









PROJECT MANAGEMENT & CONSULTING

THE FOUNDATION FOR A LONG-TERM SOLUTION

The foundation for every successful project is careful planning and tailored consulting. VAHLE's team of experts accompany you from the initial idea to the realization of your vision – offering you comprehensive support from a single source.

All-Round Service from a Single Source

Consulting & Planning

Our specialists analyze you project's requirements on site to develop custom system layouts. Technology, sales, and product management teams work closely together to identify potential challenges and identify effective integrated solutions, while your dedicated account manager helps coordinate the successful implementation of your goals.

General Contractor

We take overall responsibility for your project – from planning to implementation. Our site management adheres to the highest safety standards and is certified according to DIN ISO 45001. Through ongoing communication and streamlined support, we help ensure project goals are completed successfully, meeting the expectations of all stakeholders.

Tailored Service Packages

From installation to preventative maintenance and inspections to predictive measures, we offer comprehensive support for your system.

In emergencies, we provide quick repairs and offer additional training for your team to help you optimize your systems and maximize their lifespan.

The VAHLE Project Management Approach

Analysis & Concept

We develop fully custom solutions tailored to your unique requirements, designed to deliver optimal results.

Coordination & Resource Planning

Specialists, materials, and schedules: We ensure structured organization to implement your project efficiently and smoothly.

Comprehensive Expertise

Your dedicated point of contact coordinates all projects steps, backed by our extensive interdisciplinary team.

Transparent Communication

We keep you informed about project progress, schedule, and budget through regular reports – for full transparency.

Implementation & Validation

Installation and commissioning are checked and validated according to strict quality and safety standards, ensuring adherence to the highest level of professionalism.

Certification & Efficiency

Based on the highest standards, our processes are controlled according to ISO 45001 for precise, safe, and reliable execution.

INSTALLATION & COMMISSIONING

PERFECT EXECUTION FOR OPTIMAL PERFORMANCE

Proper installation and precise commissioning are essential to ensure the optimal performance and availability of your systems. Our experts at VAHLE guarantee smooth execution – from installation to successful commissioning.

Precise Installation

Our certified specialists ensure that your systems are installed professionally and on time - whether new installation or retrofit solutions. We guarantee compliance with all quality standards and specifications, and offer flexible solutions, such as weekend installations, to meet your unique needs.

Smooth Construction Phase

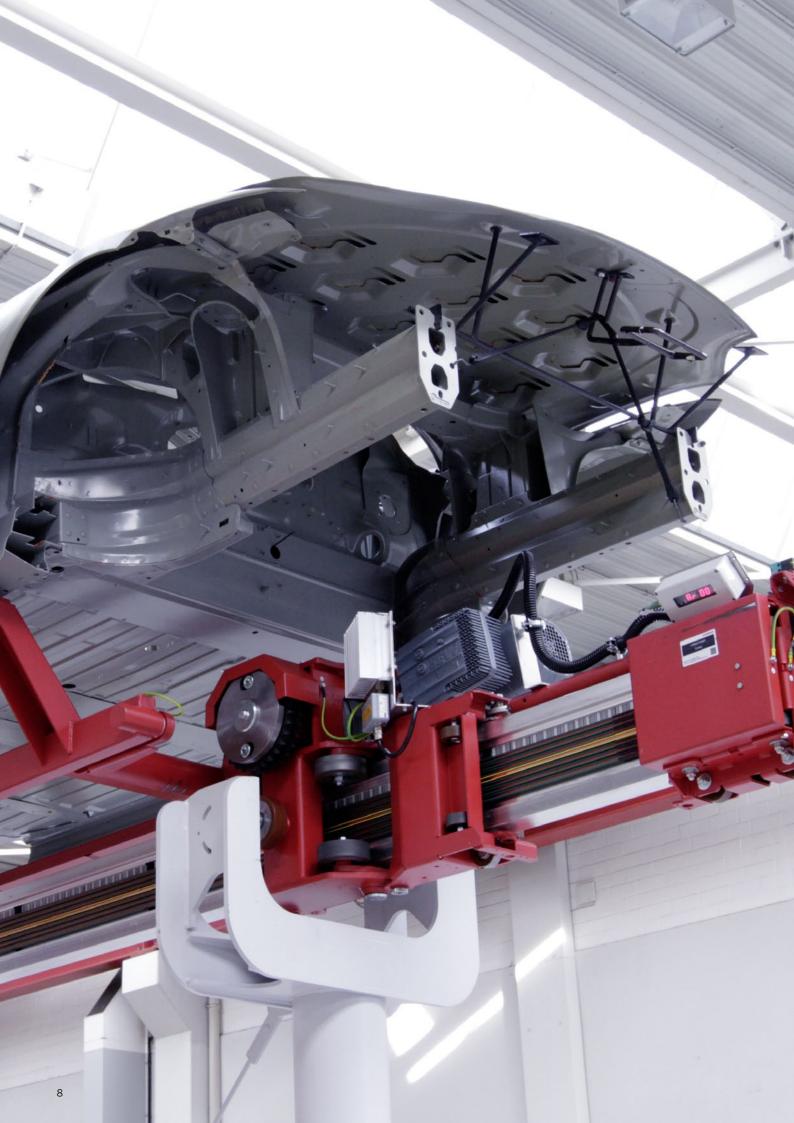
Our experienced team provides support throughout the entire construction phase, adapting to unforeseen challenges as needed to stay on schedule. Through collaboration and transparent communication, we create the foundation for sustainable, efficient and optimized results.

Commissioning & Quality Check

After installation, each system is tested and validated to ensure a smooth start. If desired, your employees receive training to use the system productively right away. All relevant documentation, including a certified final report, is fully provided upon handover.







PREVENTATIVE MEASURES

SECURE FUTURE: PREVENTING DOWNTIME

To ensure the long-term efficiency and availability of your systems, VAHLE offers comprehensive preventative services. These range from innovative cleaning solutions to regular maintenance and targeted inspection measures, as well as flexible maintenance contracts – all with one goal: to prevent unplanned system downtime and ensure the best possible performance.



Thorough Cleaning for Trouble-Free Operation

Dust, abrasion, and oil deposits significantly impair the functionality of conductor rails and current collectors. Such contamination can lead to malfunctions and even failures, resulting in costly repairs. In automated storage systems, shuttles, and other high-load applications, reliable power transmission is crucial.

Regular cleaning measures prevent interruptions and ensure system performance. The VAHLE cleaning tool provides quick, precise, and gentle cleaning. Clean conductor rails guarantee optimal energy transmission, reduce wear, and extend the lifespan of your systems.



Maximum Availability through Maintenance

Early detection of wear and potential problems avoids costly repairs and production downtime that could impact your profitability. The use of the latest technologies, such as material thickness measurement, level measurement, insulation testing, and camera-based inspections, extends across the entire VAHLE product range – from classic conductor systems to data transmission systems and controls.

Our maintenance services can be seamlessly combined with modifications, software updates, or repairs – all tailored to your production schedule.

Ensure the Performance of Your Systems!

With our professional conductor cleaning and regular maintenance, your systems remain in top shape. Contact us today to schedule your appointment – for maximum availability and minimal downtime. Simply scan the QR code or visit **vahle.com/globalservice**





PREDICTIVE SERVICES

WITH PLANNING & FORE-SIGHT: NO UNPLEASANT SURPRISES

With VAHLE's Predictive Services, you gain a decisive competitive advantage. By using the intelligent Smart Collector technology, errors can be detected early, anomalies identified, and maintenance measures planned precisely. The result: maximum system availability, virtually no unplanned downtime, and long-term efficiency improvements. Instead of unpredictable downtime costs for unexpected repairs and failures, you benefit from predictable service budgets. Reduce your maintenance costs, increase the efficiency of your systems, and enhance your planning security – an investment that pays off in the long run.

Effective Proactive Maintenance

The Smart Collector technology continuously monitors your conductor system and detects potential anomalies before they become problems. This enables proactive maintenance and protects your production from unexpected failures.

Planning Security through Intelligent Analysis

Using machine learning-based data analysis, you can optimize your maintenance cycles. Wear patterns are detected early, preventing process interruptions and maintaining continuous production flow.

Optimized Inventory Management

Reduce your tied-up capital and benefit from justin-time spare parts supply. Our predictive services enable thoughtful material planning that minimizes unnecessary inventory.

Predictable Service Budgets vs. Unpredictable Downtime Costs

Instead of bearing special costs for unexpected repairs and downtime, you can precisely plan maintenance measures. This allows for efficient budgeting and protects you from financial surprises. By detecting errors in time, repairs can be carried out proactively without disrupting operations. The result: virtually no unplanned downtime and smooth operation.

WHAT MAKES PREDICTIVE MAINTENANCE POWERED BY VAHLE SPECIAL?

Unplanned system failures can have significant consequences, especially in highly automated production lines or 24/7 intralogistics. Downtime quickly leads to production bottlenecks and can often result in significant cost explosions. To minimize this risk, VAHLE developed the Smart Collector – the world's first intelligent current collector system solution.

The Smart Collector uses specially developed sensors to continuously monitor the movements of the current collectors. These data are transmitted to the main unit, where they are analyzed using the Intelligent Dynamic Anomaly-Analysis (IDAA) method. This allows changes in the conductor system, indicating wear or other disturbances, to be detected early.

System Details



Current Collector with Sensors

Sensors precisely capture the movements of the current collector arms in three-dimensional space. This allows deviations to be detected without impairing the function of the current collector.



Main Unit

It analyzes measurement data in real-time using the "Intelligent Dynamic Anomaly-Analysis." With variable interfaces and compatibility with various systems, it is flexibly deployable.



Data Transmission

When anomalies are detected, the data are transmitted in real-time to our certified data center via WLAN, LTE, or SMGM, enabling an immediate response.



Software

Our VAHLE software visualizes the measurement data, offers ongoing condition monitoring, and enables digital services that can be conveniently accessed with any device.

Rely on the Future with the VAHLE Smart Collector!

Monitor your conductor system in real-time – without interrupting operations. Benefit from easy installation, increased system security, and planned maintenance. Reduce downtime and optimize your processes with our predictive maintenance technology. Learn more about the Smart Collector and how it future-proofs your system at **smartcollector.vahle.com**





AFTER-SALES & SPARE PARTS SUPPLY

ENSURING YOUR SYSTEM AVAILABILITY

Long-term success requires more than top-notch technologies – it needs a reliable partner who supports you even after commissioning. Because with intensive continuous use, even the best components eventually reach the end of their lifespan.

VAHLE offers you everything necessary for the reliable functionality of your system – from wear parts like carbon brushes and current collectors to complete automation systems, controls, and data transmission solutions. Our after-sales service guarantees you quick access to original spare parts, perfectly matched to your system.

Our specialists support you in selection and processing – precise and reliable, ensuring your systems remain powerful and operational in the long term.

Your Advantages

- Original Spare Parts
 Maximum system availability
 and consistent quality.
- Optimized Spare Parts
 Management
 Efficient system utilization
 through quick availability
 and automated inventory
 supply.
- Long-Term Partnership Support far beyond project implementation.
- Flexibility
 Short response times and precise supply to minimize downtime.



RETROFIT & MODERNIZATION

FUTURE-PROOF SOLUTIONS FOR YOUR SYSTEMS

Efficiency improvements and long system availability do not always require new construction. Often, targeted retrofitting is sufficient to adapt existing systems to new requirements and utilize the full potential of your facility.

Over time, the demands on machines and systems change, such as higher production speeds or increased performance requirements. The end of the lifespan of robust systems also necessitates adjustments. This is where our retrofit service comes in: We offer you a comprehensive solution that encompasses the entire VAHLE portfolio – from replacing conductor lines and retrofitting secure data communication to integrating modern control systems. Our retrofit solutions make your system fit for the future and enable automated processes that keep your systems efficient and powerful.

Our Retrofit Measures

Performance Optimization

Adapting power and data transmission systems to the latest requirements, such as integrating innovative technologies like power rails or upgrading control technologies to increase reliability and efficiency.

Sustainability Focus

Extending the lifespan of your systems through modernized components.

Increased Reliability

Minimizing downtime through preventative modernization measures that future-proof your systems.

Your Added Value

Cost Efficiency

Save valuable resources and avoid a complete rebuild through targeted retrofits.

Flexibility

Your system adapts seamlessly to new requirements – today and in the future.

Reliability

Minimize operational risks, maximize system availability, and avoid outdated spare parts issues with modern retrofit solutions.

Sustainability

Conserve resources and extend the lifespan of your systems – both environmentally friendly and cost-saving.



CUSTOMER SERVICE IN FOCUS

QUICK ASSISTANCE WITH MAL-FUNCTIONS & REPAIRS

With our global service center structure, we offer fast and reliable solutions for malfunctions and repairs. This ensures that your processes continue without unnecessary downtime.

Quick Response Times & Worldwide Service

Our technicians are deployed internationally to quickly resolve malfunctions and get your system back up and running.

Spare Parts Supply & Repairs

We ensure that you receive the right spare parts and that your repairs are carried out efficiently, even for complex requirements.

Worldwide Service Teams

Our experts are at your side on site, providing fast, professional service.

Your Advantages at a Glance

- Minimized Downtime
 - Quick support ensures that your production is resumed swiftly.
- Reliability
 - Your system is efficiently repaired without long waiting times.
- Global Coverage

Regardless of your location, our service team is here to help you. **VAHLE PROTECT**

EXCLUSIVE SERVICE FOR MAXIMUM AVAILABILITY

VAHLE Protect packages are designed to maximize uptime and protect your systems in the long term. Benefit from rapid emergency assistance in critical situations and efficient-focused measures that keep your processes running.

Regular professional-grade cleaning extends the lifespan of your systems and cuts down on costs, while proactive parts replacement improves safety and minimizes unplanned downtime.

The Smart Choice for Smooth Operation & Future-Proof Production

BASIC PROTECT



- Conductor system inspection and report
- Identification of damaged parts/those in need of replacement
- Spare parts inventory recommendations
- Asset management
- Optional service contract

EXTRA PROTECT



- Conductor system inspection and report
- Identification of damaged parts/those in need of replacement
- Spare parts inventory recommendations
- Asset management
- Optional service contract
- Professional power rail cleaning by qualified personnel

TOTAL PROTECT



- Conductor system inspection and report
- Identification of damaged parts/those in need of replacement
- Spare parts inventory recommendations
- Asset management
- Optional service contract
- Professional power rail cleaning by qualified personnel
- Wear parts replacement (e.g. carbon brushes)
- Material thickness measurement

Our VAHLE Protect packages can be booked once or for a period of 3 or 5 years. Individual agreements regarding the duration and optional components are possible. The replacement of wearing parts is included in the Total Protect, but the costs for the wearing parts are not included in the package price.

Don't Let Malfunctions Hold You Back

Schedule an appointment now and find out how our VAHLE Protect packages can make your systems more efficient, safer, and longer-lasting. Let's maximize your uptime together! Simply scan the QR code or visit **vahle.com/globalservice**



YOUR PARTNER FOR SMOOTH PROCESSES

VAHLE SERVICE & AFTERSALES: YOUR PARTNER FOR SMOOTH PROCESSES

Regular maintenance, professional cleaning, and precise inspection ensure reliable and future-proof intralogistics. With preventative and predictive service, seamless spare parts supply, and our protect programs, we keep your systems efficient, safe, and consistently powerful.



Schedule a System Check now!
Simply scan the QR code or visit vahle.com/globalservice



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