



hedrich



software & automation

We take time for your success!

OUR KNOWLEDGE YOUR BENEFIT

Our technical know-how includes the complete range of control and automation technique. With individual and thus custom-tailored system solutions we help you develop your projects. Furthermore, we attend to your project from planning to commissioning. With our long-time experience and the knowledge of our specialists you will win in any case.

OUR SOLUTIONS YOUR VISIONS

With our knowledge, you can realize your ideas. Our engineers and software developers are every day faced with projects requiring both abstract imagination and perfect workmanship to implement them. We look forward to every challenge, do not hesitate to come up to us with your ideas, benefit from the proposals and solutions offered by our highly professional teams for your success!



OUR IDEAS FOR YOUR FUTURE

We see ourselves as your partner in the sense of a network to which you have access at any time. This is the reason why we attach utmost importance to a successful communication. Coaching for us is a matter of course, meaning that we develop together with you our ideas clearly and intelligibly in the run-up to the project implementation virtually as a guarantee for your successful work in the future.

I look forward to meeting you personally in our Company.

A handwritten signature in black ink, appearing to read 'G. Findt'.

Gunnar Findt
General Manager Hedrich software & automation



Excellent advisory service: The team of Hedrich software & automation will be pleased to help you realize your ideas

Strong Partners: Efficient Solutions

CLEAR PROFILE

Hedrich software & automation GmbH is a subsidiary of the Hedrich Group. We are specialized in the development of innovative software and automation solutions for most different applications in the manufacturing and process industry. More than 250 persons are employed in Germany, Switzerland, USA, China and India.

The spectrum of our activities includes a complete chain of services from first consultation, development and manufacture to system support and optimization always with focus on highest possible customer satisfaction.

PERFECT PROCESSES

Optimally functioning automation is one of the most decisive criteria for efficiency and economy in production. To allow you to expand and use the automation potentials of your enterprise profitably, we offer you tailor-made software and automation solutions. As an independent unit of the Hedrich Group providing consulting service, solutions and services, we see our targets clearly defined:

Our core competences are the solution of control problems in equipment engineering, the detection of unused automation potentials in your production flow and the development of control programs for more efficient utilization of newly gained resources.

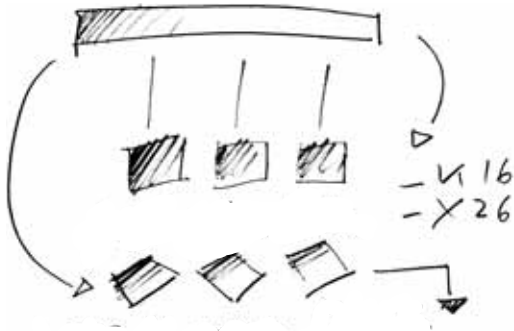
BEST COMMUNICATION

Besides development, hardware and software planning, designing and commissioning of your system, our highly-qualified technicians and engineers make sure that your equipment will also be functioning properly in the future. In addition to the consequent analytic involvement in your equipment and your process, we also guarantee a permanent communication with you as business partner. To ensure that all processes remain as transparent as possible, the technical support, whether as online diagnosis or on site, is provided by our specialists from the beginning.

So that the control technique of your equipment works as efficiently as possible not only today but also in the future.

At a glance: Our Service

Project Analysis and Concept



We support you in the planning and designing of your automation project with in-depth consulting and engineering services like:

- **Analysis of actual status of process and functional descriptions**
- **Preparation of wiring diagram (ePLAN)**
- **Support in establishing specifications**
- **Development of solutions and alternatives**
- **Selection of optimally matched system components**
- **Modeling of production processes**
- **Development of automation solution**
- **Problem analysis and, if necessary, optimization**

Design and Software Engineering



- **Selection of suitable automation components**
- **Working-out of project structure**
- **Development of realization profiles**
- **Implementation of project planning in hardware and software**

The selection and combination of appropriate hardware and software components as well as the elaboration of the structure of your automation project are core constituents of our project planning.

Of course, we also support you in creating realization profiles. Software engineering includes the linking of individual and standardized partial solutions to a closed, complete software solution. This solution can for example result in production data recording (archiving, analysis and visualization) or customer-specific user and diagnosis interface.

For more complex and extensive tasks we recommend a combination of both services to create an optimum system solution.



Installation

- **Installation and verification**
- **Parameterization and setting**
- **Integration test and trial run**
- **Final acceptance**
- **Instruction and training**
- **Documentation**

The software and automation solution developed for you will be integrated into your production or process environment on site and then parameterized according to the requirements. After successful integration test and trial operation, the final acceptance instruction and training for the control system and user guidance of your equipment will take place.

Additionally, you will receive user documentation adapted to your equipment.

Operation

- **Technical assistance**
- **Remote diagnosis**
- **On-site service**
- **Maintenance and repair**
- **Service contracts**

For all technical questions concerning our system solutions, our technical support is available round the clock. If extensive and process-specific support is needed, we offer you customized service packages by means of which you can for example obtain our remote diagnosis service.

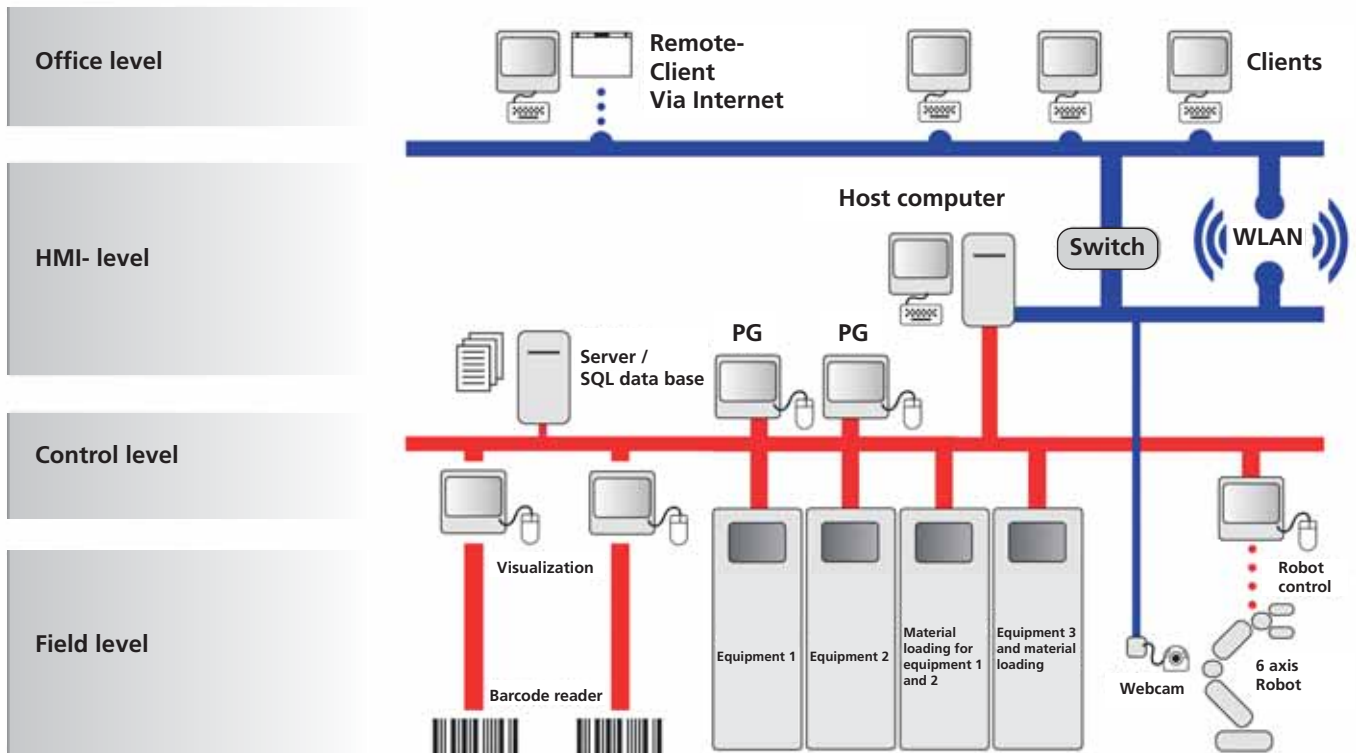
If maintenance or repair work is necessary on site, our system specialists will come to your production site.

Optimization

- **Expansion of existing equipment**
- **Shorter program running times**
- **Increase in productivity**
- **Renewal of components**

After commissioning or during the operating phase, there is often a need for optimization to increase for example the efficiency of production or to calibrate operations. Besides the actual optimization of existing equipment, our modernization service also offers ideal solutions to update older equipment and machines having mechanical systems that are still in functional state, also with regard to control-related conditions and electronic components.

Our Specialty: Automation



FULLY AUTOMATIC PRODUCTION

Fully automatic production consists for example of three production units, two material loading units and one 6-axis-robot for product unloading. All three production units, one material loading unit, the robot control system, the main control unit (PC) as well as two other control units / programming units (PG) are connected via a communication network.

The first material loading unit supplies production units 1 and 2. Production unit 3 is exclusively supplied by the second material loading unit. The robot control system receives status information on the production cycles from the individual control systems of the production units and initiates the robot sequences for the respective product unloading.

The control of the complete production equipment is performed by the main

control unit where the production data of the individual units are also stored. The main control unit is connected to a webcam for visual production monitoring via a switch and to the company network via WLAN.

By connecting the company network to the internet, a remote client can access the central control unit and the webcam to supervise production. The two control units are used as programming units for local configuration of the individual production units.

PRODUCTION DATA RECORDING

Two production units are linked via a separate ethernet and connected to the company network by means of a switch. The products produced in the two units receive a barcode that is read by the barcode reader at the visualization PC and recorded via the server in a SQL





























database. At the same time, the production data which are gathered by the equipment control system (PLC) are stored by the server in the SQL database. By entering the barcode or the product number, all product data of different clients can be called up.

OPC SERVER

The programmable logic controllers (PLC) of five individual production units and one control and visualization unit are linked via a communication network. The individual operating and product data are stored on the OPC server and made available for being called up.

Well Done!

A selection of our references

Project / Service	Analysis + Concept	Design + Software	Installation + Commissioning	Project / Service
Control of a production line for stator casting				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction • Networking • Process optimization
Control of a production line for high-voltage ducts				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction • PDE, OPC server
Control of a 4 MW boiler plant				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction
Control of a production equipment for consumer goods				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction
Control of a production equipment for casting of ignition coils				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction • IBV
Modernization of the control system of a glass fiber varnishing equipment				<ul style="list-style-type: none"> • PLC programming • Visualization • Control cabinet construction
Control of a centerless glass grinding machine				<ul style="list-style-type: none"> • PLC programming • Visualization • Optimization
Implementation of an oven control system (temperature process)				<ul style="list-style-type: none"> • PLC programming • Visualization for Windows CE
Control of a ship unloading crane				<ul style="list-style-type: none"> • PLC programming • Visualization • Networking
Control of a packaging machine for bulk goods				<ul style="list-style-type: none"> • PLC programming • Visualization • Networking

For further references, please feel free to ask us!

The philosophy of our services

- Hedrich software & automation GmbH develops and sells innovative automation and control-specific solutions and services.
- The customer's individual requirements are decisive for the development of solutions and systems
- Our aim is to improve the efficiency and productivity of machines and equipment always in the customer's interest.

The Service Network

To support our customers and their projects at the best, Hedrich software & automation offers an extensive service profile.

All services can be ordered individually or in service packages. Our customers remain flexible in handling their projects and save both time and costs.



The Spectrum of Service

Technical Consulting • Designing • Software Engineering • Technical Assistance • Maintenance and Repair Service • Remote Diagnosis • Service Contracts • Optimization Modernization • Training



We offer economical and forward-looking alternatives to conventional power supply. Whether consulting, planning, implementation or maintenance of your equipment: Our competent energy consultants will gladly show you how to secure the future in future!

Better Energies

Easy, clean, economical: The Hedrich software & automation-subsi-
diary Green energy solutions follows new paths in energy production

Our independent subsidiary Green energy solutions has specialized in solar technique and alternative energy generation. Our Green energy consultants offer you a complete package of services going far beyond the planning and implementation of photo-voltaic systems, wind power plants and combined heat and power units.

EXCELLENT CONSULTING SERVICE:

As a company specialized in solar technique, our competent energy specialists can present to you at any time the latest information on financing, depreciation and power input and show you new ways how to win energy economically, sensibly and profitably in the future. We

will gladly provide consulting service on site and plan your solar current system taking into account common regulations and standards (VDE). To find the best solution for you all necessary steps will be clarified with you beforehand.

ALSO IN THE REALISATION,

we take care of comprehensive quality. Whether building kit for self-assembly, modular system or complete solutions supplied by us: We only use high-quality components of selected brands to permanently ensure outputs, efficiency and reliability. No matter how high the requirements may be: Our expert team guarantees a perfect, customized energy production equipment.

STILL MORE GREEN.

Besides the planning and manufacture of your system, we will gladly handle all necessary formalities. Whether for the application for feed-in contracts, application for promotional programs or insurances our energy consultants will be happy to assist you in designing the operation of your system as easy and uncomplicated as possible.

For detailed information on the subject "New Energies" please refer to our website:

www.green-energy-solutions.de





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