

# Going beyond just measurements with rail replacement forecasts.

## The Challenge

Railroads are under increasing pressure to extract the most life out of rail, their most costly asset, while ensuring that wear does not exceed the prescribed wear limits. Wear measurement data, which is collected annually or on a more frequent basis by laser / camera measuring systems mounted on track geometry cars, provides a snapshot of the current wear conditions. The data in and of itself does not, however, indicate wear rates or forecast when rail will be worn to its replacement limits. Specialized post-processing software is required for this type of analysis.

## The Holland Solution

Through the use of its Rangecam Track Analysis Software, Holland LP has developed a number of maintenance planning tools that enable railroads to assess current wear conditions, overlay current and historical data, calculate average wear rates, query the data for exceptions or specific wear conditions, forecast when rail will be worn to replacement limits, and generate rail replacement plans. Recently a Class 1 Railroad that needed greater visibility into its rail conditions in addition to better tools for replacement planning; imported their track geometry and rail wear data into Rangecam. Specifically, the Class 1 was looking to ensure that the rail wear recorded by the geometry car was accurate; graphically review the history of the rail profile and wear on mainline tracks; and calculate future wear based on historical information with the goal of generating three to five year rail replacement plans.

With the help of the Holland Data Management Group, the Railroad is now using the reporting, planning and visualization tools in Rangecam enabling them to review rail wear conditions across the entire system; create a graphical display of projected rail replacement by location, using a GPS mapping tool; develop regional and system wide rail replacement plans based on wear trends and the available capital budget; as well as create a “rail map” for the entire system.

The Class 1 is also using Rangecam to identify outliers or curve locations at which rail is wearing faster than in curves of the same degree at other locations. This and other railroads use Rangecam to query data that is collected year after year to identify problem areas; to assess the current state of rail and track geometry; to plan replacement in areas where rail is worn to or near its wear limits; and to obtain a better picture of track conditions overall.

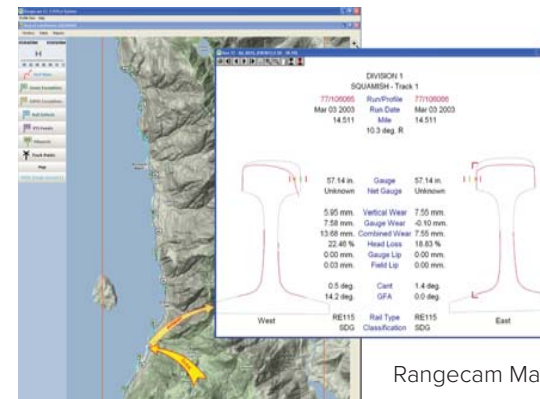
call 708.672.2300 or visit [hollandco.com](http://hollandco.com)



Rangecam Rail Wear Monitoring



Rangecam Rail Replacement Forecasting



Rangecam Map