



Product range

# Electric motors and winding testers



Designed and produced in Germany

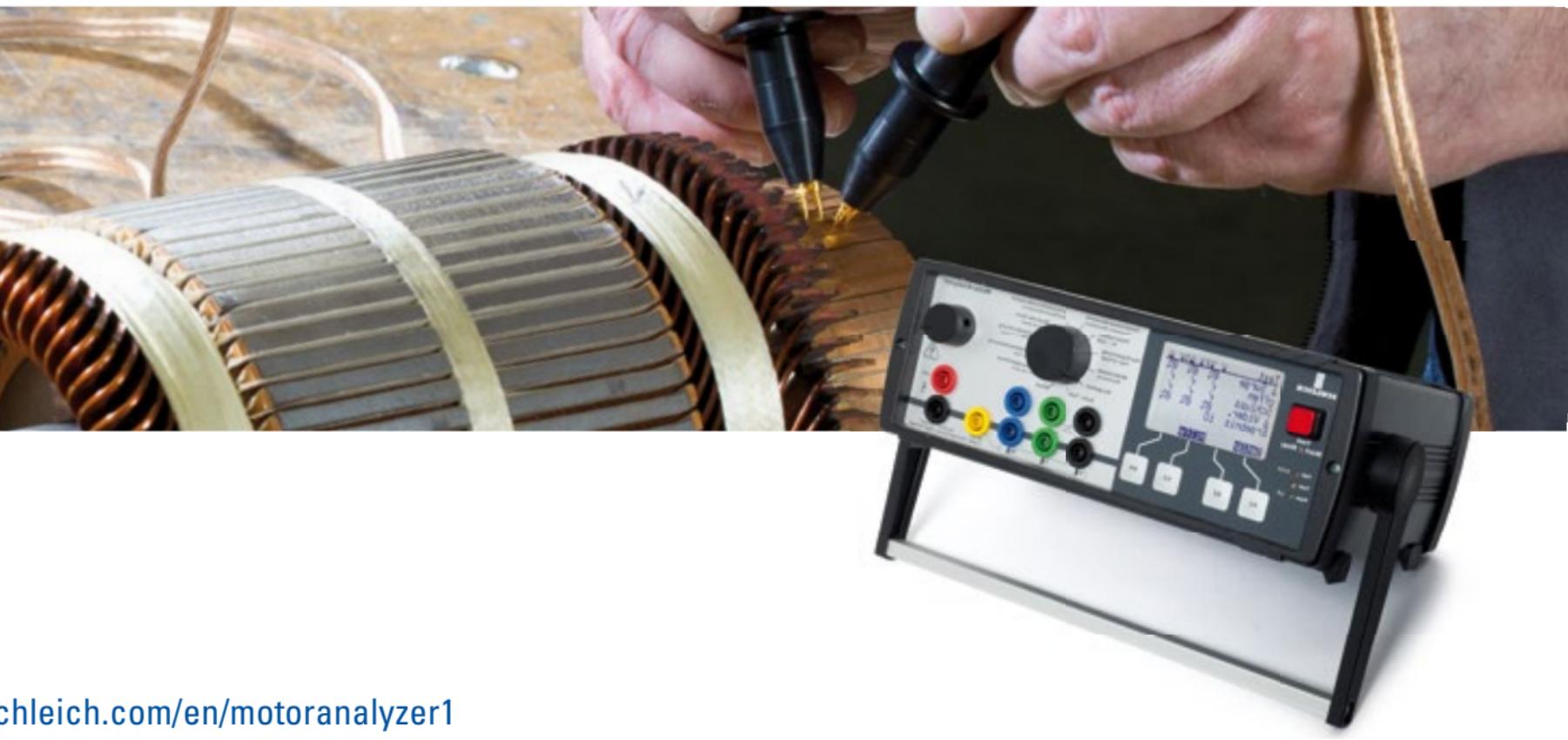
# MotorAnalyzer 1

## Universal tester for electric motors and windings

The MotorAnalyzer 1 is an all-purpose tester for testing electric motors and windings. It combines 10 different test methods in a user-friendly, mobile case. The combination of test methods, its compact design, as well as the option of a battery operation turns the MotorAnalyzer 1 into an ideal tool for the on-site use.

Test methods:

- Autotest – self running stator/motor health check
- Surge-voltage
- Resistance
- Hipot DC
- Polarization Index (PI) & DAR
- Insulation resistance
- PE/ground resistance
- „Neutral-zone“-adjustment at DC motors
- Sense of rotation at stators or motors
- Turn-to-turn fault location by test probe for stator and armature



[www.schleich.com/en/motoranalyzer1](http://www.schleich.com/en/motoranalyzer1)

# MotorAnalyzer 2

## Universal tester for electric motors and windings

The all-purpose MotorAnalyzer 2 is used for checking electric motors and windings. It combines 13 different test methods within a user-friendly and mobile tester. The combination of test methods, its compact design, as well as the battery operation, turn the MotorAnalyzer 2 into an ideal tool for on-site operation.

test  
methods

13

battery  
powered



USB  
RS232



test  
protocol



### Test methods:

- Autotest – self running stator/motor health check
- Surge-voltage up to 3 KV – 100 nF surge capacity
- Resistance– 4-wire technology– ambient temperature compensation
- HiPot DC up to 6 KV
- Polarization Index (PI) & DAR
- Insulation resistance
- Inductance
- Impedance
- Capacity
- PE/ground resistance
- „Neutral-zone“-adjustment at DC motors
- Rotating fields at stators or motors
- Turn-to-turn fault inspection by test probe for stators and armatures



[www.schleich.com/en/motoranalyzer2](http://www.schleich.com/en/motoranalyzer2)

# MTC2

## Winding analyzer and Surge tester

The MTC2 is a high-end surge voltage tester – no other tester offers such a variety of applications. With the MTC2 you precisely analyze coils, stators, armatures, and all other kinds of winding goods according to the latest technology without any compromises.

- Surge-Voltage up to 50 KV
- Up to 2000 A surge current | up to 125 joule surge energy
- Automatic test method switching
- Armature testing



### Test methods:

- Autotest
- Surge-Voltage (100 ns to 200 ns rise time)
- Partial discharge test (IEC 61394 | DIN EN 60034-18-41)
- Resistance
- Impedance
- HiPot DC
- Insulation resistance
- Polarization Index (PI) & DAR



[www.schleich.com/en/mtc2](http://www.schleich.com/en/mtc2)

# MTC3

## Universal high-end tester for stators and armatures

The MTC3-winding testers are high-end testers for complex test tasks at different winding products. They are for example used for testing electric motors, transformers, magnet coils, and all kinds of winding products.

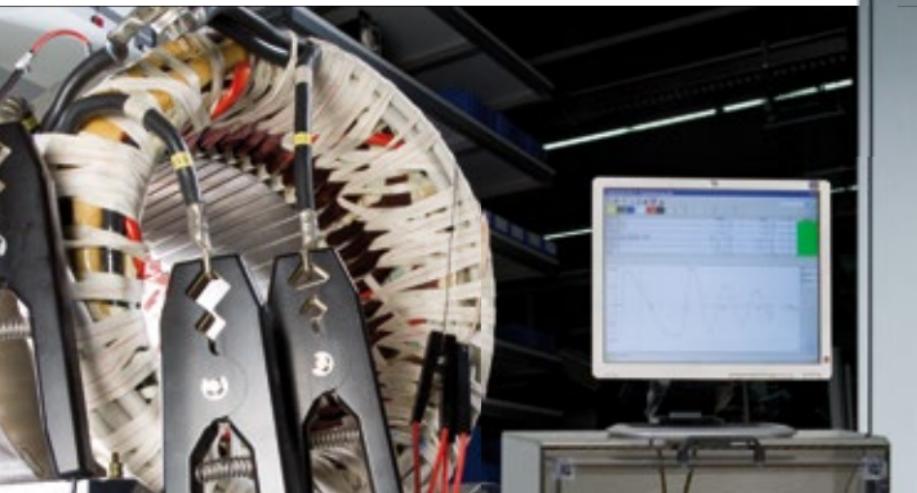
The performance of the MTC3-testers is the combination of all its strengths: user friendliness, software, hardware, data base concept – everything is perfectly coordinated based on trend-setting technology.

- Combine any test methods for your test tasks (HiPot AC/DC, Surge, PD, Resistance, IR, Rotation direction, ...)
- Any number of winding and temperature connections
- Interfaces for remote control (ProfiBus, ProfiNet, Ethernet, RS232, ...)
- Data exchange with ERP and MES systems
- Customized connectors and mechanical adaptations for your DUT
- Customized and standard safety cabinets



Freely configurable combination testers – perfectly matched to your requirements!

› [www.schleich.com/en/mtc3](http://www.schleich.com/en/mtc3)



# Dynamic-MotorAnalyzer

## Condition monitoring

The Dynamic-MotorAnalyzer allows the testing of a running motor in its operational environment. Electric parameters are measured and other mechanical parameters are calculated. The aim is to receive an analysis of the electric motor, its mains supply, and its load conditions based on six electric measuring values.

All in one-motor monitoring:

- Power supply analysis
- Voltage, frequency, harmonics, THD, HVF...
- NEMA reduction factors



- VFD check
- Motor & load analysis
- Current, electrical input power,  $\cos \varphi$ ...
- Speed, torque, torque ripple, mechanical power, efficiency...
- CSA – current signature analysis
- Multi channel Oscilloscope with different triggers
- Unique Smart-FFT, frequency analysis without confusion
- Broken rotor bar test
- Short & long time analysis
- Energy measurement and energy cost forecast
- Database for motors and test results & report generator
- Result trend analysis for predictive maintenance



› [www.schleich.com/en/dynamic-motoranalyzer](http://www.schleich.com/en/dynamic-motoranalyzer)

# EncoderAnalyzer

## Testing and adjusting encoders

The EncoderAnalyzer is THE tester for checking encoders at electric motors.

Modern engines are often equipped with rotary encoders. There is a huge variety of encoders, making checking complicated. This is especially valid for electric motor repair and production. This complex check is not possible without special measuring technology.

The EncoderAnalyzer provides valuable services. It facilitates the encoder test well by providing voltage to the rotary encoder and measuring and evaluating the signals.

- Encoder analysis without special training!
- Special analysis Software
- Automatic check of all encoder signals
- Up to 12 high-speed measuring channels
- Back EMF measuring
- Encoder angle adjustment for AC servo motors
- Check of encoder interfaces

**HIPERFACE®**  **EnDat 2.2®**



[www.schleich.com/en/encoderanalyzer](http://www.schleich.com/en/encoderanalyzer)

# GLP1-g HV AC

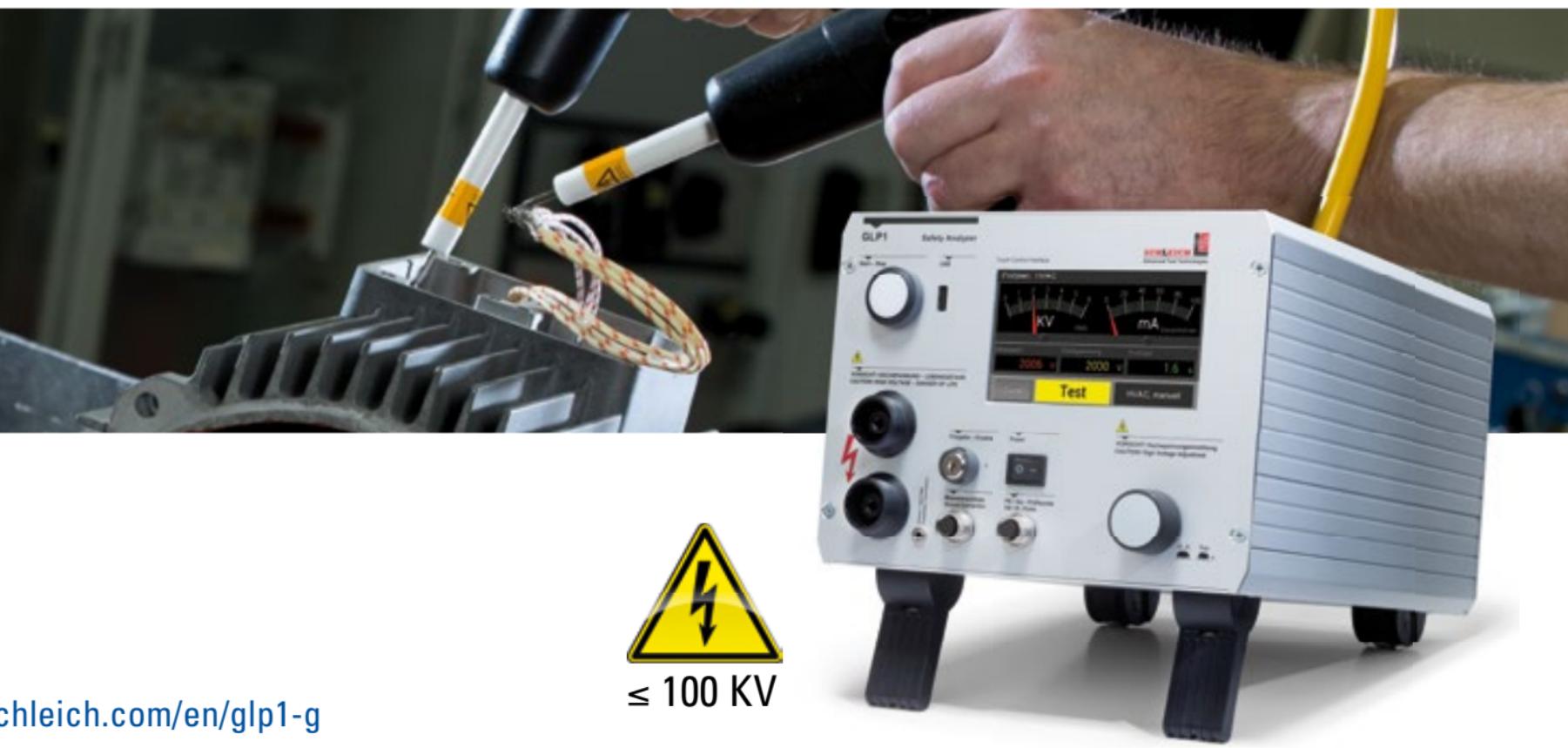
## HiPot tester up to 100 KV

The GLP1-g high-voltage testers serve for testing the insulation capability and the dielectric strength of electric components or assemblies.

These testers are perfectly suitable for fast and simple tests during repair or production. The tests can be performed either manually using safety test pistols, or automatically. The tester provides the programming of time sequences and other monitoring functions.



- HiPot AC up to 100 KV
- HiPot DC up to 10 KV
- Test current max. 200 mA
- Electronic voltage regulation
- Freely-definable voltage ramp and test sequence
- 5" TFT-color touch display
- Dual-circuit safety inputs



[www.schleich.com/en/glp1-g](http://www.schleich.com/en/glp1-g)

# GLP3-M

## Universal motor tester

Beside an electric part motor, test stations often consist of comprehensive mechanical components. Our GLP3-Class testers with which we can achieve a maximum quantity of different test methods and solutions, are the basis for the electric part at motor test stations.

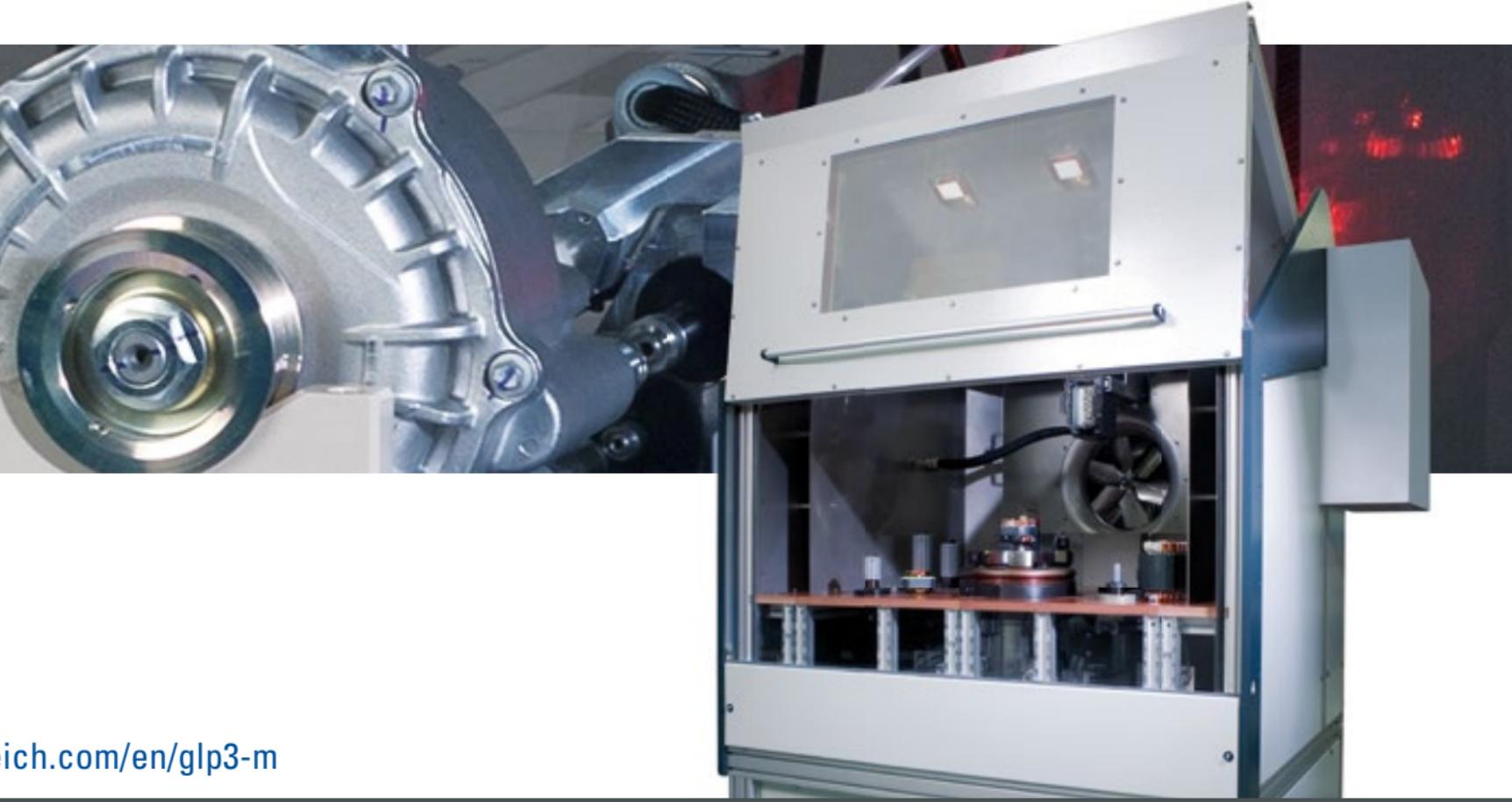
As a system manufacturer, we also supply the mechanical components and the complete test setup in addition to the test electronics. This is possible due to our modular designed product range that we adapt and extend correspondingly to your requests.

- No load and load test
- Fast, high-precise measurements and evaluation via DSP & FPGA
- Customized measuring procedure and mathematic calculations
- Functional test 1-phase and 3-phase up to 500 A
- Interfaces for remote control  
(ProfiBus, ProfiNet, Ethernet, RS232, ...)
- Data exchange with ERP- and MES systems
- Customized connectors and mechanical adaptations for your DUT
- Customized and standard safety cabinets



Freely configurable product solution –  
perfectly matched to your requirements!

› [www.schleich.com/en/glp3-m](http://www.schleich.com/en/glp3-m)



# Automation

## Test systems, production lines, EOL

SCHLEICH plant, konstruiert und produziert komplette Prüfarbeitplätze, Fertigungslien mit Transfersystemen, EOL-Prüfplätze und Großanlagen mit unterschiedlichsten Prüfautomaten genau nach Ihren individuellen Anforderungen.

Eine umfassende Beratung und die gesamte Entwicklung der kunden spezifischen Anlage führen zu einer für Sie maßgeschneiderten Auslegung von Hard- und Software und der Mechanik. Wir projektiere und fertigen Ihr schlüsselfertiges Gesamtpaket - von der Planung bis zur Auslieferung.



Freely configurable production lines – perfectly matched to your requirements!

- Customized production lines with in-built testers
- Mechanical handling
- Mechanical adaptation
- Software for automation (PLC)
- Data exchange with ERP and MES systems
- Visualization of test results and statistics
- Customized and standard safety cabinets



› [www.schleich.com/en/automation](http://www.schleich.com/en/automation)

# Bonding Machines & Impregnation systems

SCHLEICH plant, konstruiert und produziert komplette Prüfarbeitplätze, Fertigungslien mit Transfersystemen, EOL-Prüfplätze und Großanlagen mit unterschiedlichsten Prüfautomaten genau nach Ihren individuellen Anforderungen.

Eine umfassende Beratung und die gesamte Entwicklung der kundenspezifischen Anlage führen zu einer für Sie maßgeschneiderten Auslegung von Hard- und Software und der Mechanik. Wir projektieren und fertigen Ihr schlüsselfertiges Gesamtpaket - von der Planung bis zur Auslieferung.

- DC/AC bonding
- Up to 800 A
- Up to 1000 V DC
- Up to 170 A/mm<sup>2</sup> for speed bonding
- Three bonding techniques:  
Constant voltage | constant current | constant temperature
- Online temperature monitoring
- Fully-automatic impregnation processes
- Varnish hardening with current heat
- Varnish hardening with ultraviolet light
- All SCHLEICH test methods can be combined in the bonding machine



› [www.schleich.com/en/bonding](http://www.schleich.com/en/bonding)

# Accessories

## Test systems, production lines, EOL

SCHLEICH plant, konstruiert und produziert komplette Prüfarbeitplätze, Fertigungslien mit Transfersystemen, EOL-Prüfplätze und Großanlagen mit unterschiedlichsten Prüfautomaten genau nach Ihren individuellen Anforderungen.

- Test covers and cages
- High-voltage test pistols
- Test probes
- Safety accessories
- Lead and special contactings
- Rolling tables
- Black boxes
- Connection boxes
- Special software
- ...



› [www.schleich.com/en/accessories](http://www.schleich.com/en/accessories)



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