

# True German Quality.

Product Catalogue for  
Safety and Function Test Technology.



**We are meticulous  
about quality -  
in every area.**







**Dear Reader,**

We are glad to be able to present our new product catalogue to you. And just as we do, you should really have a close look at it. Because we from SPS electronic have at all times bet on True German Quality according to highest standards. Our testers and our full service are certainly typically German. Just as we are. And that is what we are globally well-known and popular for. On the next pages, you can discover our offer. How can we support you in providing advice and technology? Let us bet that we will take your concerns seriously.

**Wolf-Henning Stoll**  
Managing Director

**Sascha Aust**  
Managing Director

**Stefan Ruhl**  
Technical Manager

|  |              |
|--|--------------|
|  <b>Foreword</b>                          | <b>4-5</b>   |
|  <b>Field of application and products</b> | <b>6-7</b>   |
|  <b>Service and technical advice</b>      | <b>8-13</b>  |
|  <b>Products</b>                          | <b>14-27</b> |
|  <b>Customized</b>                        | <b>28-35</b> |
|  <b>Accessories</b>                       | <b>36-39</b> |



# True German Quality means: We live and breathe German quality.

Rely on safety and function test technology which you can trust in every respect.

## TRUE GERMAN QUALITY: THE BASIS FOR HIGHEST SAFETY.

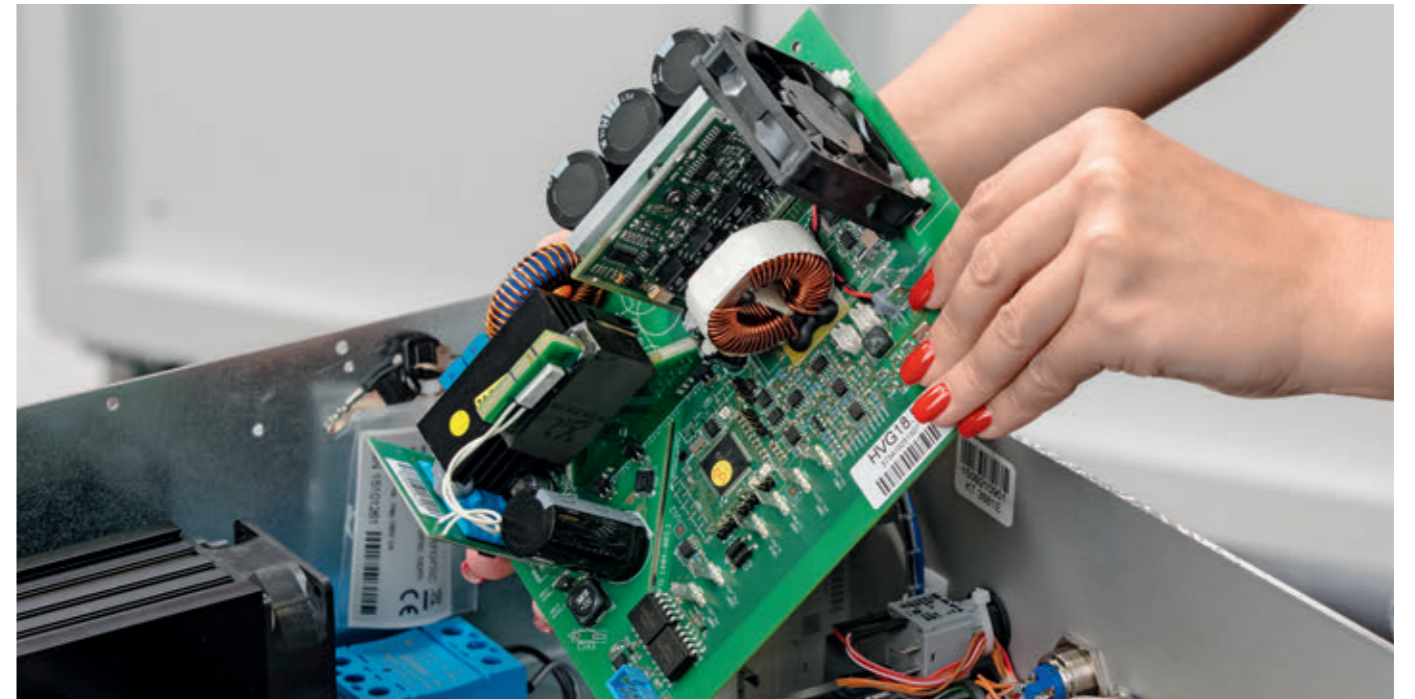
For more than 35 years, SPS electronic has designed and produced test technology in Germany in the field of electric safety, selling it worldwide. While doing so, our main focus is on providing safety and function testers as well as a wide selection of suitable accessories. Always at the latest state of the art and, of course, in best German quality.

But apart from the continuous extension and further development of our product range, we are specialized in developing test and checking systems that are individually tailored to customer requirements.

While doing so, we also look after implementation apart from planning. And it goes without saying that this takes place with highest claims. Because no matter what test problem you have - we will find a solution.

We round off our product range with a reliable full service. This includes, for example, our comprehensive advice prior and after the purchase, the installation as well as the repair of appliances, if necessary. And this even applies when it is a third-party product. Furthermore, we offer worldwide training courses and seminars, covering all topics - from mere product use to safe handling of the test technology. To us, this also belongs to German thoroughness.

We are the technology-obsessed experts for electric testers from the heart of Germany. This is exactly the biggest advantage when you decide to engage us. Because we develop our products based on the belief to always offer the best quality. While doing so, we have always oriented on typical German values such as reliability, thoroughness and diligence - and that in every area. From product development to customer advisory service to individual care. In short, you always bet on real German quality when using SPS electronic.





# We ensure safety according to German standards - and that worldwide.

Our products are internationally represented in numerous industries, because, as is generally known, quality prevails .

Whenever electrical current flows in this world, it is likely that its function and safety have been checked using technology from SPS electronic. Because no matter in which industry - from the home appliance industry to drive technology to automotive suppliers - always when it is about highest safety and best possible quality, one relies worldwide on the competence of the experts from Germany. That delights us, of course, and drives us to further high performances.

## OUR ASSORTMENT CERTAINLY FULFILLS HIGHEST DEMANDS. THIS IS GOOD FOR YOU!

You cannot make a better decision: With our wide product range, we offer the suitable unit for each of your testing tasks. You need a single High Voltage Tester? But rather a Safety Tester, by means of which several kinds of testing can be covered? And what about suitable accessories for that? You will find it at SPS electronic.

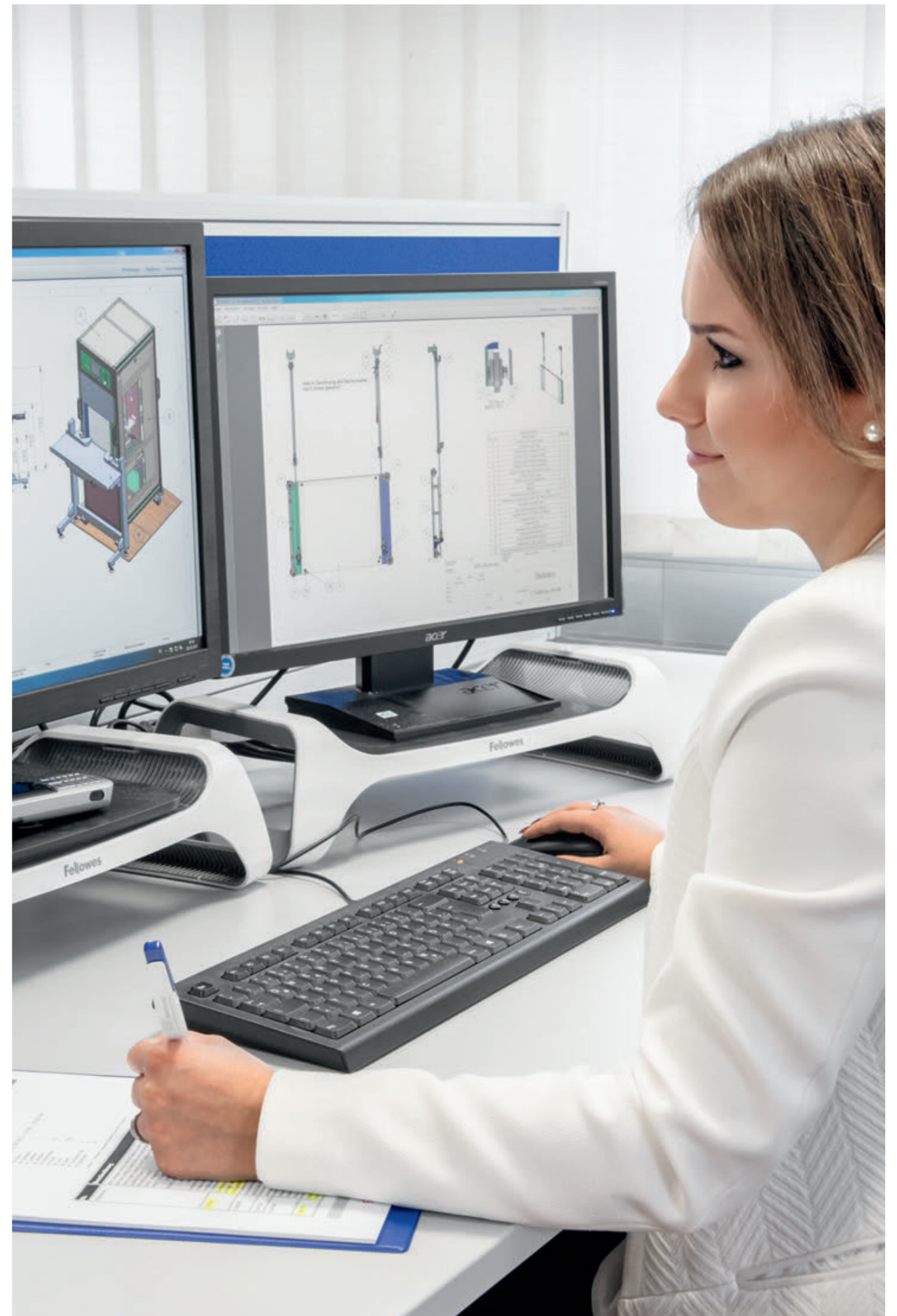
And in case you do not yet exactly know which of our units is required for your application, our company is the right place for you. We are happy to provide you with extensive advice, assist in making a choice and ensure whenever possible that your work can be done smoothly and successfully. One call will do.

### FACTS:

Founded: in 1980 by  
Dipl.-Ing. Wolf-Henning Stoll  
Headquarters: Schwäbisch Hall  
Northern branch: Twist  
Western branch: Uersfeld (Eifel)  
Distribution: worldwide

## INDUSTRIES IN WHICH PRODUCTS FROM SPS ELECTRONIC ARE USED:

- + Home appliance industry (large and small appliances)
- + Electrical appliances
- + Lighting industry
- + Drive technology/Electric motors
- + Transformer manufacturers
- + Industrial technology
- + Automotive suppliers
- + Cable manufacturers
- + Medical technology
- + Calibration laboratories





**We cannot do otherwise:  
We take everything seriously.**





## We do not only take care of safety, but also of your **well-being.**

Apart from testers, mechanical constructions for integration into the production is our special field.

The greatest asset is safety. And we do not only provide this by means of our testers, but also to persons who use our units daily. That is why we have also always specialised in developing mechanical superstructures for the automated use of our testers. Especially when several hundred to thousand products are tested daily, maximum safety in the handling is important. Furthermore, we attach great importance to ergonomics and flexible, possible applications for many years.

Our superstructures are always customer-specific. They are planned and developed jointly with our customers in order to achieve the best possible result. While doing so the mechanical system is always structured in such a way that parts subject to wear can always be changed quickly and product-specific parts are easy to replace. From automatic contacting through robots to the labelling of products we offer everything which might have to be used during production. This means that, also in this area, you can rely on the best thing from Germany: excellent quality, highest safety, extreme robustness and durability.







# Good advice creates happy customers. Everywhere.

Even for our work, we have found the ideal test criterium: Your satisfaction.

When doing something, we do it thoroughly. This particularly applies to our service. What sense does a wide range make without the corresponding advice? Both before and after purchasing one of our products you can therefore be sure to be comprehensively advised.

This is also confirmed by the accreditation according to DIN EN ISO/IEC 17025 which we have already applied for. You have a question, need a replacement part or other support? Please let us know about it, we would be glad to help you.

### OUR SERVICES AT A GLANCE:

- + Calibration and maintenance service (also third-party units)
- + Regular firmware updates
- + Loan unit service
- + OEM spare parts service
- + Aftersales support
- + On-site service
- + Seminars and training
- + Remote service

### WITH ADVICE AND TECHNOLOGY TO ASSIST YOU.

|                         |  |  |
|-------------------------|--|--|
| <b>Headquarters</b>     | Blätteräcker 18<br>74523 Schwäbisch Hall (Germany) | Phone +49 (7907) 878-0<br>Fax +49 (7907) 878-99      |
| <b>Northern Branch:</b> | Boschstraße 15<br>49767 Twist (Germany)            | Phone +49 (5936) 91815-0<br>Fax +49 (5936) 91815-99  |
| <b>Western Branch:</b>  | Hauptstraße 14<br>56767 Uersfeld (Germany)         | Phone +49 (2657) 9415-976<br>Fax +49 (2657) 9415-037 |

You can contact us by email on [info@spselectronic.com](mailto:info@spselectronic.com). On the internet, you can find us on [www.spselectronic.com](http://www.spselectronic.com).



**PRODUCTS**

**CUSTOMIZED**

**ACCESSORIES**





## The whole range of Safety Test Technology.

Using products from SPS electronic, you are excellently positioned in every area of the electric safety test technology. Our offer ranges from multi-functional safety testers - which combine up to 18 functions in one unit - to high-voltage testers to surge testers and to almost everything which is required for correct testing. But the best thing remains: With each unit, you can rely on real German quality and the latest state-of-the-art technology.



# The ones for all cases - Electrical Safety Compliance Analyzers from SPS electronic.



Electrical  
Safety Compliance  
Analyzer  
KT 1885B

**FROM LEAKAGE CURRENT TEST TO GROUND BOND TEST:  
USING OUR SAFETY TESTERS, YOU HAVE YOUR TEST  
SPECIMENS UNDER CONTROL.**

Tried and tested and now even better: the new Electrical Safety Compliance Analyzers of the 1805 series. They combine all functions of their predecessors, extending them by a lot of new features which considerably facilitate your work. For example, this includes the new touch display. Using it, you can operate all functions and take a direct reading of the results. And thanks to the interfaces which are available ex factory, the KT 1885B can be integrated without problems into your existing production line, for example, or be fully operated without a PC, too.

If it shall be particularly exciting:  
For all tasks which are not safety current limited, we offer the model KT 1885J (500 VA/100 mA/200 mA).

- + 18 test functions combined
- + Large touch display
- + Numerous interfaces ex factory
- + Fully electric generator
- + Usable standalone without PC
- + Can be integrated into existing systems

More information about the KT 1885B and KT 1885J and all other models can be found on: [www.spselectronic.com](http://www.spselectronic.com)

**The independent  
all rounder.**



## LG 1805B

Identical equipment, same performance: All new functions combined in the table-top unit LG 1805B.

- + Compact table-top unit
- + 18 test functions combined
- + Large touch display
- + Numerous interfaces ex factory
- + Fully electric generator
- + Usable standalone without PC
- + Improved ergonomics

More information about the LG 1805B on: [www.spselectronic.com](http://www.spselectronic.com)

**The first generation -  
but certainly not stuck  
in the past.**



## KT 1880B 19" rack

Your affordable entry into the world of multi-functional safety testers.

- + Most important test functions combined
- + 4.3" TFT colour display
- + Manual operation
- + 19" slot/5 HU
- + Full operation, also by means of a PC
- + Can be integrated into existing systems



## LG 1800B Table-top unit

Alternatively, there is also a table-top unit available for you.

- + Most important test functions combined
- + 4.3" TFT colour display
- + Manual operation
- + Table-top unit
- + Full operation, also by means of a PC
- + Improved ergonomics



## Sit back and relax - using our **High Voltage Testers.**

Using the high voltage testers from SPS electronic, you can carry out all high voltage tests conforming to standards. This allows the units to test all electric insulation properties and the dielectric strength of electrical appliances of the protection class I and II. We offer you high voltage testers for voltages within the range of up to 5,500 VAC or 6,000 VDC at a maximum of up to 100 mA/200 mA.



### OUR SELECTION MEETS **ALL WISHES:** HIGH VOLTAGE TESTERS FROM SPS ELECTRONIC FOR EVERY APPLICATION.

With our state-of-the-art High Voltage Tester HA 1885B, your production is ideally positioned. Its large touch display immensely eases operation, and also all relevant testing information can be read conveniently. During the process, the HA 1885B seamlessly fits in your production or it can also be operated as a stand-alone unit completely without any PC support.

For particularly exciting tasks, our non-safety current limited variants HA 1885G and HA 1885J are also available to you.

- + 19" slot/5 HU
- + Large touch display
- + Numerous interfaces ex factory
- + Fully electric generator
- + Usable stand-alone without PC
- + Can be integrated into existing systems

You can find more information about these and all further units on: [www.spselectronic.com](http://www.spselectronic.com)

### The independent alternative.



#### HA 1805B

The latest technology of high voltage testing was installed in the table-top unit HA 1805B.

- + Table-top unit
- + Large touch display
- + Numerous interfaces ex factory
- + Fully electric generator
- + Usable standalone without PC
- + Improved ergonomics

More information about the HA 1805B on: [www.spselectronic.com](http://www.spselectronic.com)

### No longer brand-new - but very exciting anyway.



#### HA 1800M Compact unit

Compact, inexpensive, mobile:  
Your entry into high voltage test.

- + 4.3" TFT colour display
- + Fully electronic generator
- + Numerous interfaces
- + Can also be used without any PC



#### HA 1800B Table-top unit

The basic version for your high voltage test

- + 4.3" TFT colour display
- + Fully electronic generator
- + Numerous interfaces
- + Can also be used without any PC



#### HA 1880B 19" rack

The basic version for high voltage test as a slide-in unit.

- + 4.3" TFT colour display
- + Fully electronic generator
- + Numerous interfaces
- + Can also be used without any PC
- + Can be integrated into systems

### Most necessary functions for mobile use.



#### HA 3600A and HA 3600D

For manual testing and with an analogue display reduced to the most important functions, the HA 3600A and the HA 3600D are ideally suitable for mobile applications.

- HA 3600D:
- + Switchable voltage range 2,500 VAC/5,000 VAC
  - + Timer



## Your guarantee for a reliable Ground Bond Test - the P 1800D.

Using ground bond testers from SPS electronic, you can carry out ground bond tests and continuity tests conforming to standards on units of protection class I. So you can reliably and flexibly check if the permissible limits of ground bond resistance given in standards are not exceeded.

P 1800D

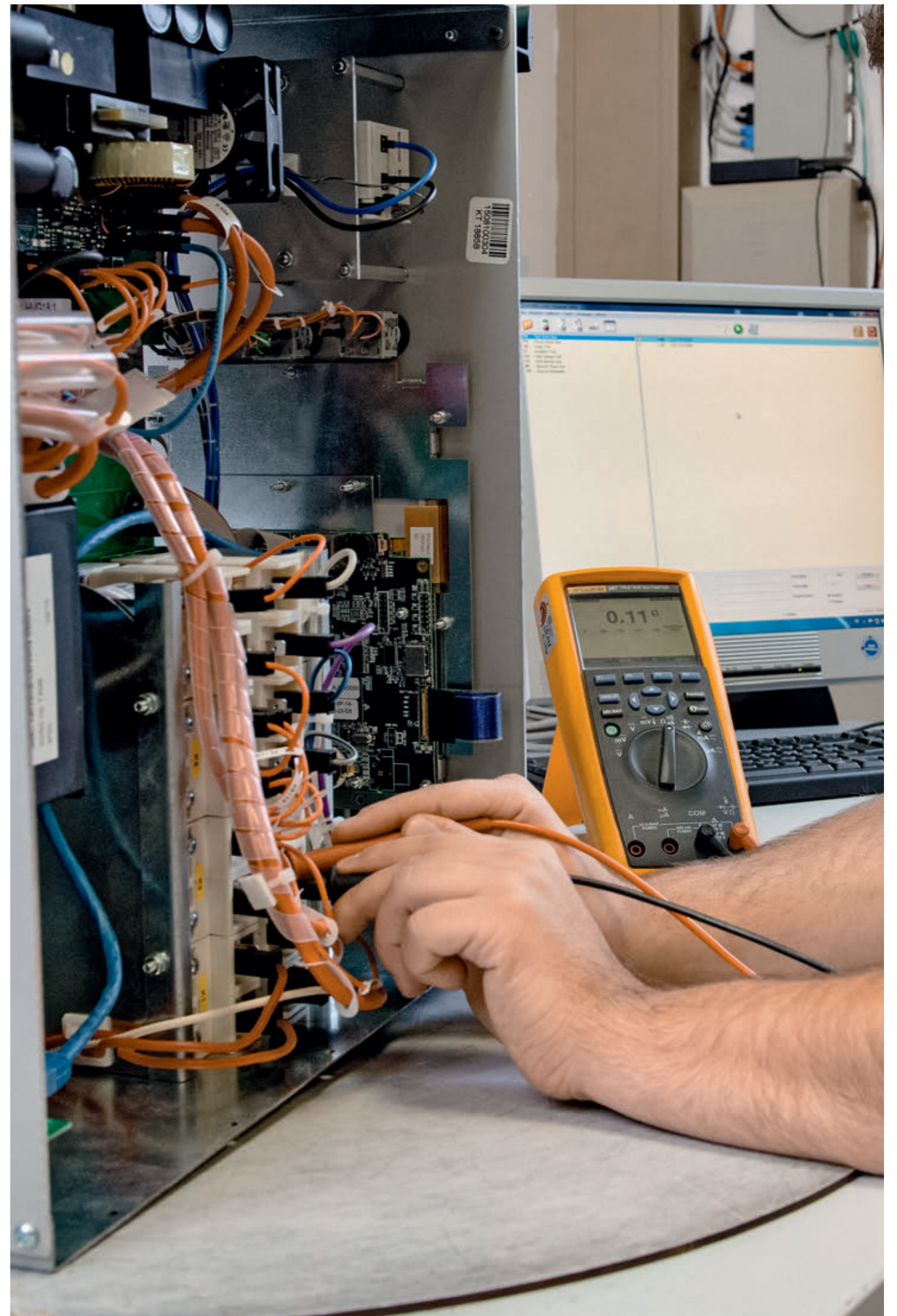


### HIGHEST FLEXIBILITY, **MAXIMUM SAFETY** - THE GROUND BOND TESTER P 1800D FROM SPS ELECTRONIC.

The P 1800D is our latest innovation in the field of Ground Bond Testers. It is handy and compact, which is why it is particularly suitable for mobile use. Likewise, all requirements are met in order to operate the unit manually or even in fully automatic system use.

- + 4.3" TFT colour display
- + Automatic test sequence
- + Fully electric generator
- + Usable standalone without PC

You can find more information about the P 1800D on: [www.spselectronic.com](http://www.spselectronic.com)





## If it shall be really safe - the **Insulation Testers** from SPS electronic.

Whenever the insulation of an electric appliance shall be tested safely and conforming to standards, the insulation testers from SPS electronic are the first choice. From the possibility of a mobile test application to a stationary use to an integrated operation into a network, they have been ideally designed for all applications. All units are also easy and convenient to operate.



### ELIMINATING ERRORS AND ALLOWING FOR SAFETY - BY MEANS OF OUR DIVERSE INSULATION TESTERS.

The IL 3801F from SPS belongs to the all-rounders among the insulation testers. Apart from insulation tests, it additionally combines a high voltage test and a continuity test function. It is very compact, can be conveniently operated by means of its 5.7" colour display and meets all common standards, of course.

- + 5.7" TFT display
- + Automatic test sequence
- + Fully electric generator
- + Usable stand-alone without PC
- + 4-wire technology

You can find more information about the IL 3801F on:  
[www.spselectronic.com](http://www.spselectronic.com)

## Pushed-in quickly: the IL 3881F 19" rack unit.



### IL 3881F

Just as talented, but made for stationary use - the IL 3881F.

- + 5.7" TFT display
- + Automatic test sequence
- + Fully electric generator
- + Usable standalone without PC
- + Can be integrated into existing systems
- + 4-wire technology

You can find any further information on the IL 3881F on: [www.spselectronic.com](http://www.spselectronic.com)

## The direct tester for your system.



### IS 580F

Entirely automatic unit for fast tests via direct control.

- + 19" rack / 4 HU
- + For use in automatic test systems
- + Simple control and evaluation through 24 VDC interface
- + Separate back measurement for 4-wire technology



## For those who are energized - the Leakage Current Testers from SPS electronic.

Using the leakage current testers from SPS electronic, it is possible to check if the current occurring in case of a faulty insulation or protective conductor connection exceeds the limit values of the standard. Likewise, only the leakage current test allows to activate internal switching elements with electro-technical units and is thus essential in the manufacture of such units.

AI 5601D



### THE VOLTAGE IS HIGH, AND SAFETY TOO - WITH THE LEAKAGE CURRENT TESTER AI 5601D.

The AI 5601D from SPS electronic is your partner when it comes to a quick and accurate Leakage Current Test conforming to standards. This unit can energize your test specimen with a 110 % operating voltage and thus correctly capture adherence to all limit values. During the process, the results can be immediately printed out, stored on the unit or processed in your network right away.

- + Potential-free 24 VDC control interface
- + Potential-free analogue output for the voltage
- + Potential-free analogue output for the current
- + Adjustable voltage increase from 100 % to 110 %.

You can find further information and offers about the AI 5601D on: [www.spselectronic.com](http://www.spselectronic.com)

## So that you do not get wound up in production - the Surge Testers from SPS electronic.

Only via a Surge Test it is possible from the outset to detect turn-to-turn shorts and insulation faults within a winding. That way, incipient faults and thus a failure of wound components, electric motors and coils of any kind can be prevented. Using the Surge Testers from SPS electronic, you can be sure about your winding.



ST 1800B

### IF PERFORMANCE AND RELIABILITY ARE DECISIVE, YOU MAKE THE RIGHT CHOICE WITH THE ST 1800B.

The ST 1800B from SPS electronic has a memory for 360 test programs which can then be checked for individual criteria. That way, fast and efficient working is ensured. Furthermore, the unit can be operated in connection with a PC via an interface, whereby trouble-free use in automatic test systems and production lines is made possible. At the same time, the price-performance ratio of the ST 1800B is unbeatable in many respects.

The ST 1800B enables automatic evaluations of:

- + Error area
- + Differential error area
- + Corona quantity comparison
- + Corona frequency comparison

You can get further information about the ST 1800B on: [www.spselectronic.com](http://www.spselectronic.com)





## Customized

With our products we normally offer a suitable solution for all tasks in electrical safety testing. However, it can happen that very special requirements apply to a particular test task. Be it in terms of the sequence of parameters to be tested, the conditions under which it shall be tested or also the kind in which the approval of the test finally takes place. Here we are also glad to help you - with special solutions which are fully coordinated with your individual needs and the desired requirements. You can learn more about this on the next pages.



# Wherever there is a testing task, there is also always a solution.

And, at best, it comes from the German experts for electric safety test technology: SPS electronic.

Now request information about your individual test system.

We would not be experts if we did not know everything about electric safety tests. Therefore we have the possibility to respond quickly and coherently even to new questions: in the form of customer-specific test systems, supporting you in your work and making it easier. Just put us to the test - what can we do for you?

## A TEST SYSTEM - WHAT DOES THAT MEAN?

In a test system, different components from the field of electric test technology are combined with each other and thus summarized to an independent test system. That can mean that a whole production line comes into being on which various electric safety tests are carried out on several stations. It is automated, for example. But it can also mean to develop first-time a safety test for a special, completely new product, where appropriate. The opportunities for that are almost unlimited.

## FOR WHOM AND IN WHICH CASE DO TEST SYSTEMS COME INTO CONSIDERATION?

Test systems come into consideration for everyone who is not satisfied with the standardised procedures for electric safety testing. This might have different reasons. For example, if safety testing has not been applied in the required manner yet. This is often the case with a new or also a very exotic product. Or particular test parameters are required, for example whenever a product must also function underwater or in other extreme situations. No matter how unusual a customer wish is - we will find a solution.

## FOR WHICH INDUSTRIES, APPLICATIONS AND APPLIANCES CAN TEST SYSTEMS BE REALISED?

Our individual test systems are used in almost all industries dealing with electric technology. Because once current is flowing within an appliance, it must be ensured that safety is guaranteed for the user at any time. In the process, it is rather unimportant whether it is about household appliances, lightings, tools, motors or even medical equipment. What is essential is always the type of carrying out the test.

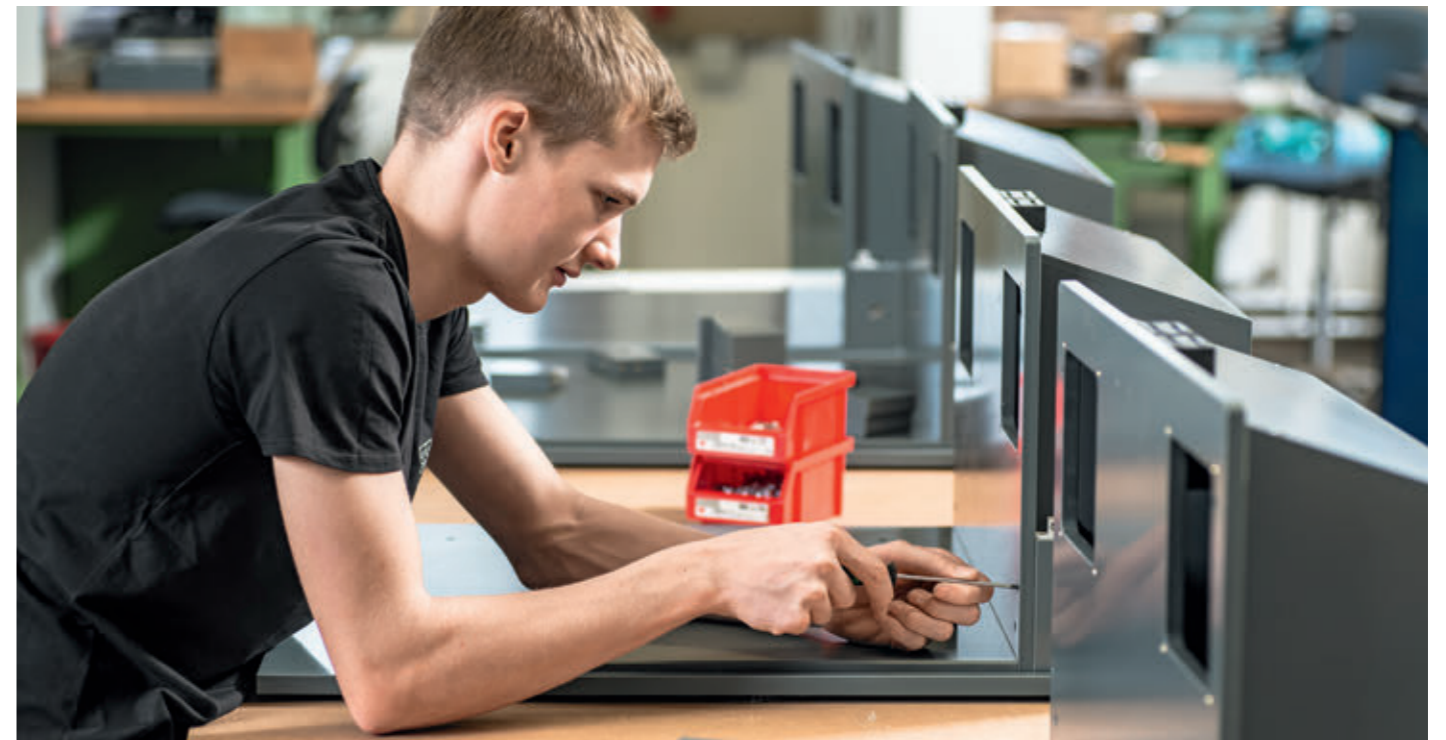
## THE KEY TEST PARAMETERS ARE YOUR WISHES.

The advantages of an individual test system are clearly obvious. Because it is especially designed to solve your day-to-day problems at the best. You would like to know whether a test system is also possible for you? Then please contact us. We will jointly analyse your task and develop a set of specifications. Then we will look after the development, realisation and commissioning of the system.

On request, you and your employees will then get a comprehensive training and introduction, and we will, of course, continue to provide you with technical support. It almost sounds too simple, doesn't it?

## OUR TEST SYSTEMS CERTAINLY OFFER YOU MANY ADVANTAGES:

- + Individual problem solutions
- + Controllable via software
- + Complete integration into existing systems, on request.
- + Comprehensive aftersales support





# The know-how of SPS electronic has been used in these solutions.

A short extract from our list of references.



## Industry: Household appliances Test system for coffee machines.

### Challenge

Mobile, flexible inspection station for various household appliances

### Solution

PC-controlled, mobile test system. The test technology, including a PC, are integrated into the substructure. The operator has a direct view of the monitor. User protection by means of a safety light curtain. Thus also other persons are protected.

- + Mobile
- + Flexible
- + Little space requirement



## Industry: Lighting industry Compact test bench for explosion-proof lightings.

### Challenge

The problem was to correctly contact the different lightings in order to carry out automatic testing.

### Solution

A compact free-standing enclosure was developed in which the required comprehensive adapters were installed and combined to an automated test system.

- + Fully automated
- + Special features such as operating the lightings via an equivalent load



## Industry: Automotive industry Test system with automatic contacting unit.

### Challenge

In order to test an electronic component from the automotive sector, a complex contacting unit with a pneumatic cylinder was necessary.

### Solution

We manufactured a contacting unit which was equipped with a 4-wire technology in order to enable fully automatic testing of the single current paths. In addition, a die-cutter was integrated which immediately marks good parts using a poka yoke clip.

- + Fully automated
- + Special features such as an intergrated die-cutter



## Industry: Electric motor industry Fully automatic motor test system.

### Challenge

Testing of an electric motor should be integrated fully automatically into the manufacturing process on the line without an employee being required for its operation.

### Solution

Testing was completely integrated into the production. The test specimen is automatically recognised via a workpiece fixture. After that, the motor shaft is contacted, with the motor being operated via load for testing. It is thus possible to achieve particularly fast testing times.

- + Fully automated
- + No operation required
- + Integration into the manufacturing process



# Your problem becomes a **success story** with SPS electronic.

Further examples of our expertise.



## Industry: Electric Motor Manufacturing Stator test system with production line connection.

### Challenge

A stator test system was required in which a Surge Tester is integrated and which is directly connected to line production.

### Solution

The test system consists of a test area which is open on three sides, by means of which a connection to line production and a particularly fast test are ensured. The user himself is protected by a light curtain, with the contacting of different stators taking place via kelvin clamps.

- + Integrated Surge Tester
- + Production line connection



## Industry: Industrial technology Test system for servo motors.

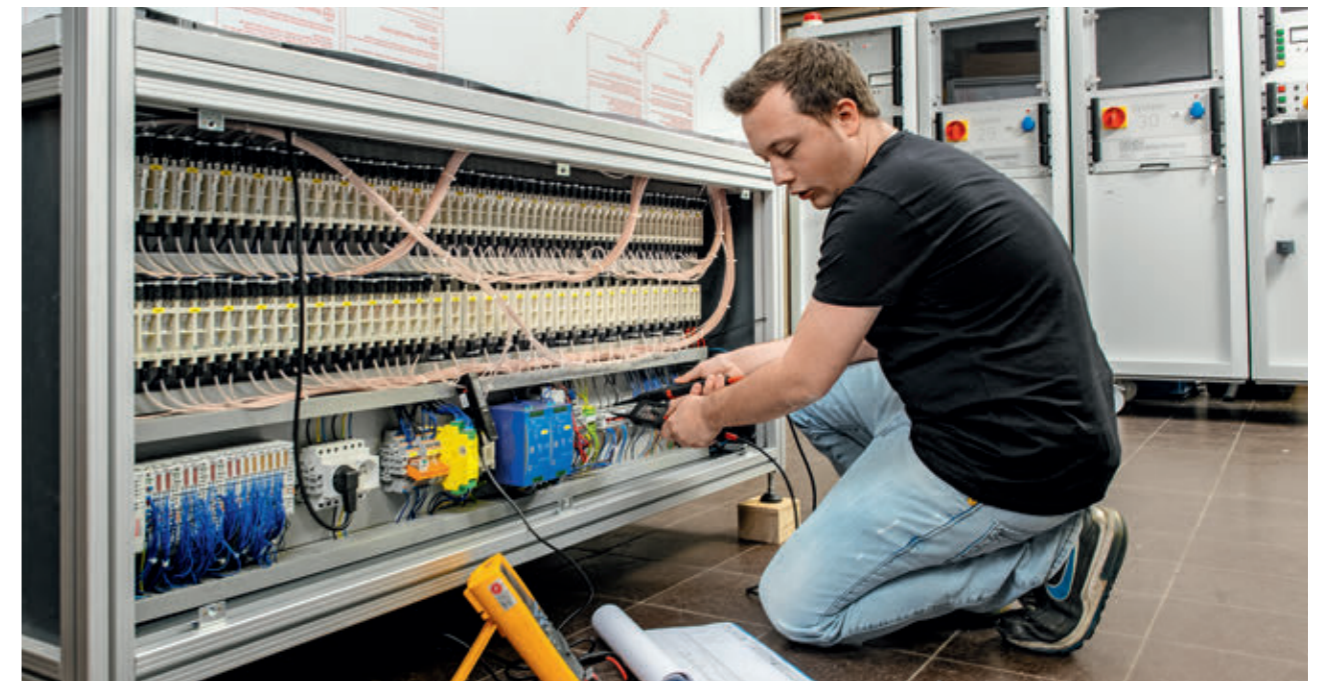
### Challenge

The test stand had to meet the challenge of serving different high quantities and construction methods of servo motors.

### Solution

The high degree of inspection depth required was implemented in a very compact way with this test stand. In addition, it has been seen to it that short distances to the control electronics are adhered to or encoder signals are evaluated, for example. Additionally, vibration measuring was integrated for quality control.

- + High depth of inspection in a compact space
- + Integration of vibration measuring



## Industry: Household appliances Test system for kitchen appliances.

### Challenge

Integration of complete final testing into the production line.

### Solution

Testing area that is open on 3 sides and protected by a safety light curtain. The test technology is integrated into the substructure, the personnel has a direct view of the PC monitor.

- + Optimal workplace design
- + Adjusted customer solution for optimal production process



## Industry: Power tools Mobile test trolley for universal applications.

### Challenge

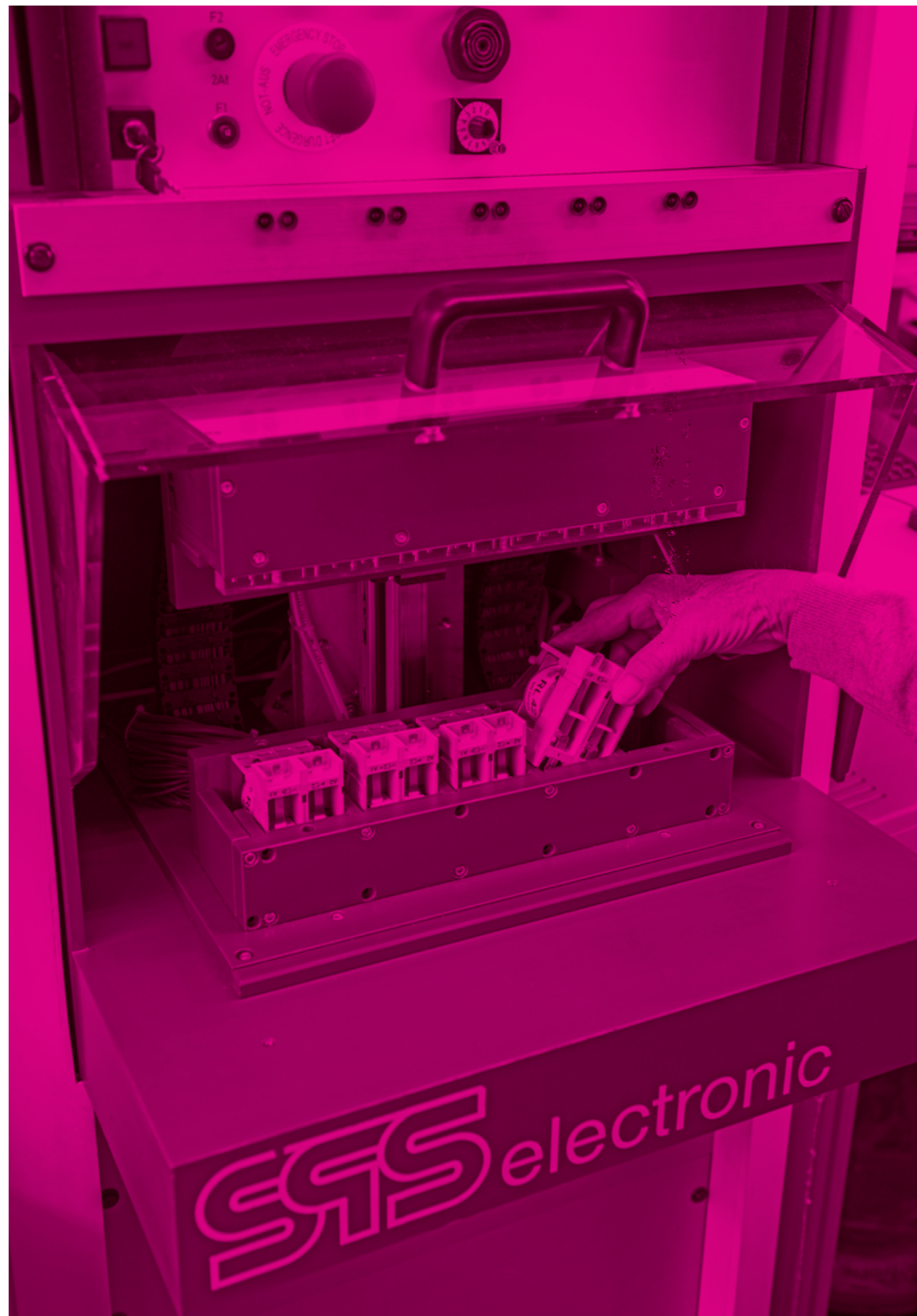
What was needed was a test trolley in which all safety and functional tests are directly integrated and which can be used in a mobile way.

### Solution

We have managed to meet all requirements and to adhere to a compact design while even integrating additional functions. So all results are directly stored via a wireless network, for example. Due to the coordination with our control software DAT 3800, a high comfort and easy operation are guaranteed in addition.

- + Very flexible
- + Additional features such as results storage via wireless network





## Accessories

Especially in case of an electric safety test, the details can be decisive. With accessories from SPS electronic you are always on the safe side. Because just as with our remaining products you can trust in best German quality here. From high voltage test pistols to high voltage relays and various socket connectors to software for remote control we offer everything you need for your work.



# Everything you need for relaxed working.

Using products from SPS electronic, you are excellently positioned in the area of electric safety test technology. In order to round off our entire service and performance package, we additionally offer you comprehensive accessories in various versions for all areas. Furthermore, you can find more accessories on [www.spselectronic.com](http://www.spselectronic.com)



## High Voltage Relays

Various high voltage relays which can switch voltages between 5,000 VAC and 10,000 VAC in combination with high currents.



## High Voltage Socket Connections

Up to 9-pole sockets and socket connectors up to 10,000 VAC.



## High Voltage Cable

Up to 10,000 VAC approved high voltage cables. Available in various versions and cable lengths.



## Universal Test Socket

Universal test socket adjusted to various plugs and country standards. Especially durable and robust.



## Kelvin Connector

For easy contacting of open cable ends. Connection via screwing contacts. Available in various cable diameters.



## Remote Control Software / Special Software Solutions

You need a software to control your individual test system? Then just contact us, we will jointly find a solution.



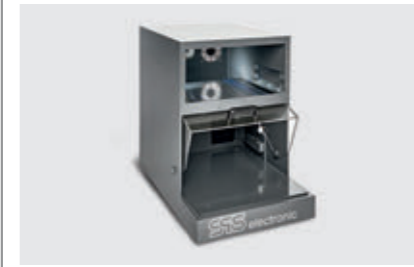
## High Voltage Test Pistols

To carry out a safe high voltage test. Available in various versions and cable lengths with start signal.



## Protective Conductor Test Probe

Available with integrated start tester and with different cable lengths.



## Test Cages

Standardised test cages for various applications. You need an individual system? Then just contact us.



## Test Cage with Light Curtain

We stock test cages in which safety features such as a light curtain are integrated ex factory. This offers highest safety and a convenient access to the test specimen.



## Control Panels

To control and operate your testing processes. Available in different versions.



## Test Dummy

To test all standard units and test systems with regard to their functional capability.



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