#### Effective fleet management with zedas®asset

# Smart maintenance and management of rail vehicles

To ensure that rail vehicles are always ready for use and meet safety requirements, the right maintenance activities must be carried out at the right time. The service life of vehicles and vehicle components should be maximised and reliability and availability increased. However, conventional maintenance practice is reaching its limits.

Modern maintenance must therefore be able to support employees with status statements, maintenance recommendations and forecasts in an optimal way.

zedas®asset - the maintenance management system for rail vehicles and rail infrastructure - is used to analyse and evaluate the data generated during the operation and the maintenance documentation. To do this, zedas®asset takes condition and operating data directly from on-board units and combines them with measurement, historical, maintenance and planning data. This produces statistics, evaluations and status displays for individual vehicles and individual components. Future critical conditions can be recognised at a glance by the maintenance coordinator.

The system learns through continu-

ous data acquisition, analysis, planning and forecasting in zedas®asset. It takes into account wear and load data and thus improves the accuracy of the forecast even further. This makes foresighted maintenance possible. The Wheelset Analyser, for example, visualises the wheelset tear. The time for the next

measurement, reprofiling and wheelset replacement is well in advance.

These reliable forecasts of the status and failure probabilities of vehicle components as well as the extrapolation of due dates for time and load-dependent planned maintenance make it possible to plan workshop capacities in a targeted manner and to prevent strongly fluctuating loads on the workshop.

### Apps support the complete maintenance documentation

Also for the documentation itself there are aids from zedas<sup>®</sup>asset. The App **Touch** is a digital assistant to better support workshop employees in their tasks and documentation duties. The **digital Assistant** guides the user through the individual process steps and ensures that the employee saves all necessary data without errors. Thanks to the integrated push function, the simultaneous processing of orders, work processes and checklists can be carried out by several employees possible.

## Keep the overview with good dashboards

Dashboards for various maintenance tasks provide an overview. Problems, discrepancies and overlaps in maintenance planning become immediately visible and can be eliminated in the long term.

#### Conclusion

The evaluation options range from the current status overview of the vehicle fleet to the component-exact tracking of weak points and warranty claims to the operations diary. With its industry-specific software, zedas<sup>®</sup>asset supports the entire fleet management and enables predictive maintenance.



The dashboard shows the ratio of preventive and corrective maintenance actions to staff availability