brings together linear asset data from multiple sources and correlates the data by location and time. The application includes a number of integration capabilities for importing files and linking to existing databases, as well as web services to communicate with other systems.

You can extend value to discrete or hierarchical asset data systems like enterprise asset management (EAM) and other computerized maintenance management systems (CMMS), by combining linear with discrete data analysis, then feeding results back to these the nonlinear systems.

DATA SECURITY

Keeping your data secure is our top priority. Only your authorized users can access your data and visualizations. Our expert team works around the clock to keep your data secure, allowing you to focus on the results.

CLOUD DEPLOYMENT

AssetWise Rail Condition Analytics is rapidly deployed as a cloud hosted managed service that includes all capabilities installed, configured, and ready to use. No server hardware required. Start with a few users, and roll out to more users as data is populated. On premise deployment is available with support plans to help achieve success.
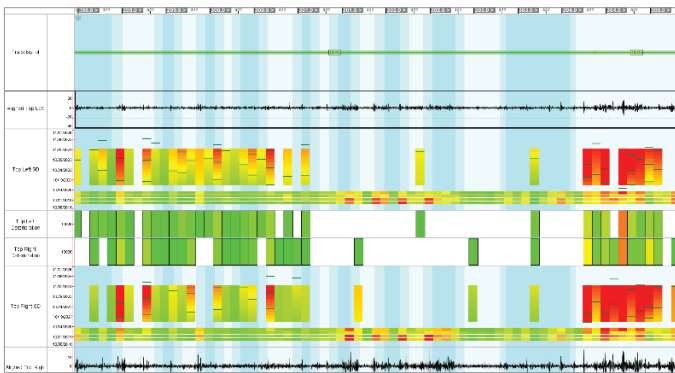
SYSTEM REQUIREMENTS

MINIMUM: Windows 8.1 64-bit Intel or AMD processor 3.0 GHz, 1 GB memory, 500 MB free hard disk space, GPU with 256 MB RAM

RECOMMENDED: Windows 10 64-bit Intel processor (highest affordable processor speed), 4 GB memory or higher, Discrete GPU, 4k monitors not supported
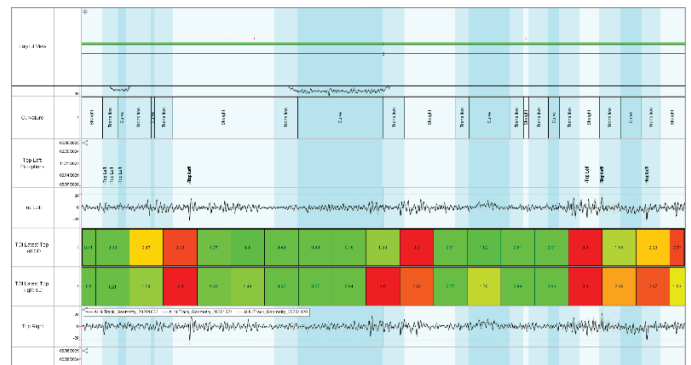
BROWSER COMPATIBILITY: IE 10, IE 11, Chrome, Safari

Rail Condition Analytics At-A-Glance

- Plan rail replacement and surfacing work based on historic rail measurements
- Proactively fix issues before these cause slowdowns or outages
- Import track and traction power measurements, assets, and events from numerous sources
- Provide users with data-driven interactive electric track charts
- Quantitatively prioritize capital requests
- Publish PDF and paper track charts for distribution
- Focus production surfacing to only locations that need it

- Determine from rail wear history, where and when rail will need to be replaced
- Produce straight line track schematics from GIS track centerlines
- Maintain a history of track measurements across multiple collection vendors
- Automatic visualization and export including latest survey, work, and condition
- Monitor state of good repair performance metrics, investment prioritization, and trend analysis

Understand your track condition and deterioration to accelerate ROI.

Gain insight from existing key datasets to predict and validate future decisions that improve service, safety, and reliability.