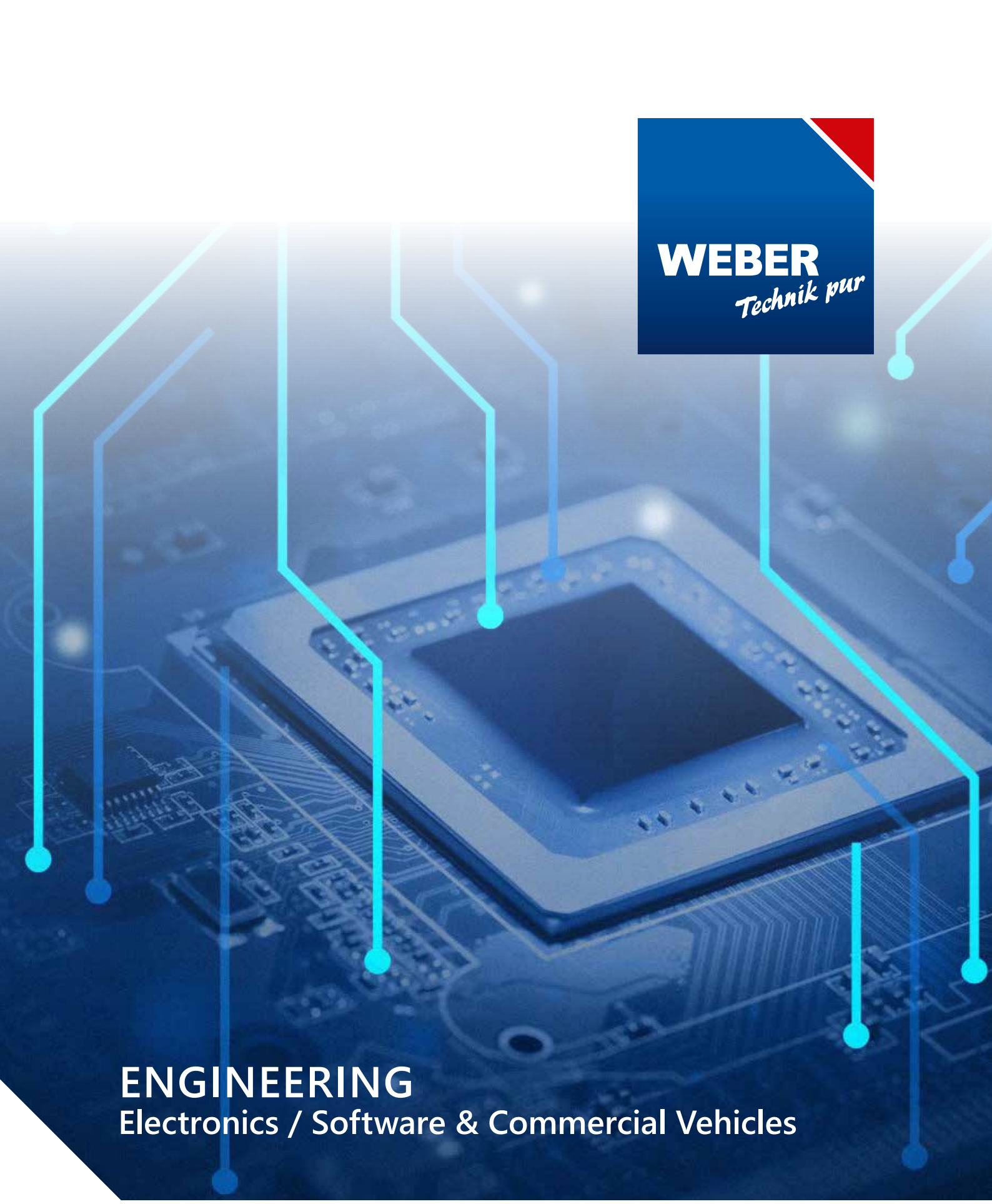


ENGINEERING

Electronics / Software & Commercial Vehicles

WEBER GmbH

....so that technology works

Your experienced partner for all aspects of embedded development.

Developing universal systems

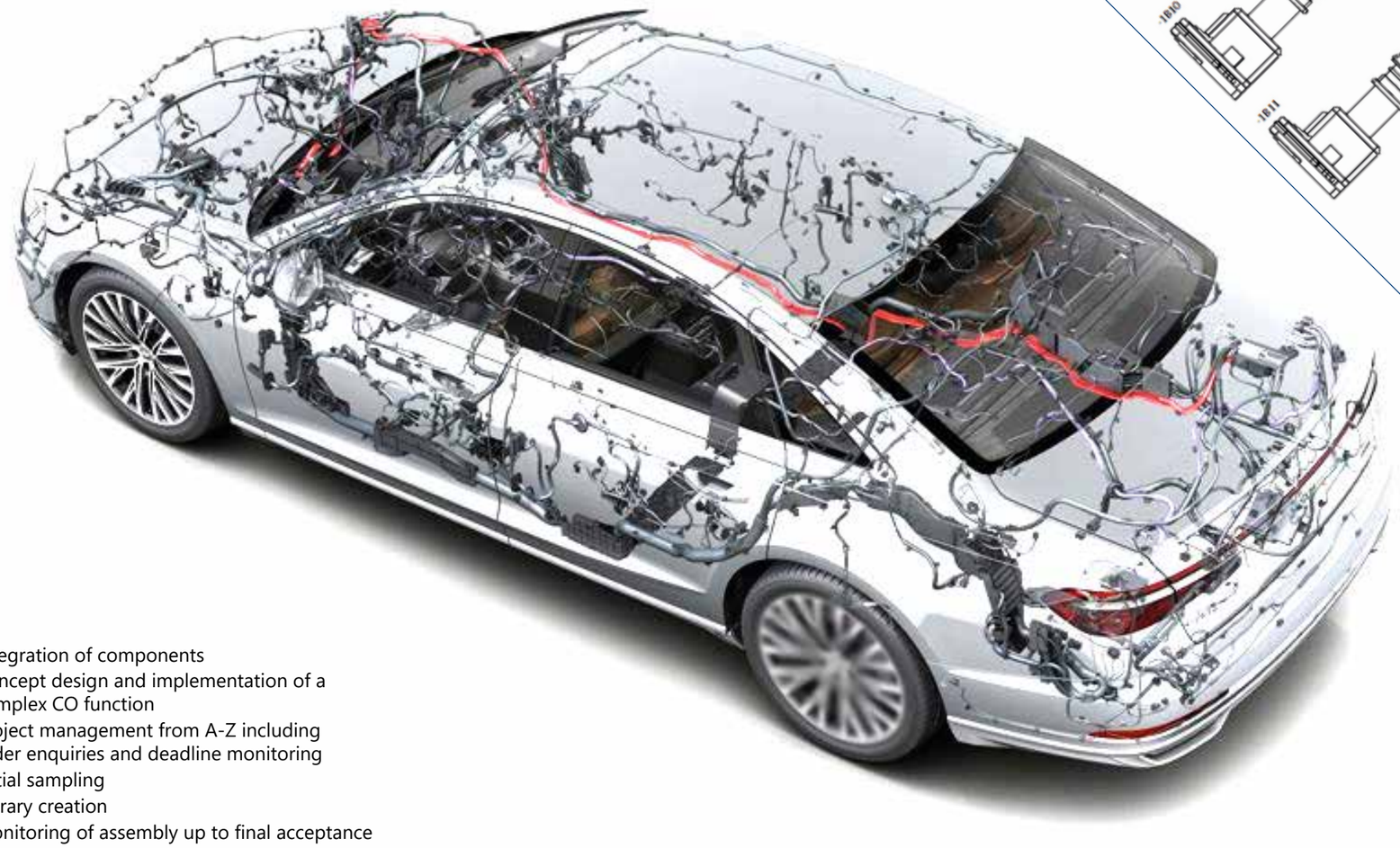
Embedded Software development

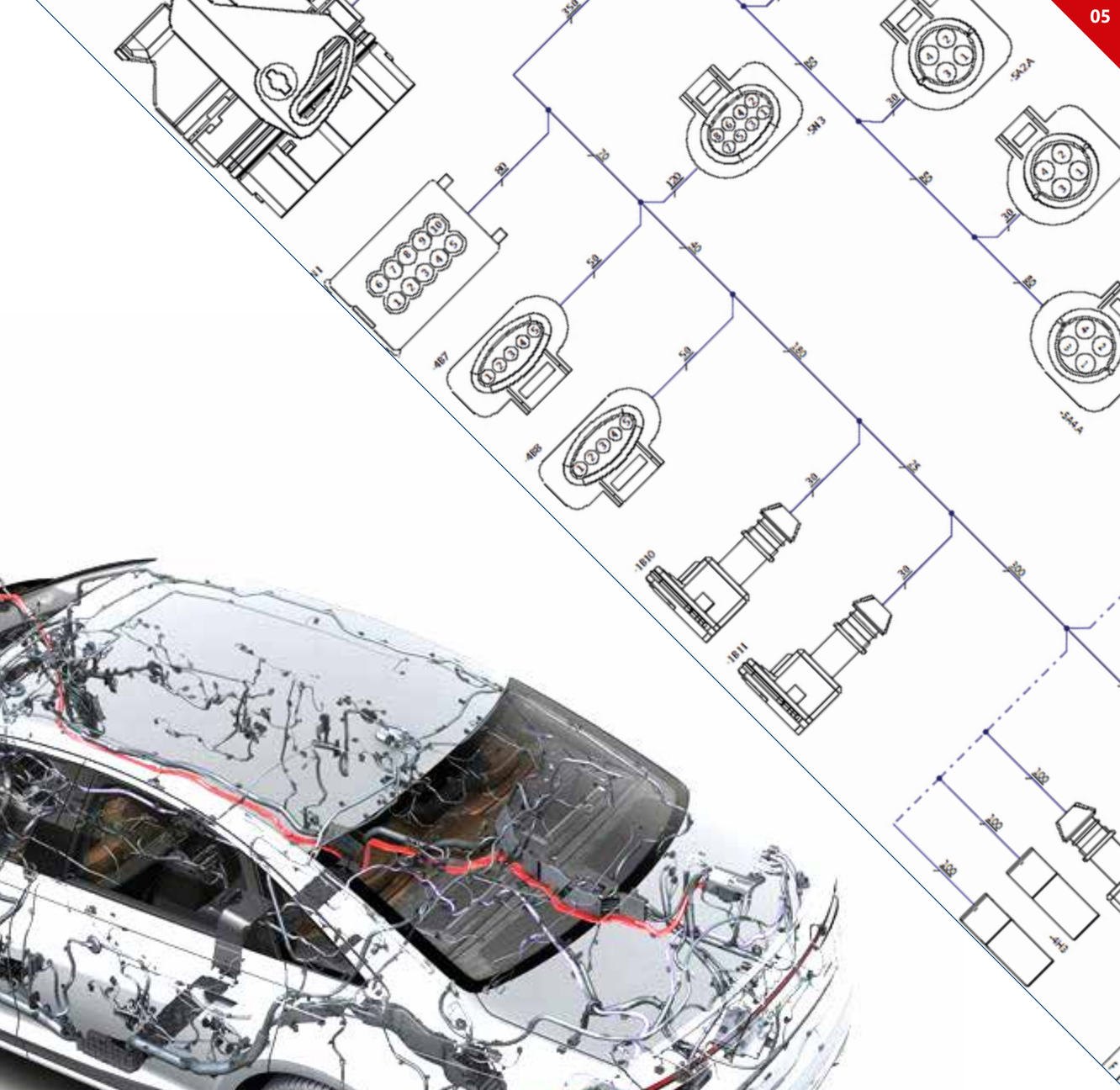
Embedded software development of complex systems. WEBER is your experienced partner for all aspects of embedded development: In all matters of software development to software testing.
Our highly qualified in-house engineering team supports you in planning and realisation of your visions - in our well-equipped development centers or on-site at your premises.

Our range of services

- Requirement & change management
- Preparation of specifications & functional specifications
- Soft- & hardware design, development
- Soft- & hardware qualification/ test
- CAN/LIN driver development
-
- Real time & microcontroller programming
  - Basic software
  - Application software
  - Environments
  - Diagnostic software
  - MPLAB
  - MS Visual Studio
  - Arduino
  - Greenhill
  - ...a.m.m.

- CAN:
  - DBC creation & maintenance
  - Diagnostics (CDD/ODX) creation and maintenance
  - Communication conversion to CANopen
  - CAN bus analysis
  - Autosar, OSEK
- LIN:
  - LDF creation and maintenance
  - LIN bus analysis
- Tools: UOE-Debugger, Vector CANoe/CANape/ CANalyzer/CANeasy/CANdelaStudio/ ASAP2 Tools/Doors/PTC
- Programming in C, C++, Python, CAPL, GNU Make



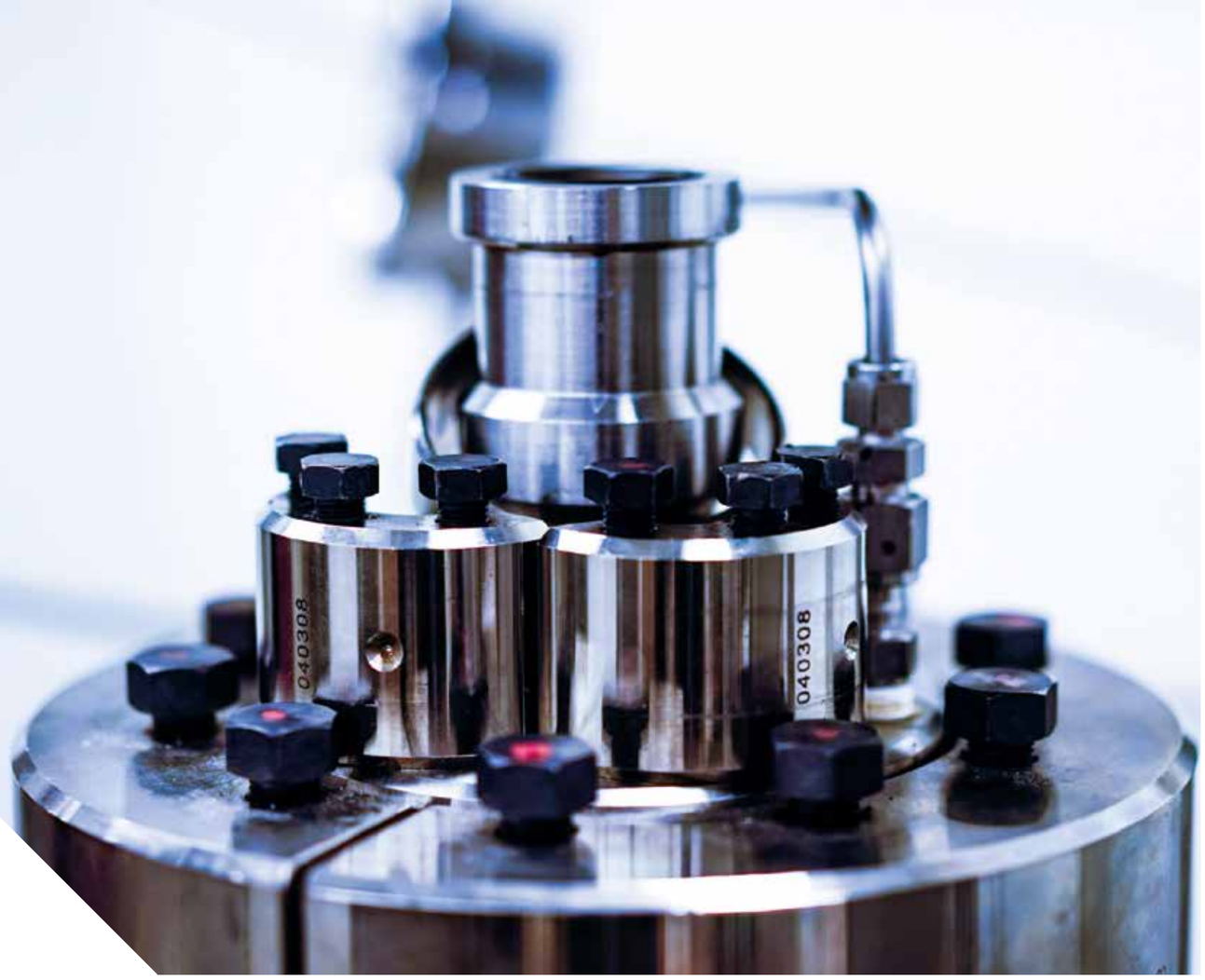


Cable harness development

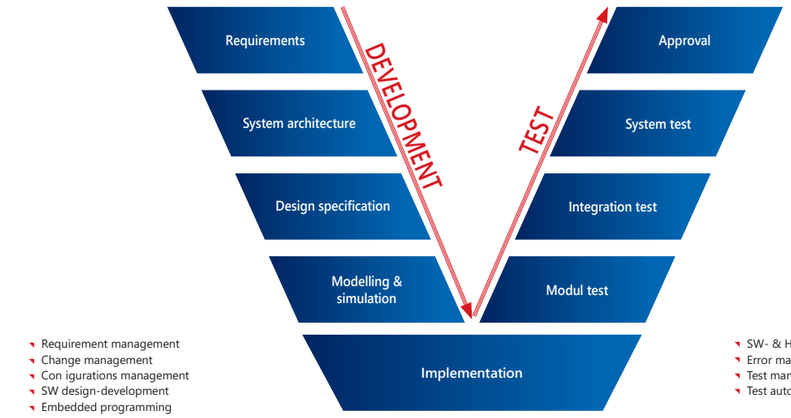
Vehicle electrical systems - the „nervous system" of vehicles. Steadily rising in complexity, they have to be continuously adapted to new requirements. No two wiring harnesses are alike. Type and selection of electronic components have to be developed according to the type and specification of the vehicle.With WEBER you can expect competent project support and handling.

Our range of services

- Development of vehicle electrical systems
- Creation of cable harnesses
- Sketching of circuit diagrams, cable harness drawings and assembly drawings
- Development and design of single parts and complex modules
- Cable harness modelling and laying in the CAD overall design
- Installation space and tolerance analyses
- Creative solutions in the automotive engineering sector
- Simple adaptation of cable harness / assembly drawing / parts list
- Integration of components
- Concept design and implementation of a complex CO function
- Project management from A-Z including order enquiries and deadline monitoring
- Initial sampling
- Library creation
- Monitoring of assembly up to final acceptance
- Documentation
- Tools: Zuken E3.3D Routing Bridge/cable/ schematic, Siemens NX, EPLAN, etc.



V-MODEL



- Requirement management
- Change management
- Con igurations management
- SW design-development
- Embedded programming

- SW- & HW qualification
- Error management
- Test management
- Test automation

Engineering

Cross-industry support for your projects. For 40 years, we have been a reliable development and technology partner for numerous well-known customers in the automotive and commercial vehicle industry, medical technology, consumer and other industries.

We offer
- 250 qualified staff
- Cross-industry support
- High flexibility
- Professional recruiting
- High planning reliability

Your benefits
- Staff relief
- Cost reduction
- Employee leasing
- Reduced risk
- Transparency of costs

Types of contract
- Contract for work
- Contract of employment
- Temporary employment

Software-, Embedded development according to the V-model

Along the V-model, we offer you competent personnel support in software and hardware development, software and hardware testing and design. In addition, we are also happy to support you in industrial engineering. Whether on your premises or in our development centers.

Embedded Programming

Embedded controller programming

Whether it is a question of programming embedded hardware in commercial products or more specifically in the automotive sector: our employees offer you the appropriate in-house development. Thanks to numerous external projects and the rapid increase in customer demand, we set up a specialised engineering department to handle customer projects at our development centrer in Aschaffenburg.

Our range of services

- Embedded Programming in C, C++
- Environments: MPLAB, Arduino, MS Visual Studio
- CAN bus
- Vector tools
- CanEasy
- Doors
- MKS/PTC

Software testing of Automotive control units

Used tools

- Bus/Diagnosis:
  MOST, CAN, LIN, (Vector CANoe + test package),
  TFS (Vector TAE), ODX
- Requirement and versioning:
  MKS, DOORS, ClearCase (IBM-Rational), Tortoise SVN
- Error management:
  ClearQuest (IBM-Rational), Jira (Atlassian)
- Operating systems and office applications:
  MS Windows, Linux, MS Office, MS Project
- Models, norms und standards:
  Automotive SPICE, ISO 26262, AUTOSAR, OSEK, embOS
- Test stations for manual, interactive as well as semi- and fully automatic SW tests
- LabVIEW

These complex tests enabled us to ensure that the control units developed by the client met the specifications (norms and standards) and were ready for use.

Commercial vehicles ready for series production.

Engineering service
Commercial vehicles

We develop individual solutions and products for on- and off-highway vehicles, such as agricultural, construction and forestry machinery, municipal and forklift vehicles, omnibuses as well as trucks - all since 1979

Our services cover the entire product life cycle - starting with concept studies, through prototype construction and functional samples, up to start of production. If necessary, our flexibly accredited test laboratory will support you in qualifying your products until they are market-ready. We also consider your special areas of use such as explosion protection or a required road traffic approval. In addition to our expertise in the automotive sector, our clients in the Off-Highway sector benefit from our long-term experience in the field of mechatronic product design and embedded systems for driver assistance systems (infotainment, instrument assemblies, camera and head-up systems).

Comprehensive development solutions

Whether in the field of electronics & software or mechanical product design - we are a highly experienced team with many years of project expertise in all aspects of your development requirements for commercial vehicles!

Our competency includes, among others the following modules:

- Chassis (chassis, frame, also including design surfaces for counterweight, etc.)
- Drive unit integration (electric motor, gas-powered combustion engine or diesel engine)
- Transmission
- Hydraulics (drive and work hydraulics)
- Working and attachment equipment (lift frame Simplex/Duplex/Triplex as well as shear modulus, container spreader, load pick-ups)
- Drivers' cab (design for various applications, e.g. in cold storage house, Offshore)
- Driver's workplace, design of interior according to ergonomics and design (steering, accelerator and brake pedal, parking brake, dashboard console with integration of operating and display elements as well as operating elements for the work functions).
- Development partner regarding various technical assistance systems and comfort functions
- and much more
- Tools: Siemens NX, MicroStation

www.webergmbh.de

Your contact

Matthias VOGEL
Business Unit Manager
Phone +49 6021 35 88-153
Mobile +49 170 302 68 37
E-mail m.vogel@webergmbh.de

Andreas FRIES
Deputy Business Unit Manager
Phone +49 6021 35 88-242
Mobile +49 151 12 19 74 36
E-mail a.fries@webergmbh.de

Leona PAUSER
Account Manager
Phone +49 6021 35 88-278
Mobile +49 171 97 97 178
E-mail leona.pauser@webergmbh.de