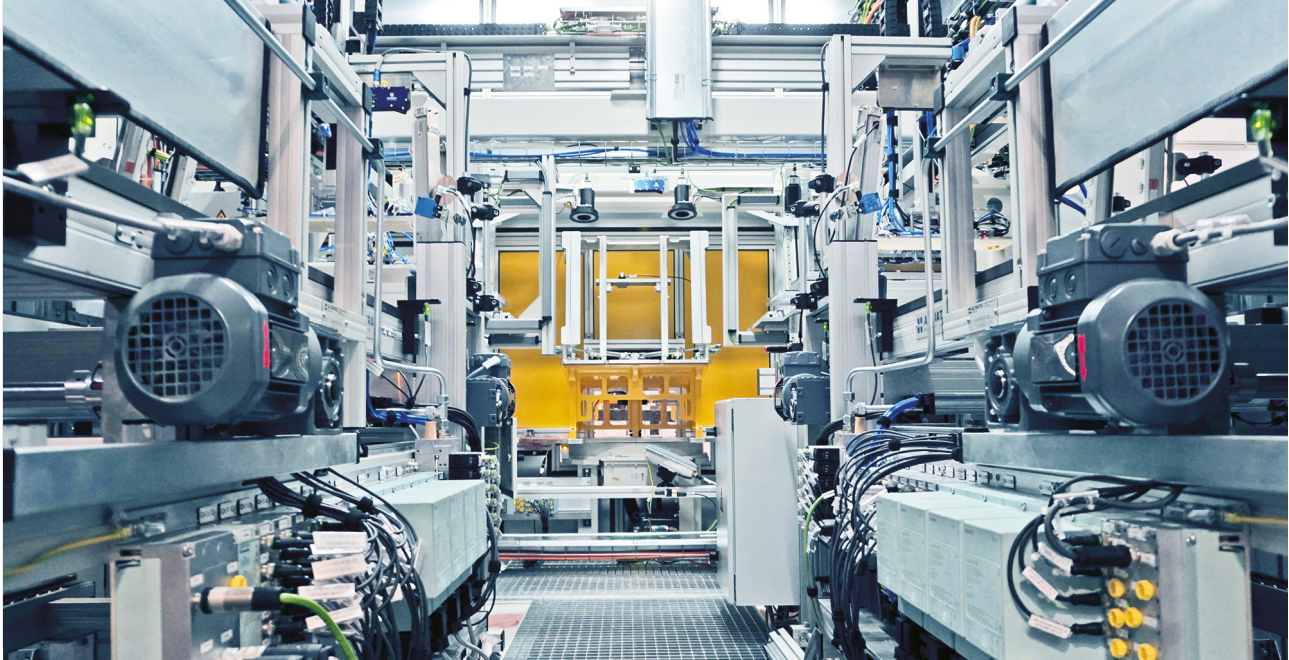


360° Solution



From Innovation to Scalable Production

Turning pioneering hydrogen technologies into industrial-scale, production-ready solutions

The hydrogen industry is entering a dynamic and demanding phase of development. While many companies in this field have innovative product ideas, they often lack the experience to scale this into industrial production. Therefore, we work with an integrated approach that connects product design, process planning, production concepts, system integration and data management. We support our customers from the first idea to a scalable and efficient manufacturing solutions.

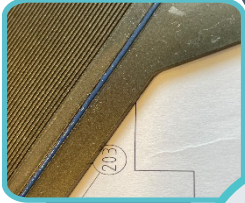
Early in the process, we assess whether a design is suitable for production, identify challenges in assembly, handling materials or automation feasibility before they become expensive issues. Based on these insights, we develop robust and repeatable production processes tailored to product maturity, output targets and available resources. We connect these individual steps into a complete and future proof production system with optimized layouts, streamlined material flow and realistic workforce requirements.

If cost estimations are needed to secure investments or fundings, we are able to provide reliable cost models, including CAPEX and OPEX calculations. We deliver turnkey production and testing solutions in the time of implementation. Our Advanced Data Management System enables monitoring of production, machine and quality data, ensuring consistent process control and traceability.

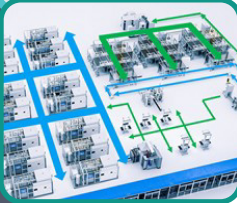
What sets us apart is the combination of deep engineering expertise and hands-on production knowledge. We turn innovation in scalable reality – with strategies and systems that grow with your business.. Because long-term market success depends not only on a great product, but on a production process that brings it to life.

Innovative Service and Support Solutions

Design Consulting



Process Consulting



Turnkey Production



Prototyping Product

Factory Planning

Management System

Design Consulting

- Analysis of assembly and manufacturing issues
- Evaluation of automation potential
- Design recommendations for bonding, sealing or space efficiency, etc.

Result: A production-ready design that reduces rework and follow-up costs

Prototyping Product

- Manufacturing of customer-specific prototypes based on validated design
- Use of production-representative materials and technologies

Result: Functional prototypes that validate design and process feasibility

Process Consulting

- Definition of process chains and workflows
- Selection of technologies and testing methods
- Validation through trials, cycle time, and sequence analysis

Result: Efficient, traceable processes with defined cycle times, that are ready for direct implementation

Factory Planning

- Development of complete system, line and factory concepts
- Layout planning considering logistics, material flow, and staffing
- Structured CAPEX and OPEX calculations
- Scenario modeling for ramp-up, scaling, and automation levels

Result: A robust production concept, that is scalable, cost-effective, and ready to implement and a realistic cost model for investors, funding applications, and strategic decision making

Turnkey Production

- Development, construction and build of customized systems
- Commissioning and handover of turnkey solutions
- On-site support during start-up

Result: A fully tested, technically advanced and ready-to-use production or test system

Management System

- Advanced Data Management System (ADM)
- Mixture of a Manufacturing Execution System (MES) and a Supervisory Control and Data Acquisition (SCADA) tool

Result: Continuous control of your production and evaluation of your manufacturing and quality data

What we stand for...

- Experience and Expertise in the field of hydrogen technology for over 10 years
- Delivery of professional pre-project consulting services
- Experiences in investment cost and support in complete factory planning
- Serving the entire production value chain alongside our partners and supplier network
- Innovative products and design concepts for customized requirements
- Reliable turnkey solution provider for manual or mass production systems

We are the **H** of Hydrogen

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