

# Setting standards.

Intelligent measurement & testing technology

DESIGNED & PRODUCED  
IN GERMANY

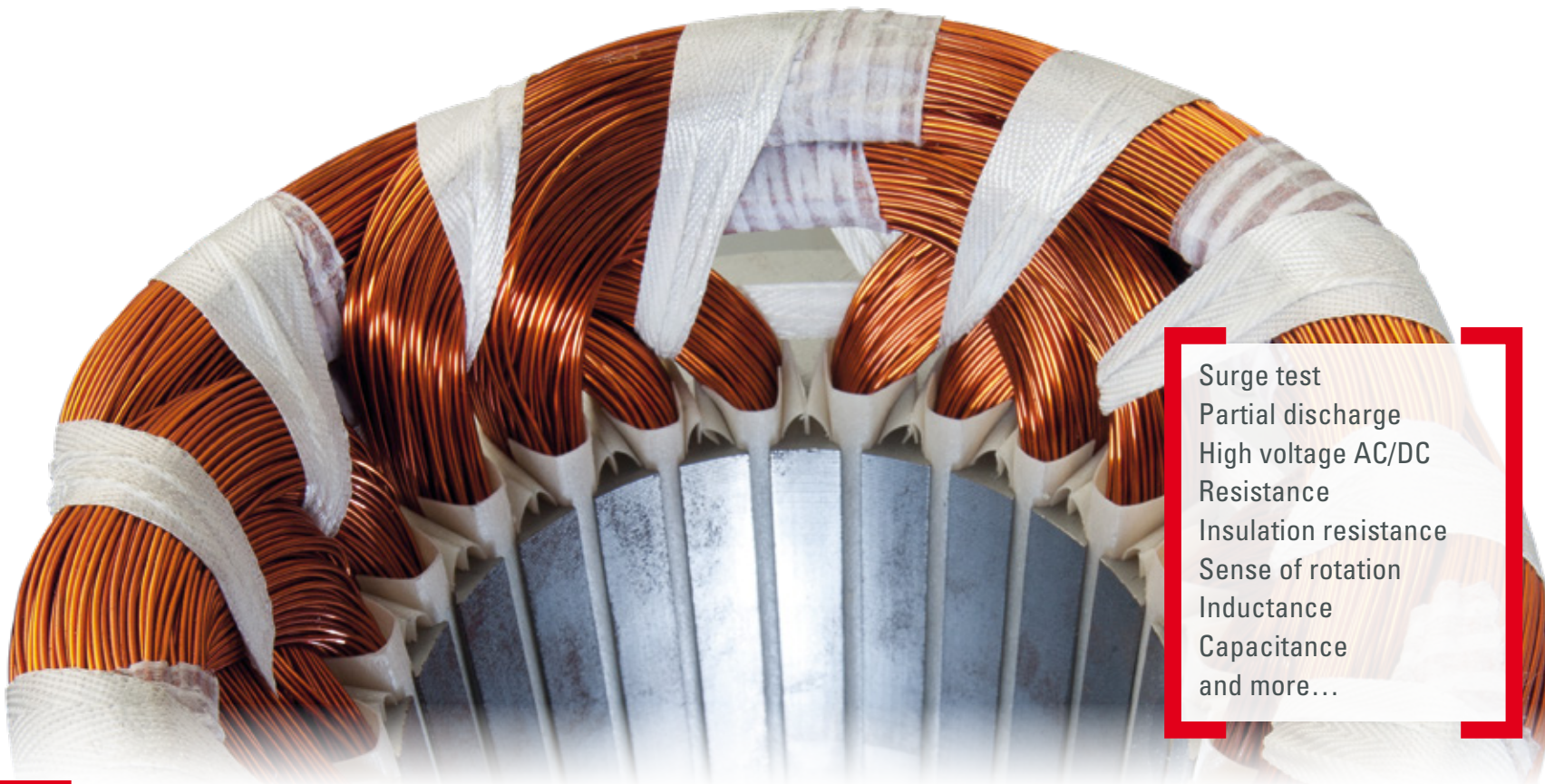
**TEST WITH THE BEST.**

# Testing technology for electrical safety and function



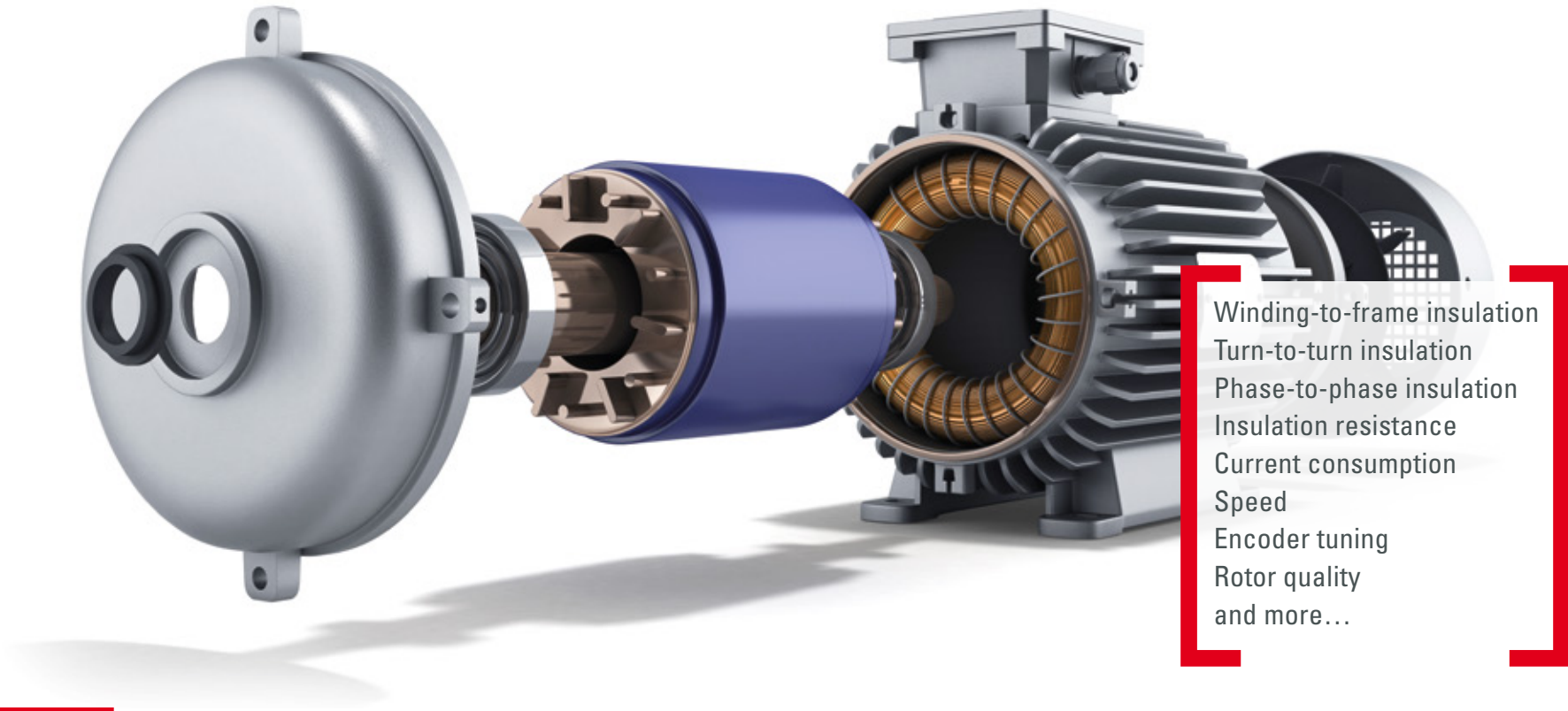
Medical leakage current  
High-voltage AC/DC  
Insulation resistance  
Leakage current  
Residual current  
Voltage  
Current  
Power  
Overall function  
and more...

## Testing technology for windings of all kinds



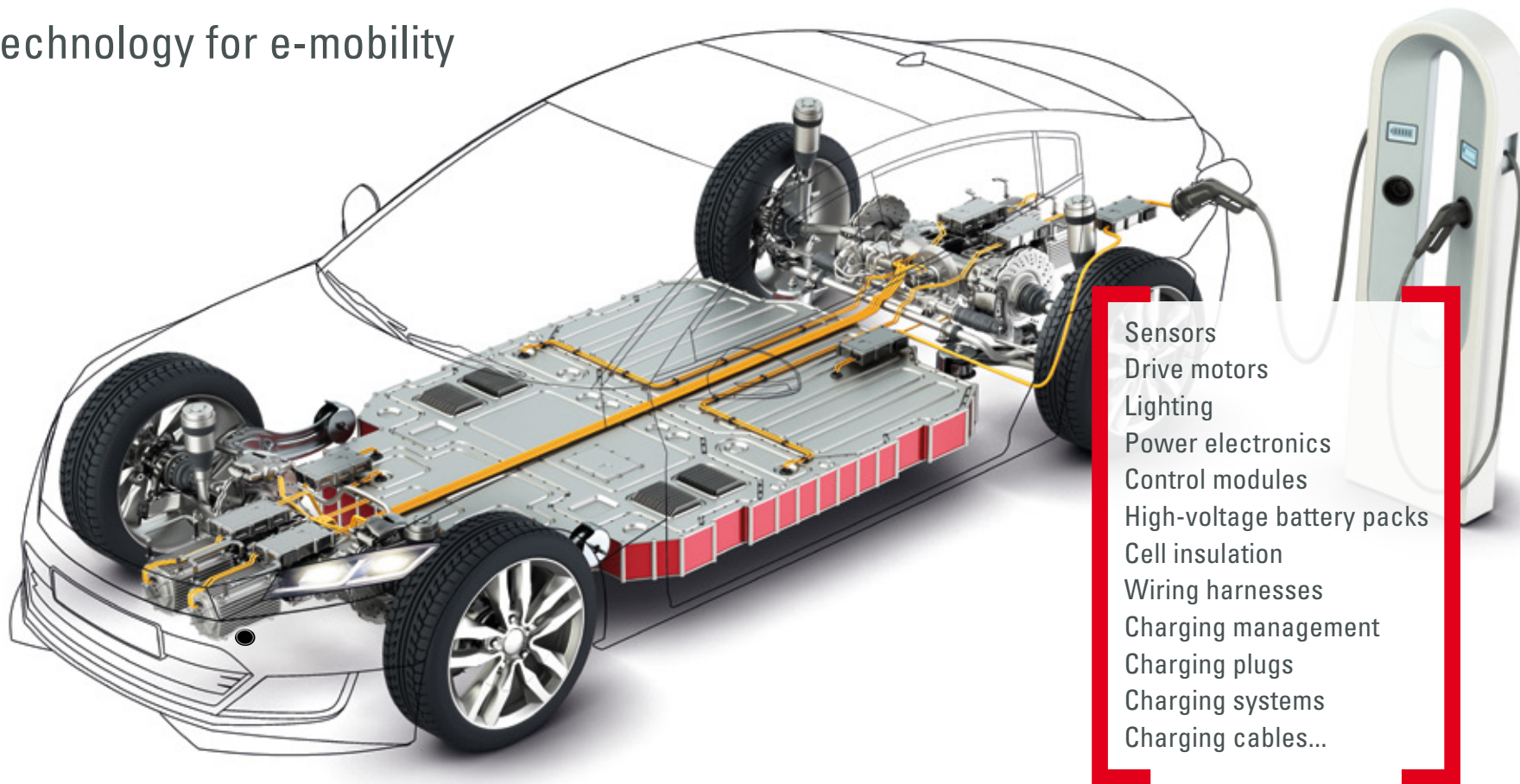
Surge test  
Partial discharge  
High voltage AC/DC  
Resistance  
Insulation resistance  
Sense of rotation  
Inductance  
Capacitance  
and more...

## Testing technology for electric motors



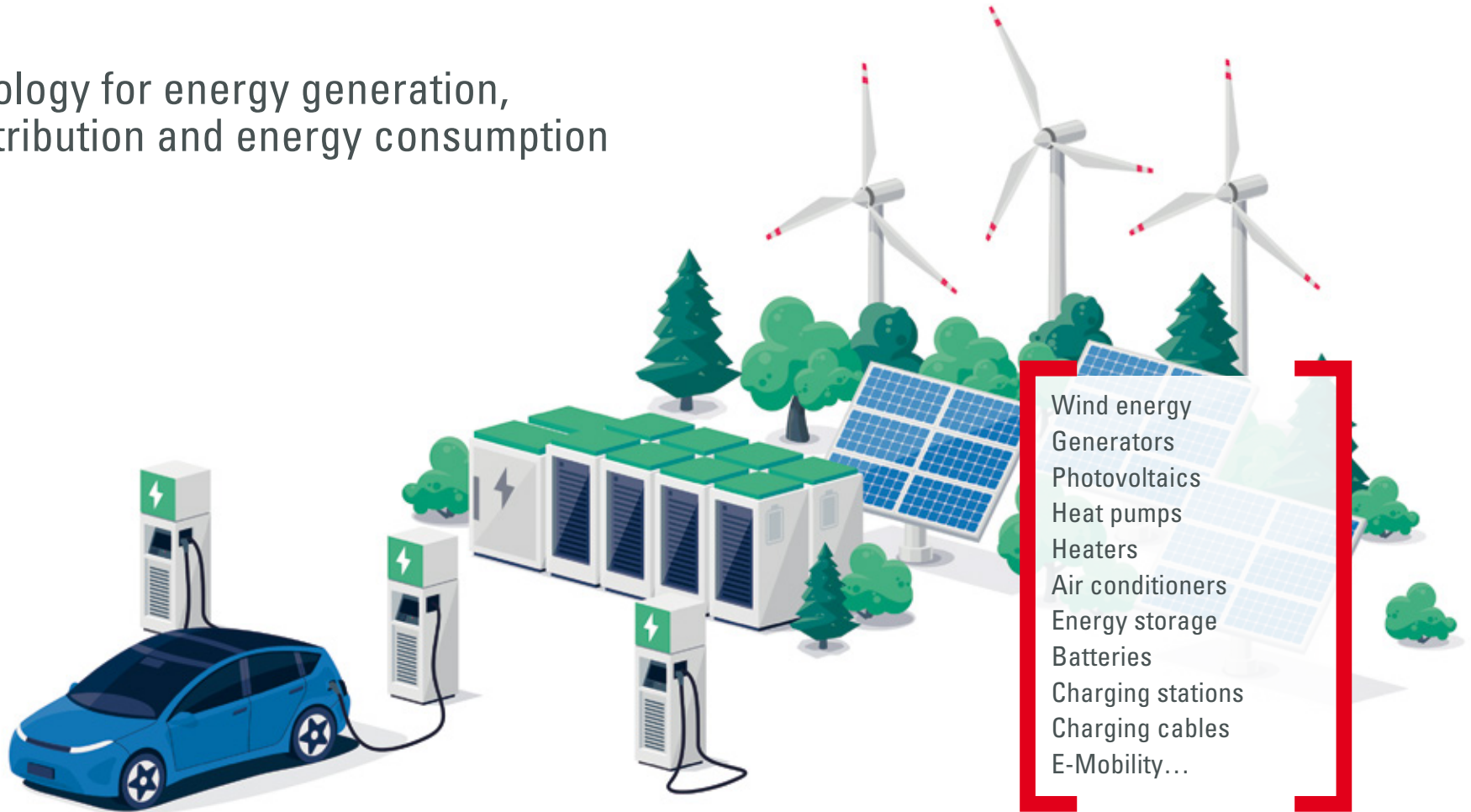
Winding-to-frame insulation  
Turn-to-turn insulation  
Phase-to-phase insulation  
Insulation resistance  
Current consumption  
Speed  
Encoder tuning  
Rotor quality  
and more...

## Testing technology for e-mobility





## Test technology for energy generation, energy distribution and energy consumption



Wind energy  
Generators  
Photovoltaics  
Heat pumps  
Heaters  
Air conditioners  
Energy storage  
Batteries  
Charging stations  
Charging cables  
E-Mobility...

## Testing technology for luminaires



PE/GB-conductor  
Insulation  
Wiring  
ECG-parameterization  
NFC  
Casambi  
Luminous color  
Luminosity  
and more...

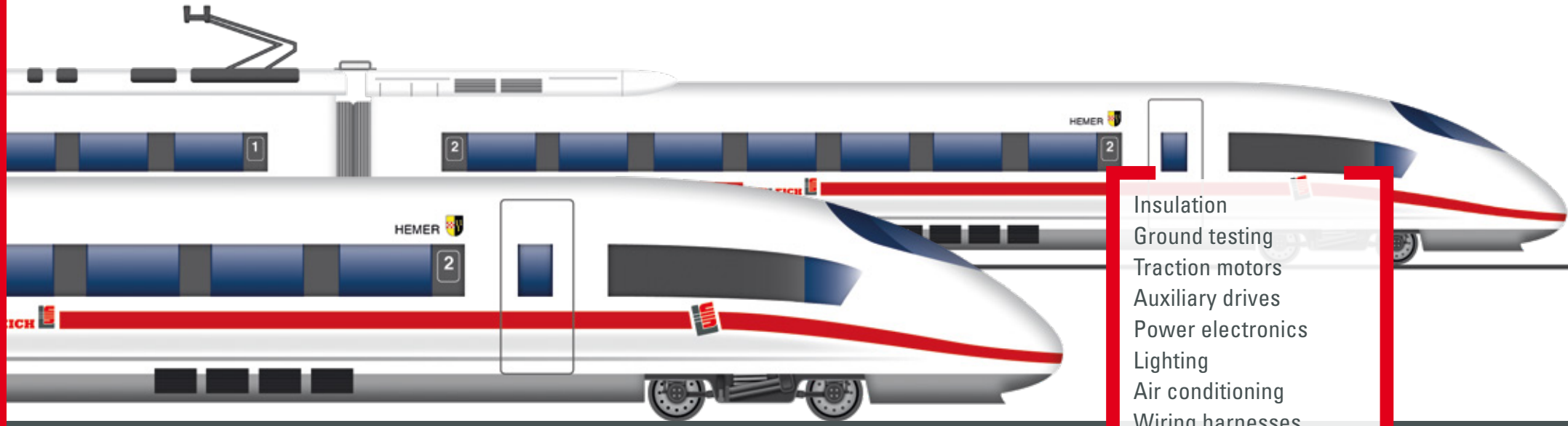


# Testing technology for electrical products of all kinds



Wherever electricity is used  
White goods  
Brown goods  
Power tools  
On-site power distributors  
Cables  
and more...

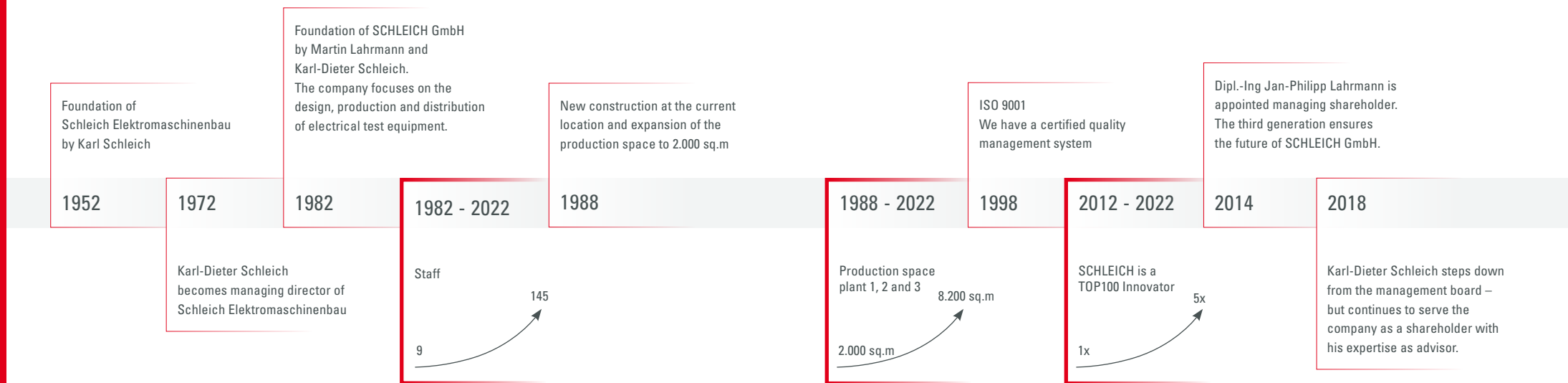
## Testing technology for railway vehicles



Insulation  
Ground testing  
Traction motors  
Auxiliary drives  
Power electronics  
Lighting  
Air conditioning  
Wiring harnesses  
and more...

**70 YEARS OF INNOVATION.**

# Company history



# Product innovations



**1968** Development and production of automatic winding machines for electric motor production and repair in a variety of sizes  
**1972** Implementation of fully electronic control systems  
**1985** Transition to PC control

## Winding machines

## MotorAnalyzer

**1985** Production start of the first motor tester for the electrical engineering industry  
**2003** MotorAnalyzer1 with 4 kV test voltage  
**2013** MotorAnalyzer2 with 3 kV surge voltage and 6 kV insulation test voltage  
**2018** MotorAnalyzer2 now with up to 500 GΩ

**1990** Shipment of the first PC controlled winding tester for stators, generators and winding goods of any kind  
**1991** First fully automatic stator testing for WILO  
**1995** Transition from DOS to WINDOWS  
**2001** Introduction of the modular concept  
**2017** Partial discharge testing with active antenna

## MTC3

## GLP3

**1992** Our first PC controlled test stand for safety and function tests for all kinds of electrical appliances  
**1993** Fully automatic DC armature testing for Mannesmann-Demag  
**1995** Migration from DOS to WINDOWS  
**2001** Introduction of the modular concept

**1995** Production of the first universal safety and function tester for almost every testing requirement  
**2001** The first tester with large touch color display on the market  
**2015** GLP2-BASIC  
 Over 50 customized standard configurations to choose from  
**2015** GLP2-MODULAR  
 Advancement of the modular concept with up to 25 test methods  
**2016** GLP2-BT  
 Groundbreaking battery tester for e-mobility

## GLP2

## MTC2

**1999** Launch of the portable PC controlled winding tester  
**2002** Patented surge voltage evaluation method  
**2004** Partial discharge testing for mass production  
**2009** Surge voltage up to 50 kV  
**2022** The MTC2R7, surge voltage testing in the 7th generation



# Product innovations

**2001** Probably the smallest digital safety and function tester in the world, available in 25 standard configurations  
**2010** Large color display with touch operation  
**2012** Fully electronic voltage source

## GLP1

## Handheld

**2001** The ultimate mobile safety tester for a wide range of on-site applications, e.g., in medical technology, on wind turbines and much more.  
A best seller to this day...

**2013** Development and rollout of the EncoderAnalyzer for testing and aligning all types of motor encoder systems  
**2016** BEMF measurement and angle alignment  
**2017** Integration of digital encoder communication

## EncoderAnalyzer

## Dynamic-MotorAnalyzer

**2014** Product launch of the Dynamic-MotorAnalyzer for testing and condition monitoring on running motors and generators  
**2016** Addition of frequency converter measurement

**2017** Development and rollout of the VoltageAnalyzer for high-precision surge voltage measurement directly at the winding including simultaneous partial discharge testing with passive and active antenna

## VoltageAnalyzer



**8,200 m<sup>2</sup>**  
shop floor



**3**  
production facilities



**145**  
staff members



**38**  
countries



**47 %**  
export ratio

**INNOVATION IS THE KEY.**

## Outstanding innovative power.

We were once again able to distinguish ourselves in the TOP100 competition in the category „51 to 200 employees“. Following an elaborate scientific pre-selection process, we managed to advance to the expert jury, winning the highly coveted award for our company's innovative accomplishments. This means that SCHLEICH is once again one of the most innovative companies in Germany.

This innovation contest has now been held for the 29th time. Prof. Dr. Nikolaus Franke and his team from the Vienna University of Economics and Business have been providing scientific support.

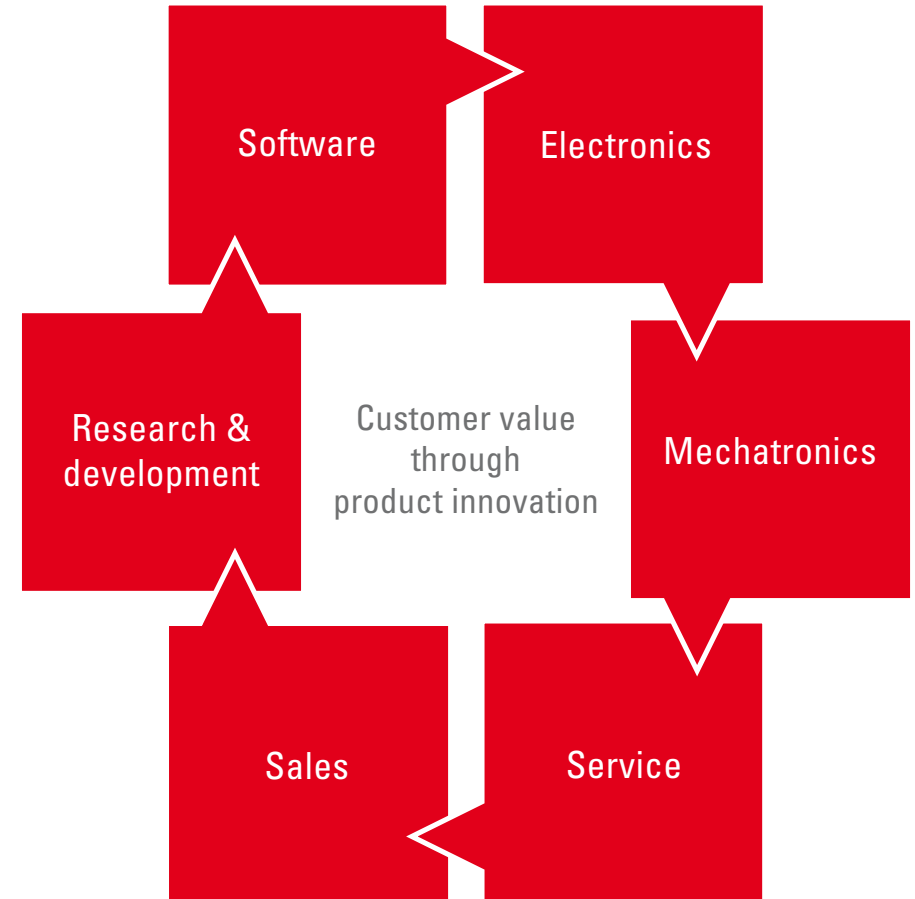
After 2014, 2016, 2018 and 2020, SCHLEICH succeeded in winning the highly coveted award for the fifth time in 2022.



## Innovative engineering.

SCHLEICH has been pioneering measuring and testing technology for 70 years. Challenges are always welcome. Thinking outside the box is encouraged and expected.

Our innovative power derives from the dialogue with our customers and from bundling our expertise between all departments. This is how we keep coming up with sophisticated improvements and innovations.





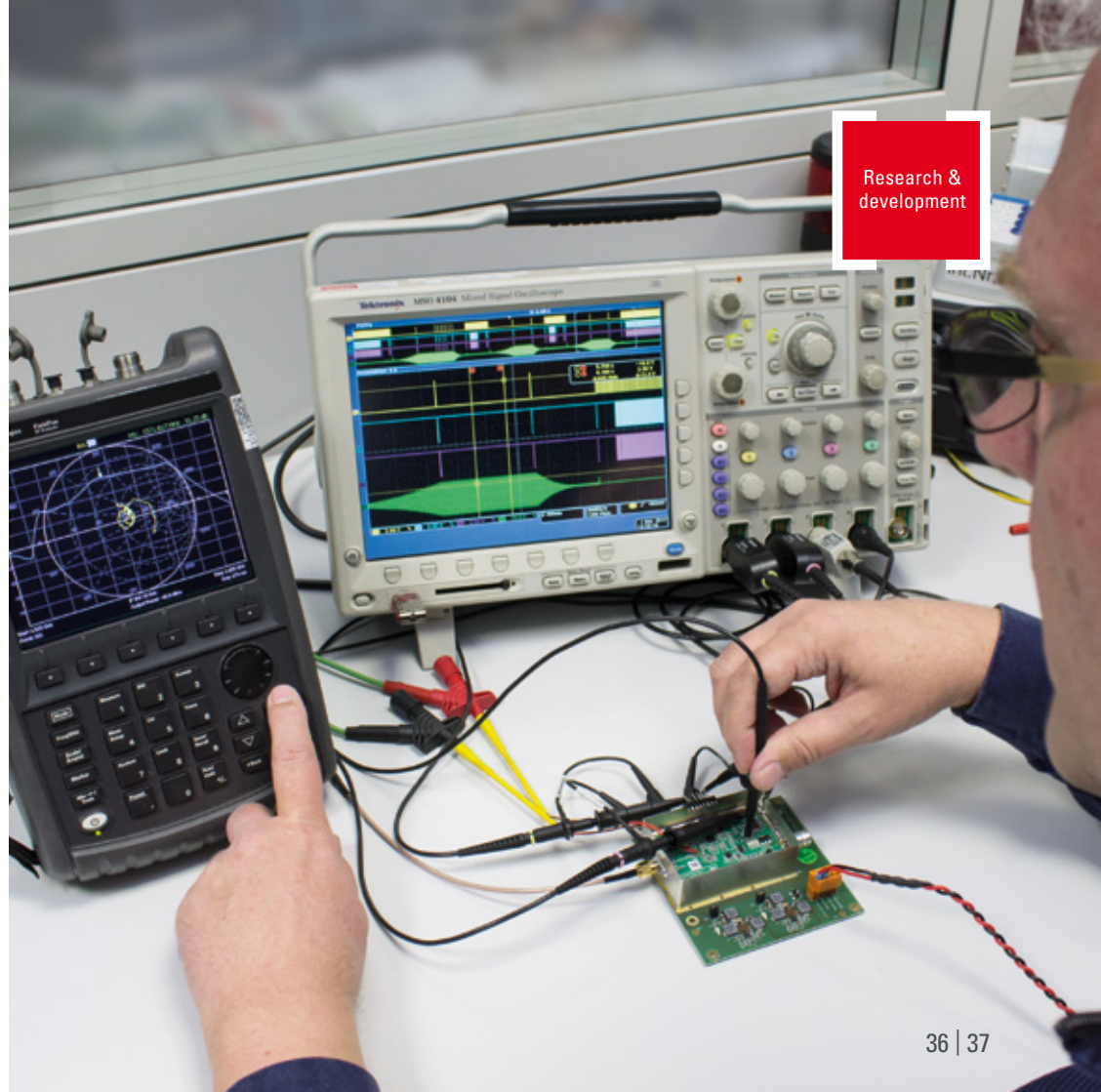
# Curiosity, creativity and inspiration.

For SCHLEICH, the challenge of developing new technologies is a permanent one.

Our engineers and software designers approach this task with curiosity, creativity and enthusiasm. Each project undergoes a thorough analysis. Every component, every module, every circuit is specified, tested and optimized.

This is how your demands are turned into technological innovations.

The focus of our activities is always customer value, well beyond common standards. This is how we became a valued development partner for our customers.

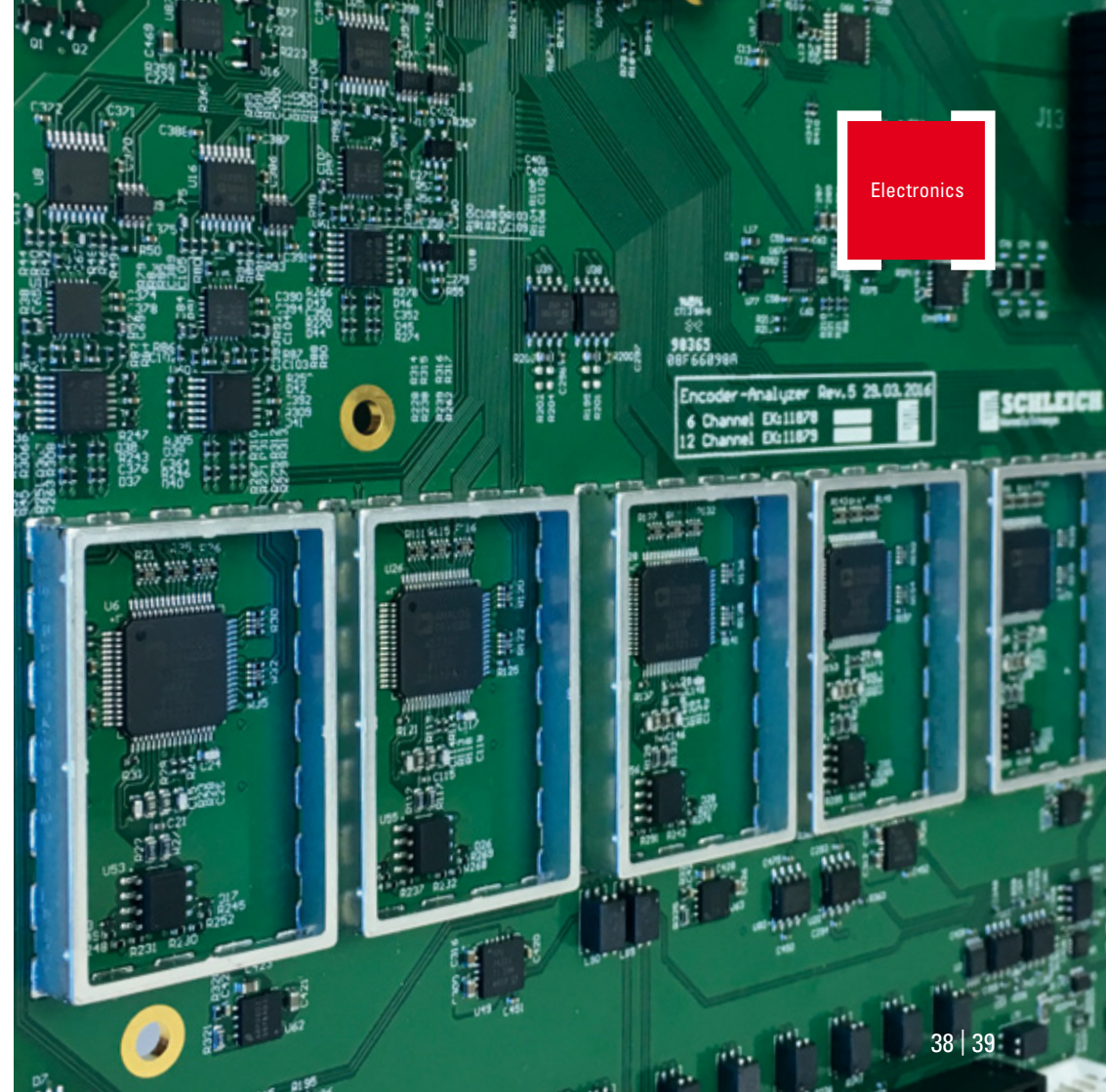


# The very heart.

Digital high-performance measurement technology is one of SCHLEICH's core competencies.

All electronic modules are in-house developments and are optimized for custom applications. All PCBs are manufactured exclusively in-house using high-quality components and high-end processors. And that is with state-of-the-art machinery.

This is our basis for quality, fast response times, flexibility and high-precision measurement technology. This would not be possible, if we were working with external service providers and subcontractors.





# Smart solutions.

SCHLEICH products make an impression – not only with their excellent design and quality, but also in every-day use. The measuring and testing tasks must be as simple, fast and precise as possible.

A convenient and intuitive operation of the devices is the key. To guarantee maximum usability, the SCHLEICH software follows the "KISS principle": Keep it Simple and Smart.

Our software designers are not only specialists in programming, but also are well informed of the needs of the user.



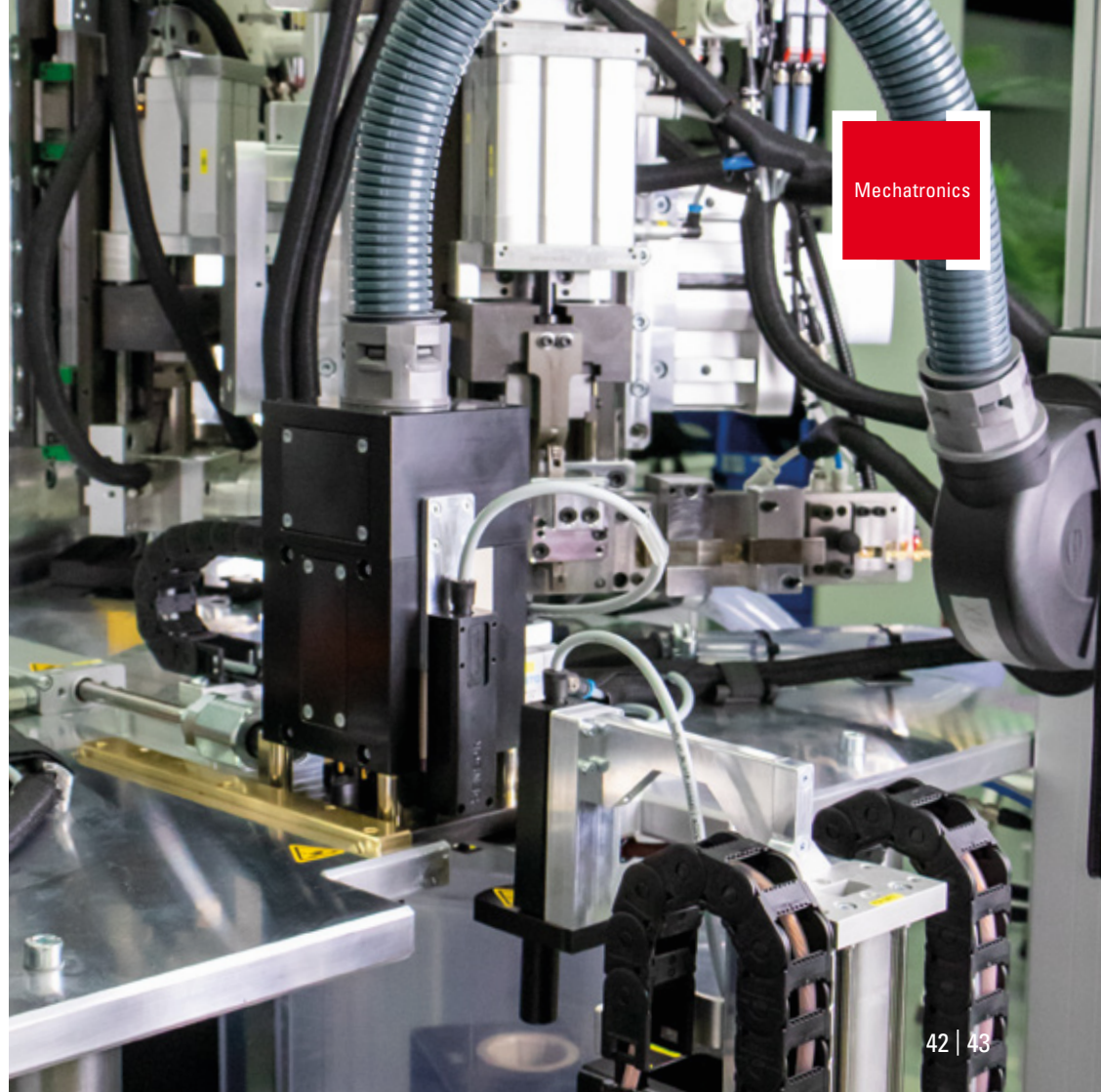
# Everything. One-stop.

Optimized to your testing task, SCHLEICH develops tailor-made solutions.

Hardware, software, mechanics, sensors and process control come from a single source. Test technology, DUT fixtures, custom-designed contacting units and many other features are perfectly matched.

A highly efficient team of engineers from the departments of electronics, mechanical design and mechanical production develops optimum solutions for you.

Outsourcing is not an option.



**ONE SOURCE. ALL TEST SOLUTIONS.**



## Perfection in series: Standard testers

Many testing tasks can be performed with standardized single or combination testers. Based on many years of experience, we design and manufacture an extensive range of standard test equipment with smart test method combinations.

SCHLEICH's standard is high-precision and state-of-the-art measurement technology.



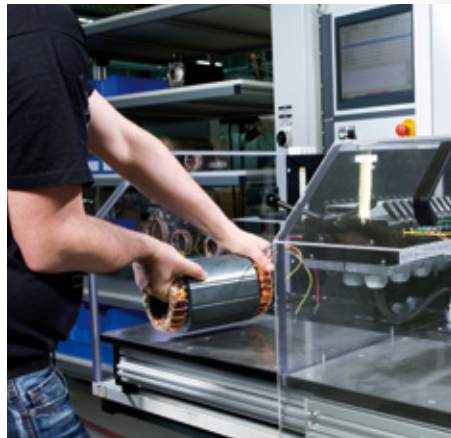
## Perfection in series: Safety and function testers



## Perfection in series: Winding and motor analyzers







Perfection  
in series

# Perfection made to measure: Custom configured testing devices

Based on the SCHLEICH-MODULAR-CONCEPT, we can offer you an almost infinite number of options for combining and integrating a wide variety of winding, safety and function test methods in one tester.

SCHLEICH provides the solution for your individual tasks.





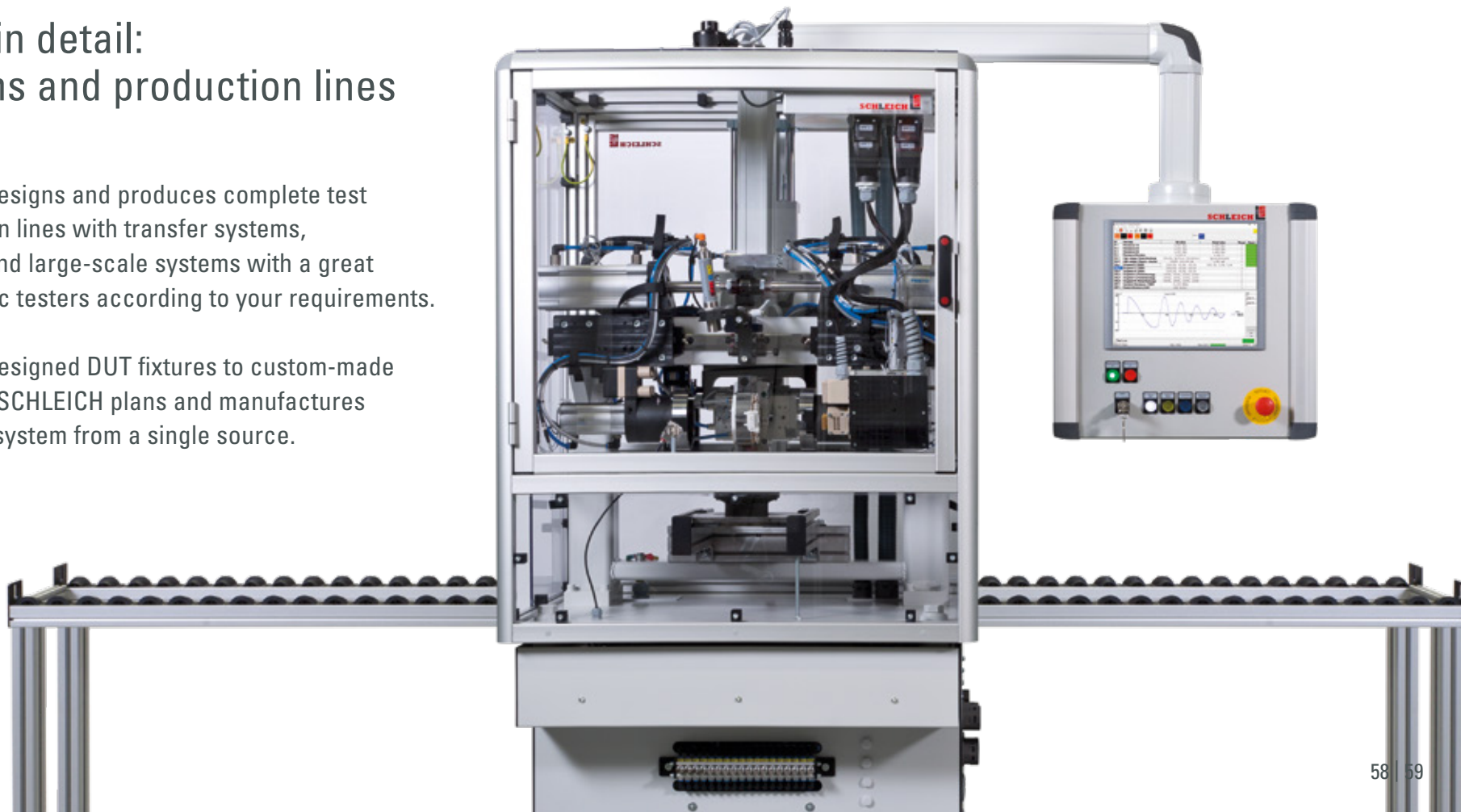


Perfection  
made to  
measure

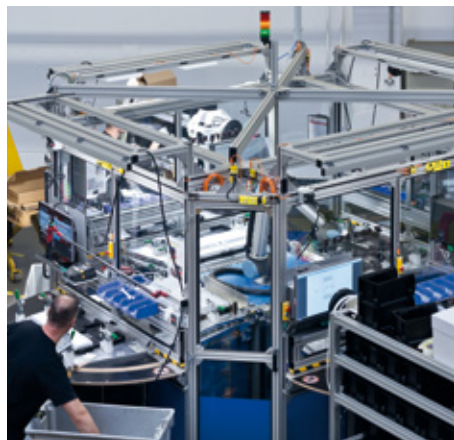
## Perfection in detail: Test systems and production lines

SCHLEICH plans, designs and produces complete test stations, production lines with transfer systems, EOL test stations and large-scale systems with a great variety of automatic testers according to your requirements.

From individually designed DUT fixtures to custom-made contacting units – SCHLEICH plans and manufactures your turn-key test system from a single source.







Perfection  
in detail

**AROUND THE WORLD.**

## Service on the highest level.

SCHLEICH stands for high-quality technologies meeting the highest demands – and offers expert customer service worldwide! From optimum customer advice during the planning phase to training and after-sales service – our team of specialists will support you during the entire process.

- Installation and commissioning of testers or test systems
- Technical support – by phone, online or on-site
- Calibration service on-site, in-house or online worldwide
- Maintenance for hardware and software
- Repair and spare-parts service

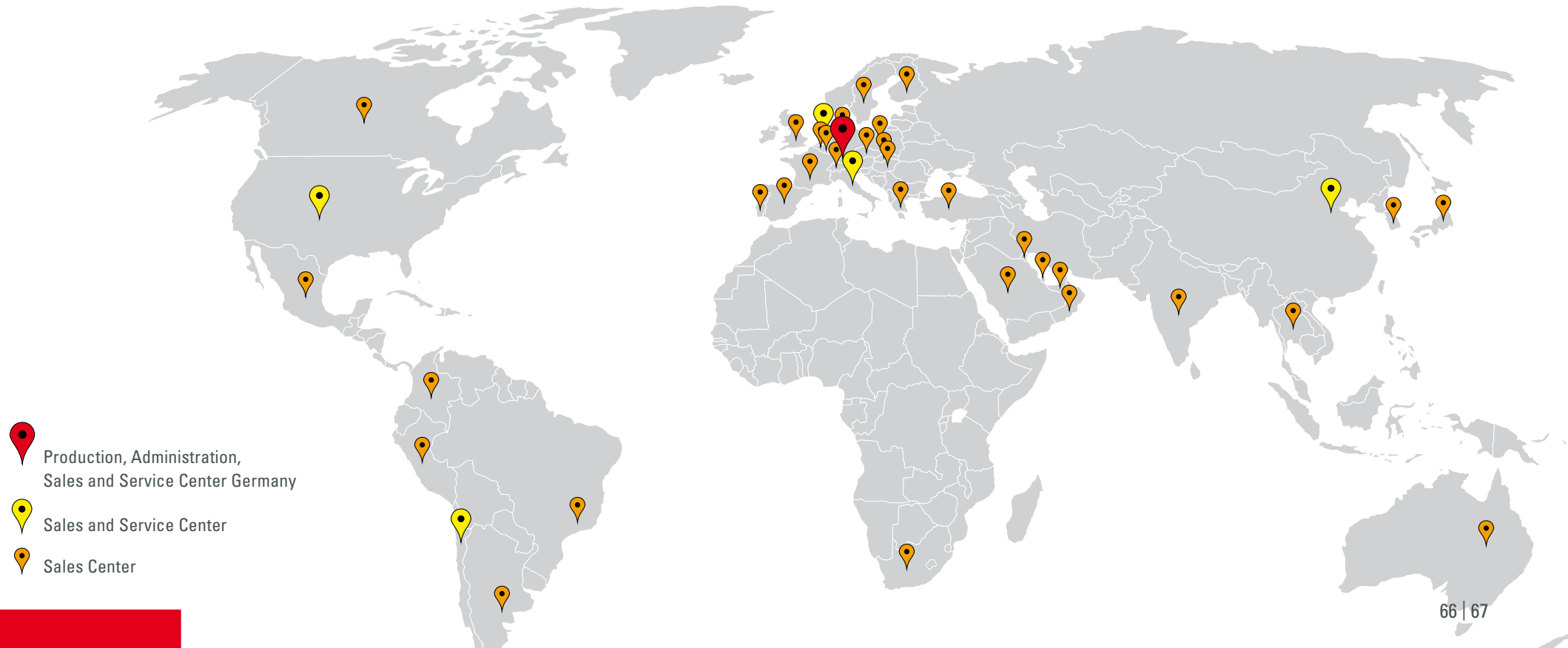
Wherever you are – our Service Centers are there to support you.



Service




## Sales and Service Centers



## Around the globe, renowned companies trust in our products.

ABB	Bernal Tore	ELIN	Heidenhain	Lenze Antriebstechnik	Novoferm Tore	Salzgitter AG	VDO
ABM	BMW	ELNOR	HILTI	LEONI	Oase Pumpen	Sauer-Danfoss	VEM
AEG-Milwaukee	Bombardier	Embraco	Hirschmann	Leroy-Somer	Ocean	Schabmüller	Vestas
Airbus Industries	Bosch	Enercon	Hoffmeister-Leuchten	Liebherr Aerospace	ÖBB	Schorch	Volvo
Alcatel	Braun	Engel	IFM	Loher	Osram	Severin	Vossloh-Schwabe
Alstom	BSH	ERCO	Ihne + Tesch	Lufthansa	Papst	SEW	VW
AMK	Caterpillar	Fagerhult	INA	Maiko	Partzsch	Siemens	WAP-ALTO
Arcelik	Continental	Fagor	Indramat-Rexroth	MAN	Philips	Siemens Wind	WDR
Arcelor-Mittal	Daimler	Fein	inmotion	Manchester University	Philips medical	Power	Weidmüller
Artemide	Danfoss	Festool	Jaguar	Marsilli	Phoenix Contact	Staff	WEG
Ascoll	Dematic Cranes	Franklin Electric	Kärcher	MDEXX	Preh Automation	Stöber	WILO
ATB	Delphi	Gardner Denver	KaVo	Mercedes	Porsche	TCM	Zanussi
ATOP	Deutsche Bahn	Gaggenau	Kessler	Miele	Renault	Tecumseh	Zeiss
Audi	DOM	GE General Electric	Kone Cranes	Motory International SRO	Rexroth	TEE	Ziehl-Abegg
Aumann	Dometic	Gildemeister	Kress	Murr Elektronik	Rittal	Trilux	Zollner
BAG	Dräxlmeier	Grohe	KSB	Nettelhof	Rotomatika	Thyssen-Krupp	Zumtobel
Bals	ebm Pabst	Grundfos	Land Rover	Nidec	SBB	TÜV	
Baumüller	E.G.O.	Hanning	Lapp Kabel	Nilfisk	Saeco	UPS	and more...
Becker Antriebstechnik	Electrolux	Heidelberger Druck	Leica	Nord Drivesystems	Salmsen	VDE	

A photograph of two men standing in a modern industrial or laboratory environment. The man on the left is younger, with short brown hair, wearing a white button-down shirt. The man on the right is older, with glasses and a grey beard, wearing a light blue shirt under a dark blue cardigan. In the background, there is a large piece of industrial machinery with a glass enclosure, a computer monitor, and a keyboard. A red square graphic is overlaid on the right side of the image, containing text.

Our focus is clear:  
Maximum customer satisfaction  
by leading in technology and quality.

Management:  
Dipl.-Ing. Jan-Philipp Lahrmann  
Dipl.-Ing. Martin Lahrmann



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