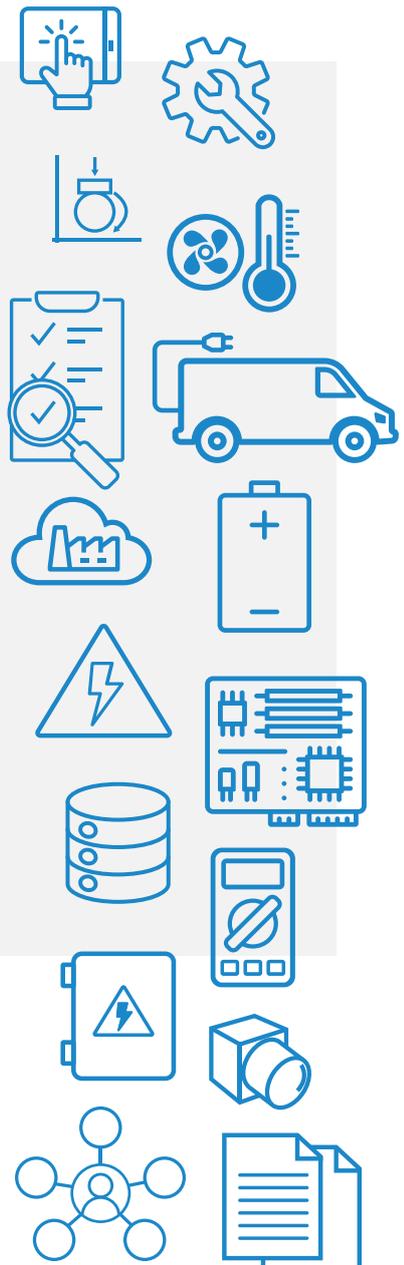


ProNES

ProNES means tailored automation in measurement and testing technology. Your requirements form our framework for a precise development as well as integration of custom-made hardware and software.



The Challenge

The modern manufacturing and testing environment around this globe and regardless of industry, has developed a number of significant traits and trends that define their environment.

Individual Company Features

In order to meet the individual challenges of each and every manufacturing company you should consider the following key properties, which characterise a company and its specific environment and system landscape:

- Special product features: type, material, dimensions, and many more
- Attention to measurement and test parameters for quality assurance
- Manufacturing processes with specifically defined manufacturing workflows
- Acquisition of specific data in order to identify key indicators
- Company-specific standards for their special equipment
- Historically grown company structure and distribution of responsibilities

Your essential quality requirements are the ultimate benchmark.



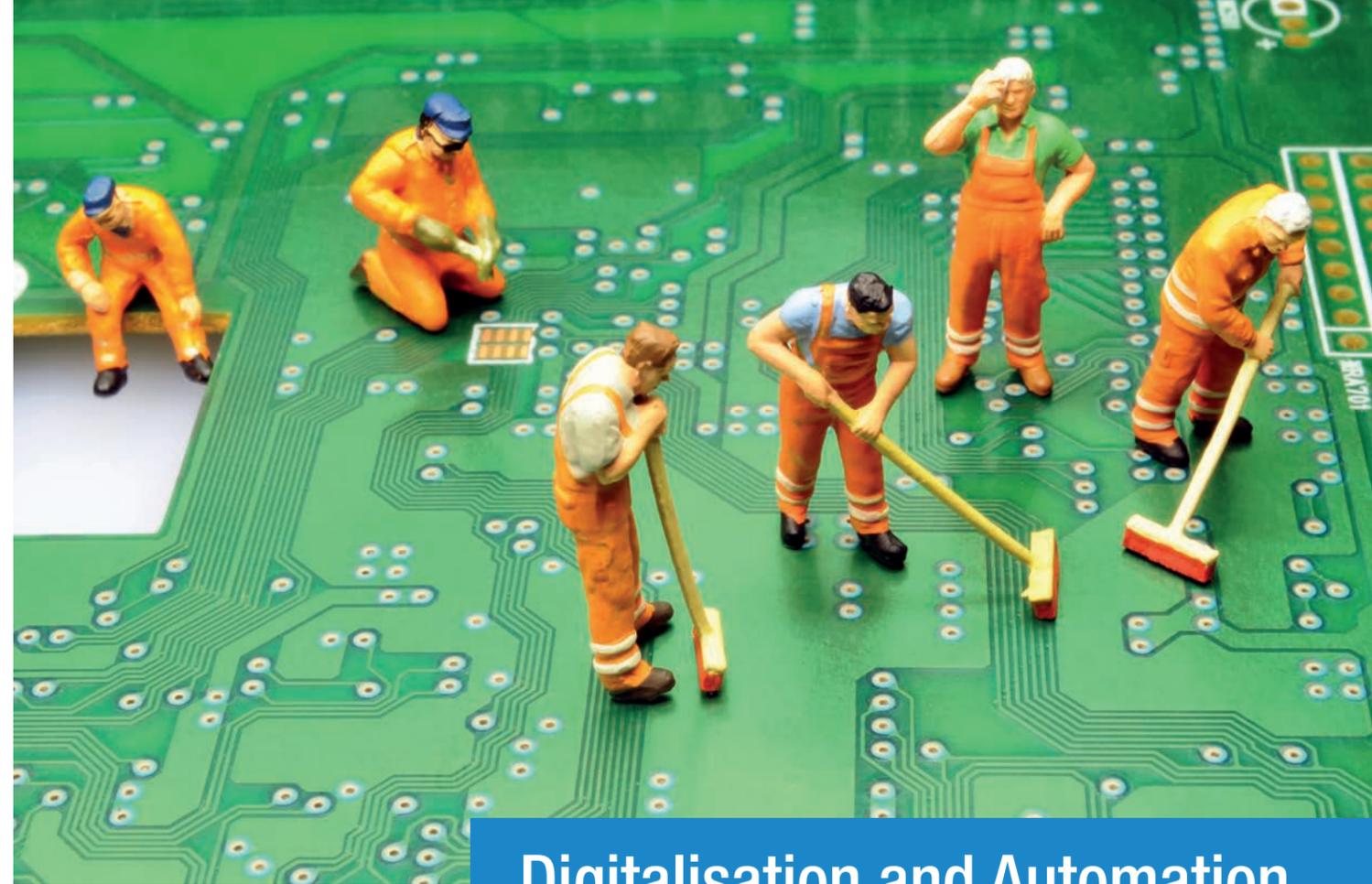
Global Trends

Apart from these individual factors the manufacturing environment has for many years been exhibiting global trends with regard to sustainability of manufacturing companies. In order to strengthen your position on a globalised market, is essential to extend the IT and quality assurance in your manufacturing environment and to increase your level of automation and thereby your manufacturing productivity. Continually rising customer expectations regarding product quality and individualised product design are producing new and greater challenges.

This, in turn means an ever-increasing complexity of manufacturing and testing workflow and the corresponding quality parameters and key figures.

However, the aforementioned trends are a source of entrepreneurial opportunities if you apply innovative solutions to ensuring the end-to-end networking and digitalisation of your company.

Future Proofing Requires Innovative Solutions.



Digitalisation and Automation

The Key: Digitalise and Automate Manufacturing and Testing.

Your digitalisation and automation solution requires a secure and high-resolution processing of your data. Moreover, your manufacturing and testing should be exactly matched to your corporate processes.

A precise source of data, meaningful action criteria by fast analyses, as well as the embedding of the results into process control and decision making exert a direct impact on the critical success factors:

- Automation, transparency, precision, continuity, and flexibility of manufacturing
- Systematic problem-solving and manufacturing optimisation
- Secure production and documentation of quality
- End-to-end digitalisation of the complete corporate environment.

The digitalisation and automation of your manufacturing and testing are your first step on your way to a Smart Factory: Integrating Industry 4.0 and IoT as trendsetting milestones pave the way to continually improving quality, productivity, and process design.

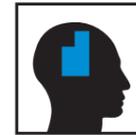
Basic Solution Approach

The basic solution approach of ProNES aims to capture and analyse all relevant product, tool, and manufacturing data. In this way, you obtain a sound starting point for the precise and optimised control of manufacturing via system-internal routines and employee decisions. At the same time, the complete documentation of the manufacturing processes makes it easier for you to comply with the relevant legal requirements.

End-to-end networking of manufacturing and connectivity to your corporate IT avoids manufacturing island solutions. Your management and all employees in the company receive the necessary key information from manufacturing that affects their work area.

Comprehensive digitalisation is an integral part of the solution. By implementing the solution concept in your company, you thus also create the necessary foundation to make the Smart Factory of tomorrow a reality. In this way, the requirements of your Smart Factory become the decisive basis for the future viability of your company and an organic part of your corporate development.

Automation, productivity, flexibility, and quality all along the line.



BATTERIEINSPEKTOR

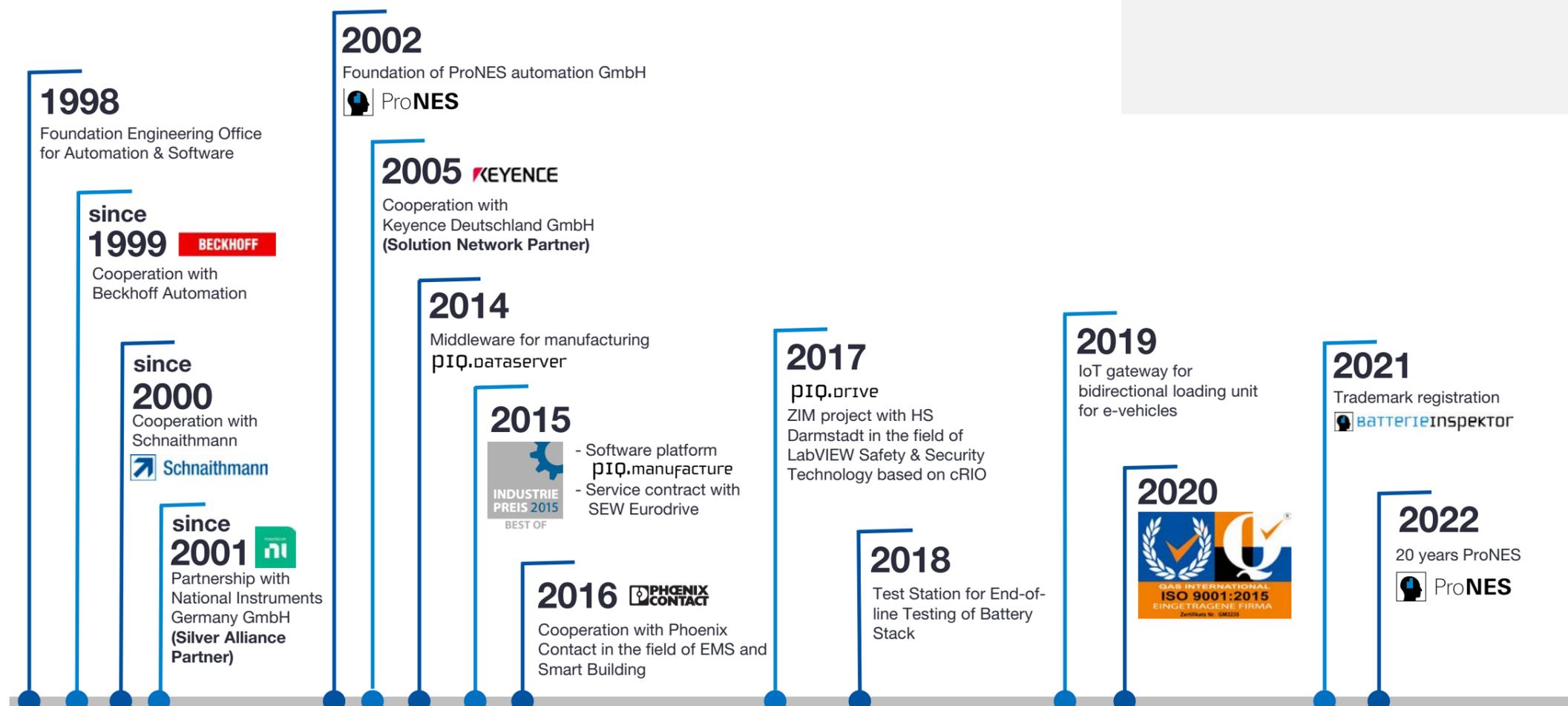
Test and Automation Portfolio

E-Mobility

- EOL and function testers
- Li-Ion batteries for commercial vehicles
- Li-Ion batteries for cars and small vehicles (eBike)
- Electric auxiliary heating systems
- Control devices and battery management
- Fuel cell (PEM)
(components, stack, system manufacturing)

Special Projects

- EOL and function testers
- Automotive air conditioning systems
- Clutch and gearbox components
- Electric motors
- Machining in piston production
- Control units and electronic components
- Assembly procedures and monitoring
- Optical inspection



Trusting Teamwork

Together we develop your automation and testing at the pace that is right for you, splitting up the project into sensible and manageable steps. By choosing our solutions, you improve the efficiency and productivity from the very beginning of the project. This applies regardless of whether you are starting with a greenfield factory or restructuring an existing factory.

During decision making

Together we sort out your situation, your aims, your possibilities, and the benefit. We consult with you in order to take well-founded decisions with regard to the appropriate solution and processes.

During development and realisation of your digitalisation solution

Together with you, we master large-scale projects. We analyse your manufacturing and your company. We configure and develop your individual solution. We organise the start-up of your solution.

During operation

We train your staff for the effective use of the solution. Together we integrate the solution into your corporate processes. We maintain and service the system and solve problems (proactively). We continue to develop the solution according to future needs.

Please do not hesitate to contact us if you want more information on our comprehensive service portfolio!



Service Portfolio

- Consult and support during the conception phase
- Coordinate mechanical engineering / MSR technology / production
- Prepare overall electrical planning (hard- and software)
- Develop software systems
- Integrate solution on site
- Optimise and support plant at customer site
- Perform maintenance and update services





Our Flagship Solution for Battery Testing

Whatever the battery-testing environment, it is shaped by individual quality parameters. An analysis of relevant parameters and the status quo is the only means to decide whether you should reconsider your digitalisation and automation strategy together with us, or if you just need certain supplementary modules for your individual quality-assurance solution. During an introductory consultation we provide first insights into the complex subject of battery testing. For a more detailed entry into our common project, you can revert to our proven workshop concept.

No matter which battery-testing modules you choose, thorough digitalisation and automation provide you with access to the following benefits:

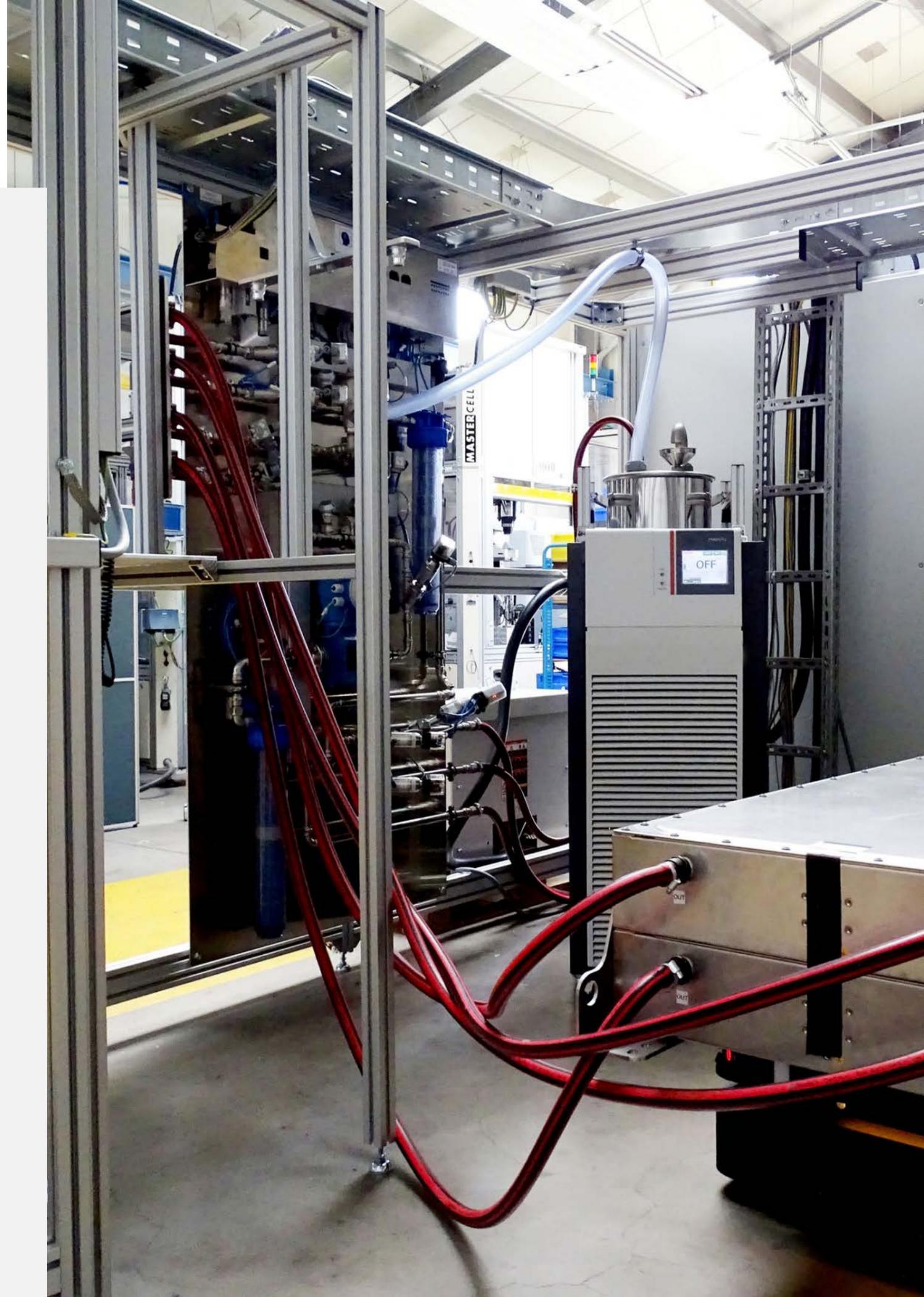
- Basic system for greenfield and brownfield solutions – individually scalable via optional modules

Continuous improvements in quality, productivity, and flexibility of your manufacturing and testing which contribute to the lasting success of your company

- Rapid analysis of quality issues contributing to uninterrupted high-quality production
- Minimised error rate contributing to customer satisfaction
- End-to-end digitalisation contributing to the future-proofing of your company in this time of digital transformation

Please take a look at our diverse portfolio for yourself! Our team is always there to help you with the realisation of your individual objectives and requirements!

ProNES and batterieinspektor™ ensure quality all along the line.





20 Years  ProNES

Your Benefits at a Glance

- Joint expertise of ProNES and other acknowledged industry experts
- Sustainable solutions for manufacturing and testing automation
- Many years of experience in quality assurance
- In-depth knowledge of customer requirements
- Numerous successful implementations in manufacturing environments

We create comprehensive battery-testing transparency.
For seamless automation and testing in battery manufacturing.

We accompany you on your way to the Smart Factory of tomorrow.
By choosing ProNES and batterieinspektor™ you increase efficiency and productivity from the very beginning of your project.

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