

Wheel Life Productivity

Save millions by maximizing railcar wheel life, without compromising safety or regulatory compliance



What is Wheel Life Productivity?

Wheel replacement accounts for more than 60% of railcar maintenance spending, so maximizing wheel life saves significant money. With Wheel Life Productivity, you can apply SAS® data analytics to limit service interruptions without worrying about breakdowns or accidents.

Client success story

One Class 1 Railroad used Wheel Life Productivity to optimize inventory and maintenance planning, saving millions of dollars in their annual component budget. The company:

- **Reduced stockout costs** while carrying less inventory.
- **Achieved 182 more days of life per wheel**, saving millions.

And it's not just Class 1 Rail companies that save. Wheel Life Productivity also benefits:

- Short-line railroads.
- Companies that lease railcars.
- Railcar owners.

Impact your bottom line



Decrease maintenance spending
by limiting early wheel replacement.



Improve operating ratios
by maximizing wheel life.



Reduce unplanned downtime
with improved wheel reliability.



Ensure regulatory compliance
and safety.

How does Wheel Life Productivity work?



STAGE 1

As railcars pass over wheel profile detectors on the tracks, sensors collect data on four important components:

- Flange height.
- Flange thickness.
- Rim thickness.
- Hollow tread.



STAGE 2

Custom algorithms developed by SAS accurately predict the remaining useful life of each wheel using:

- Repair history data.
- Mileage data.
- Wheel profile detector data.



STAGE 3

Scheduling maintenance and planning inventory according to SAS and Wheel Life Productivity makes sure you:

- Replace wheels only near the end of life.
- Save money by limiting early wheel replacement.
- Strategically order inventory only as needed.

What's included in your Wheel Life Productivity purchase?

- **Dynamically created AI** to accurately estimate the remaining useful life for railcar wheels.
- **8 predictive models** that power an actionable wheel health dashboard.
- **2 assessments** covering user adoption and feedback.
- **4 railroad personnel supported:** Inventory planner, preventive maintenance scheduler, business coordinator, IT engineer.
- **500 support hours** per year to work with your infrastructure, business, data science and IT teams from implementation through monetization.

Let's talk!

Wheel Life Productivity and SAS can help you define measurable objectives while assessing available data that affects railcar wheel life. Start by contacting:

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