



Testsystems



ELABO

Testsystems

Working environments for people with ideas..

Would you like to have more time and space for your own ideas?

ELABO's services and products are designed to ease your daily tasks.

Easy to operate, powerful, and offering excellent value for you as a user.

ELABO is the innovative force in the field of electronics – the technological leader in the field of intelligent testing technology and high-quality technical workstation systems. When it comes to measurement and test systems, our mission is quality assurance, process safety and traceability.

An economical one-stop solution.

We plan, develop, and manufacture in-house. We fulfill your wishes. We offer devices, software, and turnkey system solutions, all coordinated to work together – a full package solution, if needed. One-stop shopping – made in Germany.

Meeting complex demands, keeping an eye on the bottom line, and seeing the big picture – those are the traits that made us what we are today – the innovation leader.

You'll see: we're there for you. You'll notice: it's worth it.





Customer Care

Ergonomic
Workstations

Process
Monitoring

Archiving

Data
Analysis

ELABO is working successfully in these sectors



Home appliances

Boiling and heating, cooking and baking, cooling and freezing, vacuuming and cleaning, washing and drying: safety and function testing directly on the automated production lines, as well as programming of the control electronics integrated in the appliances and determining energy efficiency.



Automotive

From airbag to ignition: safety, function, and quality testing, partially or fully automated. Testing of motor vehicle components and programming of electronic control units.



Medical technology

From incubator to centrifuge: safety tests in accordance with EN 60601, using standard-compliant designs of measuring and testing devices and with combined function tests. Type and unit testing with complete documentation.



New renewable energy

Sun and wind: safety and function testing systems for wind energy and solar technology, partially or fully automated. Programming of the control electronics integrated in the appliances. Long-term tests and stress tests.



Assemblies and components

Capacitors, transformers, motors: automated production processes as the basis for 100% quality. Integration of test systems with highest throughput rates in production.



Electrical machinery and tools

Drilling, chaffing, sawing, mowing, grinding: safety and function testing, run-in and load tests.

From the individual workstation solution to complete testing networks

Safety and function testing for quality assurance

ELABO is an international leader in the development and manufacture of systems for testing electrical devices and electrical components and sub-assemblies. Our measuring and testing devices are used in electrical laboratories as well as in mass production.

We also provide measuring and testing systems as individual workstations or as complex testing networks, for a wide range of industries and products. Our solutions are perfectly tailored to the needs of our customers. ELABO also offers a comprehensive lifecycle service.



Measuring and testing equipment

ELABO designs and builds high-quality measuring and testing devices which will win you over with their broad and flexible applicability. Even in their basic versions they are fully equipped with functions for typical types of usage and can be expanded through additional modules.



Measuring and testing systems

We implement flexible partially and fully automated measurement and testing systems for quality assurance. Product-specific handling and measuring systems permit the economical integration of testing processes into the production line. Comprehensive software tools ensure process-optimized control and traceable data archiving.



Approval systems

ELABO designs sophisticated systems for testing institutes and the development departments of well-known manufacturers of household products for suitability testing and approval of products. For example, ELABO systems can measure energy consumption and determine the energy efficiency of your products. Values such as standby power consumption and the heat generated by a device can also be measured.



Programming systems

We flash and verify your firmware in the production process in accordance with the just-in-sequence principle. Our expertise is in interface communication and electronics programming for the greatest possible efficiency and maximum flexibility, also in parallel with testing processes.



Software

We've been developing software since 1982. Working from this extensive basis of experience, our developers continue to produce breakthrough results. The Elution® software packages sets new standards for workstation and testing systems.



Customer Care and Engineering

Mechanical, electrical, electronic, and software engineering all in one. This is what we call "Best Engineering", which means modular, perfect and complete solutions. However, we don't consider ourselves as just a manufacturer, but also a service provider offering a broad range of solutions. Professional advice, individual project management, and comprehensive after-sales service are just part of the package.

Measuring and testing devices

Almost unlimited usage options.

From the beginning, ELABO's products have been characterized by robustness and flexibility. From testing devices and expansion modules to complete accessory kits – ELABO has what you need for every application. With the measuring and testing devices of the BestPerformance and HighPerformance series, ELABO offers a complete product portfolio of economical and robust devices for sustained industrial use. Additional measuring devices and power supplies round off the product portfolio. Many of our individual devices can also be integrated into the Elution® PC software package, offering comprehensive testing and documenting functions.



Standardized measuring and testing systems

The right solution for typical testing tasks.

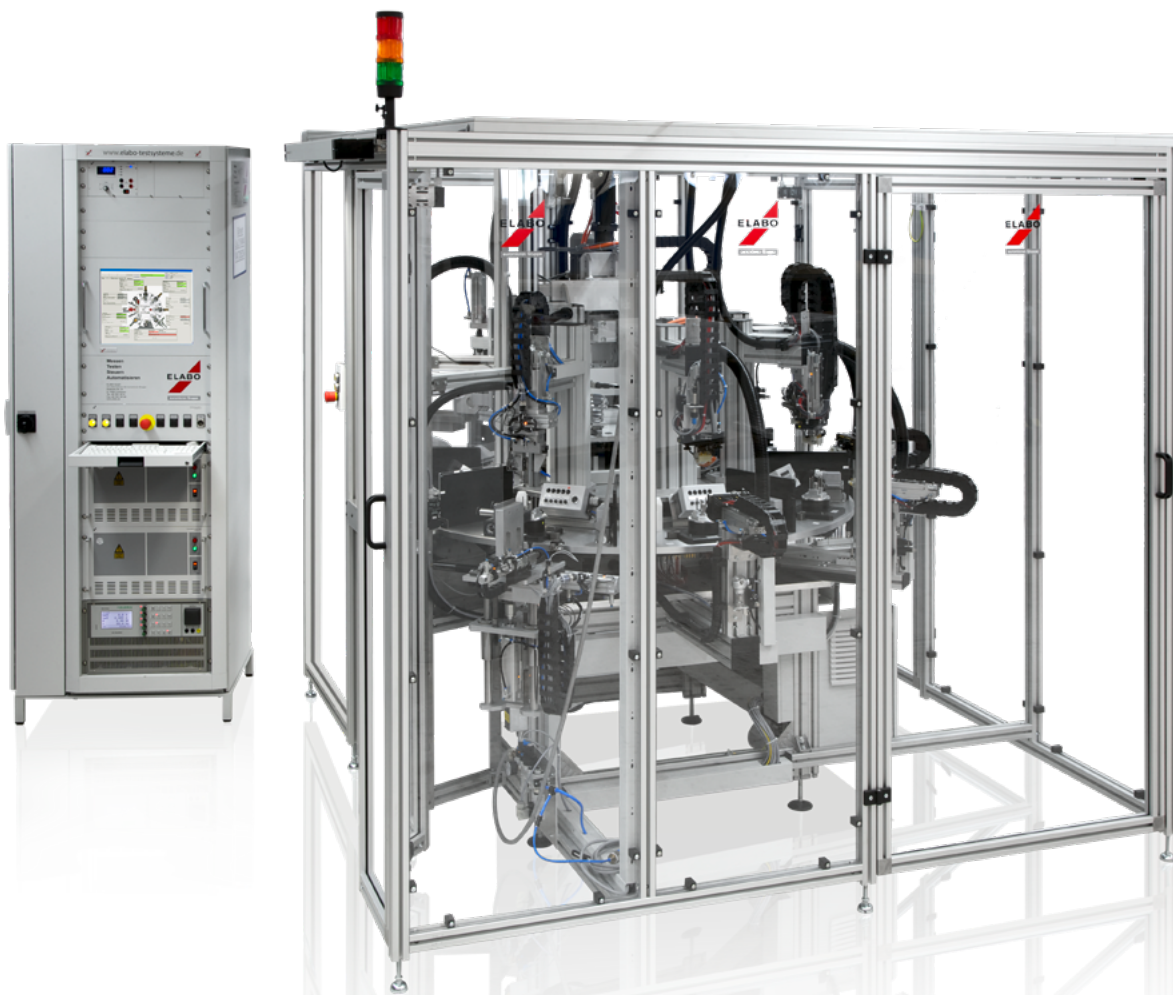
With greater testing volumes and more extensive measurement and testing requirements, the demands made on testing technology are also increasing. Testing processes are automated and carried out with the aid of predefined testing sequences. Tests can no longer be “forgotten”, and traceable data capture must be assured. ELABO’s standardized measurement and testing systems already offer the right solution for many typical testing tasks – complete systems including computer control, the corresponding software solution, and all necessary system and accessory components, the whole from a single source.



Individual measuring and testing systems

Complete packages for quality assurance and function testing systems.

Best Engineering – that’s what ELABO has been standing for since the 1980s. This means intelligent system solutions for software and hardware needs. In-house software developments and in-house measuring and test devices are networked and configured with external software. We also build mechanical systems to measure – our client always receives a system perfectly tailored to his needs. ELABO is a full-spectrum service provider.





Handmade in Germany.

We stand behind the ELABO promise: research, development, production of many components and complete assembly. It all happens in Crailsheim in southern Germany – by hand, with much care, know-how, and precision. All our solutions are handmade. Many applications and the functionalities contained therein have already been realized, including:

- Electrical safety testing
- Electrical function testing
- Mechanical function testing
- Testing of optical characteristics
- Testing of acoustical characteristics
- Load limit testing
- Run-in endurance testing

In addition to carrying out the usual testing tasks, our systems provide improved efficiency through the integration of value-creating processes, such as:

- Programming of electronics
- Mechanical processing
- Marking

Approval systems

Safety first.

Before new products are approved for sale and quality marks issued, independent testing and certification institutes carry out comprehensive measurements. In addition to safety checks in compliance with applicable standards, heat generation and consumption measurements are important.

Energy efficiency: it's worth it.

Energy and resource consumption measurements are standard considerations especially when purchasing a home appliance, and the energy label has placed political muscle behind such measurements. As electricity prices continue to climb, it's also an increasingly important sales argument. Together with the leading international testing and certification institute VDE, ELABO has thus designed test stands that optimally address these requirements.

Energy		Washing machine
Producer	Logo	ABC
Model		123
Low consumption		A
A		
B		
C		
D		
E		
F		
G		
High consumption		
Energy consumption kWh/Washing programme		
The real energy consumption depends on the use of the electric.		
Wash efficiency		A
Spin overspeed		A
Filling quantity (cotton) kg		xyz
Water consumption		xyz
Noise		xyz
		Washing
		Spin



Utility for device manufacturers.

ELABO takes it a step further and supports the manufacturer by providing measurement of standby power consumption. During the development process, products are measured and evaluated using technology comparable to that employed by the certification bodies. During the production process, special audit and sample test stations ensure that standards are complied with.

Programming systems

Programming: just in time.

Device control units are often programmed during final assembly in accordance with the “just in time” principle, in order to differentiate between production variants as late as possible in the production process for economic reasons. ELABO designs flexible programming systems tailored precisely to customers’ needs – production of just the right variants is assured.

Normally, once the electronics type has been identified, data is compared with the ERP system. The relevant data files are loaded and merged if necessary. The memory chip of the device is then programmed via software control (flashing of the firmware) and its functions are thus defined. Verification then follows, to ensure process security. Your products will always have the correct program version – just in time!

Our motto: in one go.

Assembly, testing, and programming of your devices all in one go: we integrate the programming stations into complete assembly and testing systems for the greatest possible efficiency and maximum flexibility. In addition to programming, other factors such as optical qualities (e.g. printing on the product, display function) and mechanical functions (e.g. buttons, knobs, inputs and outputs) can then be tested. Programming steps can even be undertaken during the end-of-line test. If faults are found, the devices are automatically steered to the repair area, where faults are diagnosed and eliminated. The products are then returned to the testing process, guaranteeing 100% quality – in one go!





Elution®. Professional testing software by ELABO.

Groundbreaking developments.

We've been developing our own software since 1982. With this experience to draw on, our developers have been breaking new ground in recent years: whether R&D, prototype testing, final inspection, repair, or service – the Elution® Suite software offers functions and functionalities for all these areas, permitting efficient and precise work. Once more, we're setting the standard for testing and measurement software.

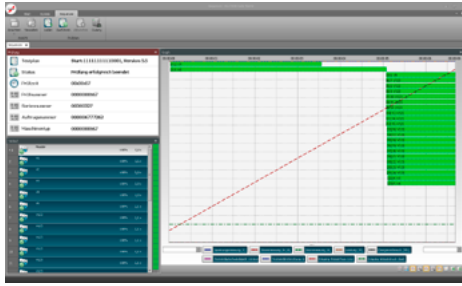
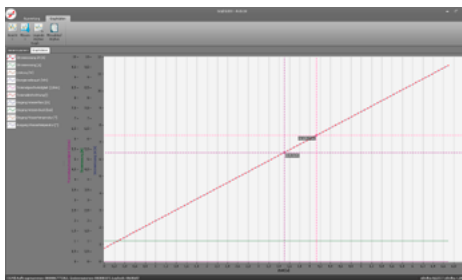
Elution® – it can ...

With the Elution® Suite software package, measurement and testing devices can be controlled remotely, and entire production and testing lines can be automated and monitored. Devices and systems can be parametrized, endurance trials set up, and recurring measurement and testing processes automated.

The software can be operated and adjusted in a visually appealing and functional manner. The results are thoroughly documented and evaluated, because nothing is more reassuring than to know that your products are reaching customers tested and free of defects. ELABO's testing systems with the Elution® software package will take care of that for you – with 100% reliability.

... and much more.

In addition, the Elution® Suite makes it possible for the first time to work on joint products and projects using a single software package, within a department as well as across department boundaries, without expensive or time-consuming programming, endless copying and pasting, and piles of unnecessary paper. With the Elution® Office, test sequences can be created and modified, completed test runs evaluated,

Elution® can be operated easily and intuitively. It is optically appealing and functional. With few clicks the target is reached. Elution® guarantee easy working with no programming knowledge needed.

and statistics examined – and you'll never even have to leave your desk.

The Elution® packages: adding value for your company.

With Elution® Device, the workstation becomes a modern test station. Time-intensive, manually controlled test series are a thing of the past. Elution® Training is used to train existing employees or trainees, and Elution® System provides for secure testing processes. All packages are easily expandable with Elution® modules to fit every application and level of automation. Elution® Suite can be easily linked to your ERP systems (enterprise resource planning) such as SAP R/3 or Navision, and to database systems such as Microsoft SQL or Oracle.





Customer Care and Engineering. Much more than merely customer service.

And never far from you.

Our expert consultants in Germany as well as our overseas partners stand ready to help you – personally, quickly and directly. In the course of a personal visit, they evaluate your processes and physical facilities and design the optimal best-engineering-solution for your needs.

The experts of ELABO.

With ELABO, every customer has a personal consultant providing project management support. The consultant ensures friction-free work processes and answers your important questions concerning processes and procedures, measurement and testing technology, product advantages, ergonomics, legal regulations and standards, lighting and climate issues, logistics, assembly and start-up, and the benefits stemming from the investment.

For your benefit: our services.

- Advising
- Design and planning
- Monitoring and reporting
- Preliminary acceptance, start-up, and final acceptance
- Training and start-up help
- Service
- After sales service
- Maintenance and remote maintenance
- Repair
- Calibration service
- Device rental and leasing
- Firmware and software updates
- Adaptation of hardware





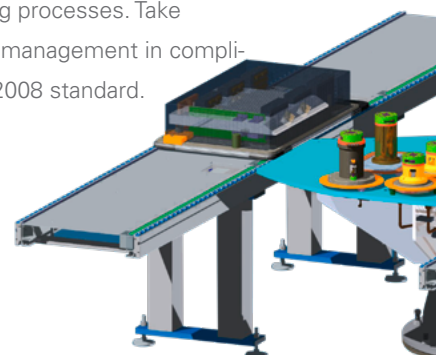
Our Competence: Know-how and Tools.

A pioneer in advanced measurement and testing systems.

ELABO employs the most modern design and development tools in developing hardware and software. With 3-D designs and software-controlled circuit diagrams and layouts, our specialists design top-notch systems. This ensures that you get optimal results from our comprehensive know-how in the areas of mechanical and electric engineering, electronics, and programming. This know-how has been developed and cultivated by ELABO over the course of 40 years. As a pioneer of computer-controlled measurement and testing systems, we have been offering microcomputer-based, software-controlled solutions since 1982.

Combined safety and function testing.

For more than 40 years, ELABO has been a respected partner for our industrial clients as well as for testing and certification bodies. Governments and standards require safety testing. Function tests such as endurance and stress testing are equally important in creating high-quality products. To save costs, ELABO offers you the ability to combine both testing processes. Take advantage of our certified quality management in compliance with the DIN EN ISO 9001:2008 standard.





1982

ELABO markets one of the first IT-supported safety testing systems – microcomputers instead of mainframes.

1988

With the new InForm program line, ELABO kicks off a revolution in the equipment of technical workstations. Electrical supplies, measurement, and testing devices are now located at eye level – with patented connection technology.

1980

ELABO launches the first safety testing devices developed in-house.

2000

For the first time, ELABO uses robots and image processing technology in testing systems.

2003

Modular assembly workstations from the TaMas product lines are designed.

2005

ELABO makes waves with its completely new software package, developed with C++. For the first time, object-oriented software modules can be perfectly coordinated with one another.

2012

ELABO continues the revolution in workstation systems. Primus One® is a genuine masterpiece!

1996

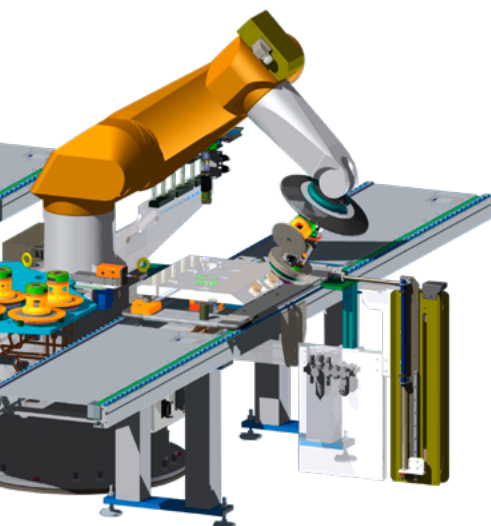
ELABO introduces completely networked testing lines for quality assurance in electrical devices.

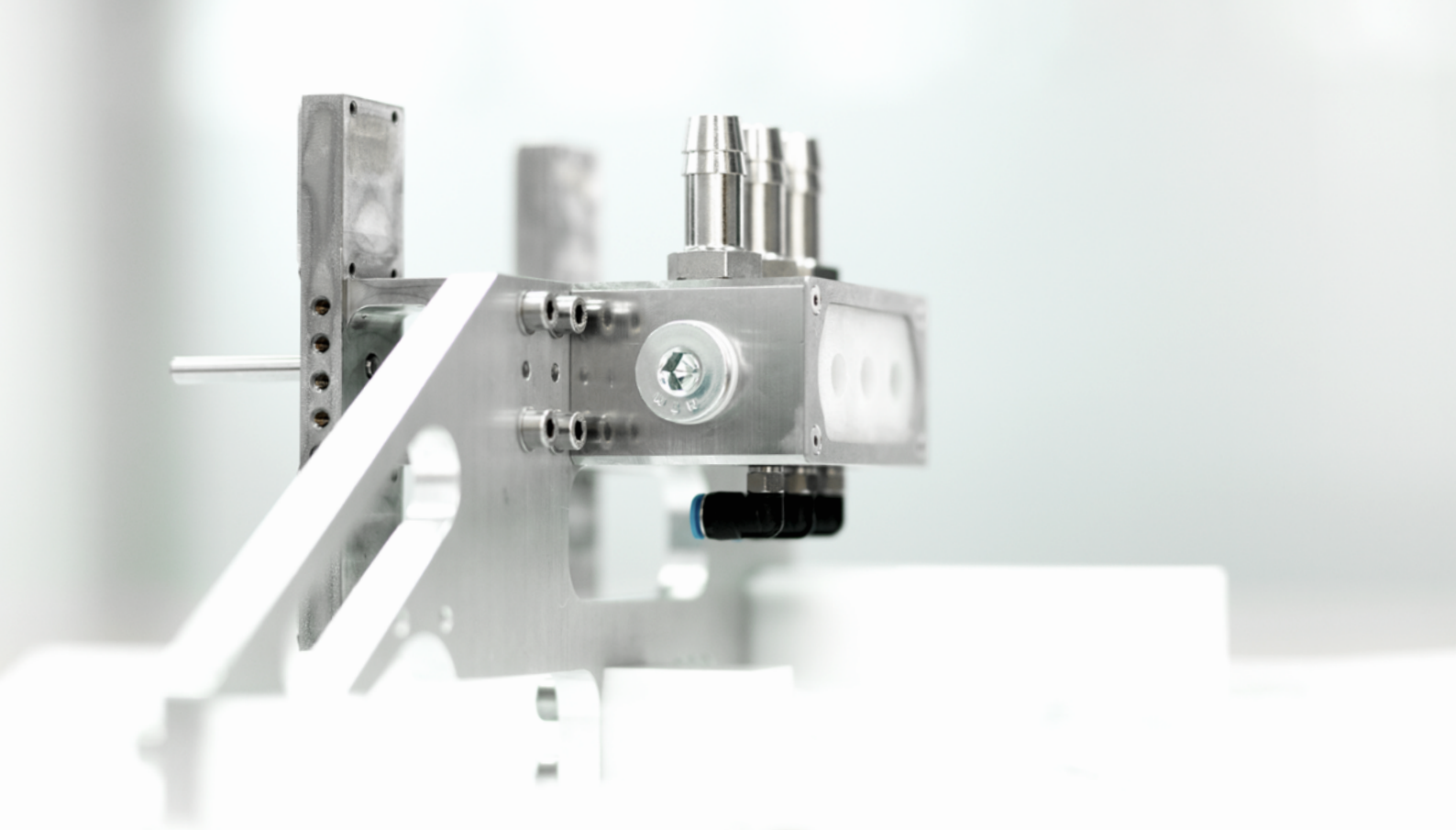
2009

With the HighPerformance device series, ELABO enters the age of modular testing devices for safety testing technology.

2010

With Elution®, the complete integration of testing technology and measurement electronics becomes a part of the ELABO software world.



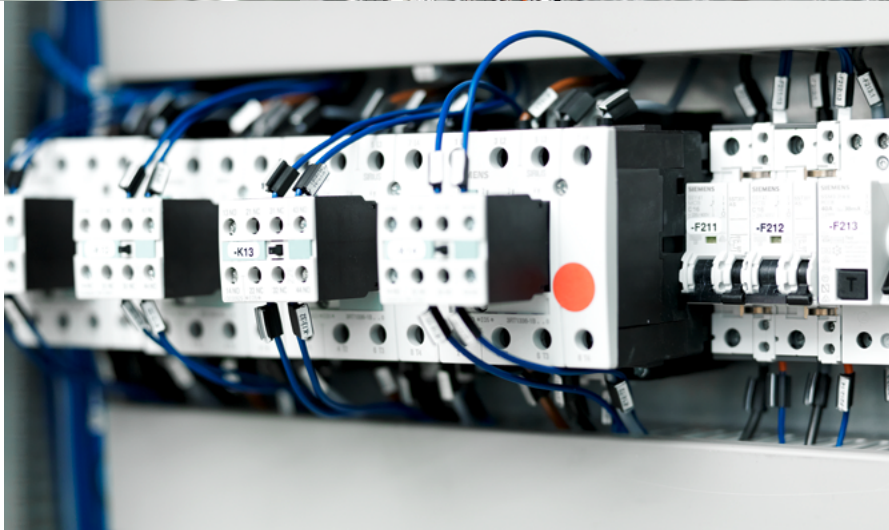
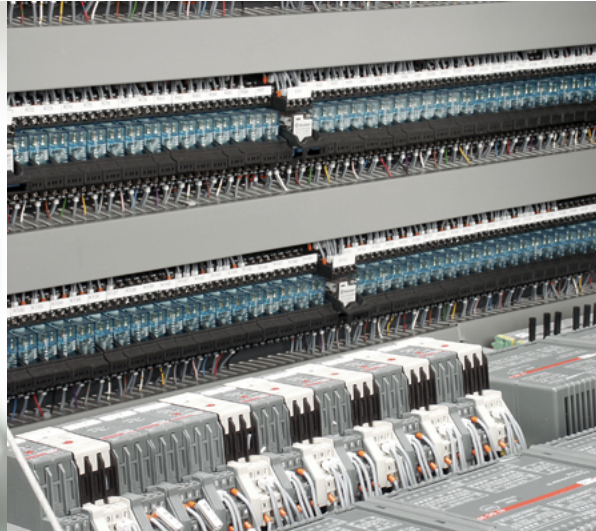
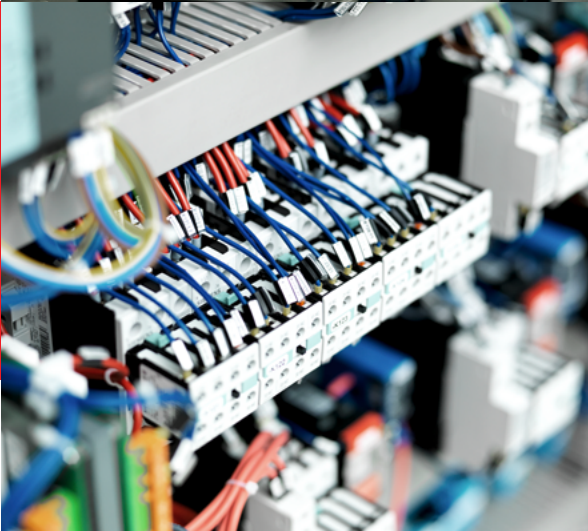


Perfect to the last detail.

The holistic view.

We don't only focus on the overall project, but also pay attention to the little things. A system can only work perfectly if every last detail has been thought of. At ELA-BO, creative solutions aren't the product of luck, but the result of painstaking effort. That means the highest care, precision, and thoroughness in everything we do for you.

Perfection





Our Employees. Our Customers.

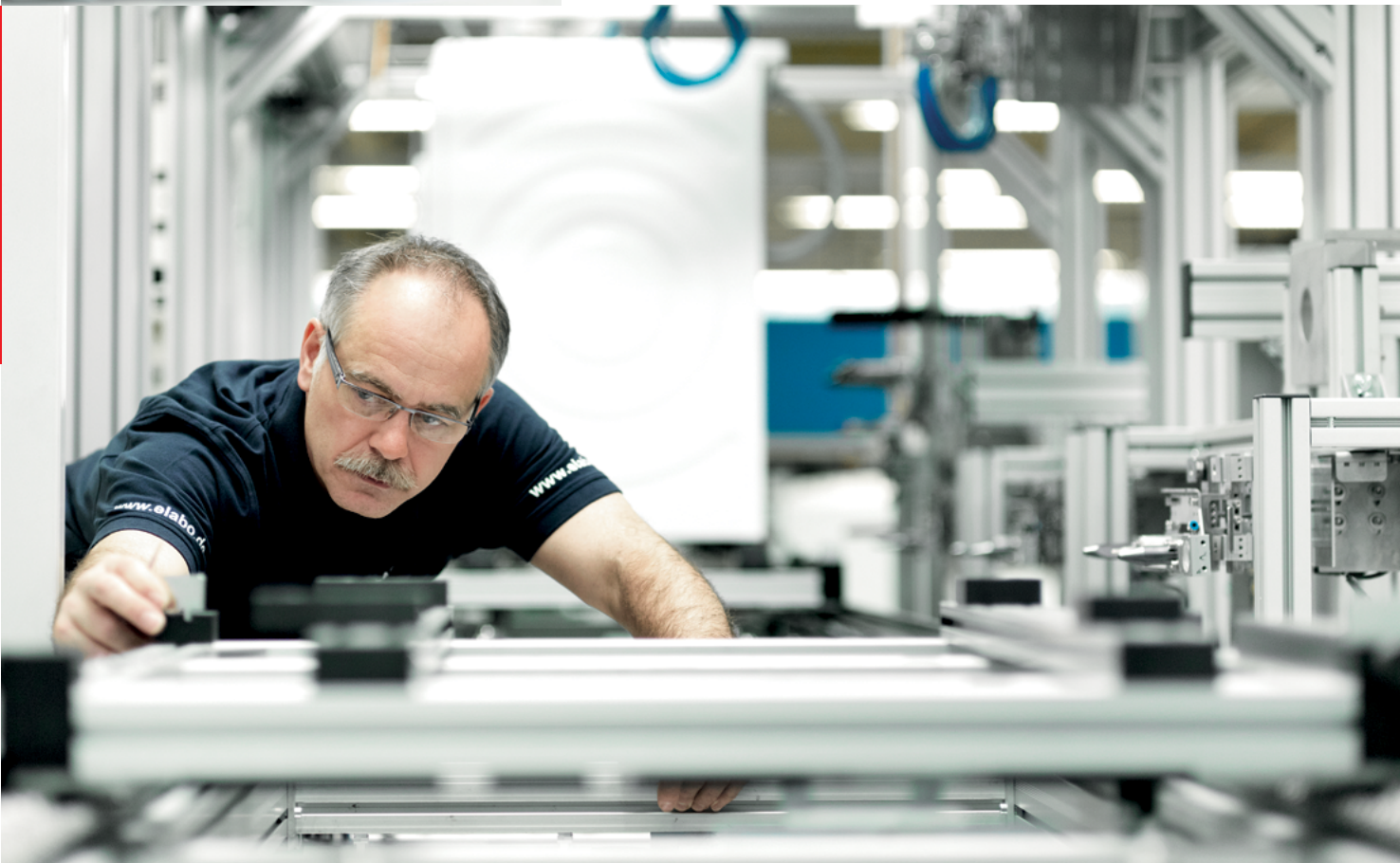
A passion for our customers, a passion for ELABO.

It's always something special to work for a company that is the innovation leader in its field. Our employees show this, day in and day out. They're proud to work for ELABO. As a result, there are strong positive effects for you, the customer.

For example: employee turnover is low, and your contact person is in it for the long haul. That creates a personal connection and plenty of know-how. Other example: your productivity increases because committed employees enjoy embodying their passion for their work also outside the company. We truly are happy to assist you. Methods and strategies are developed jointly with the customer.

We're always one idea ahead.

Working environments for people with ideas. It's our motto and our way of life. Our products and services let you find more time and space for your own ideas, and those ideas offer great potential. After all, a company's most valuable assets are satisfied customers and motivated employees. We help you optimize your work processes and improve your products.



This is why customers choose ELABO.

"You can rely on the solutions offered by ELABO! This justifies the slightly higher price."

"The Elution software has every feature one might expect from a modern quality assurance software package. ELABO distinguishes itself again."

"Our expectations in terms of efficiency were more than met. With the new test stands, testing time has been reduced by 50%. We have expedited the purchase of new equipment to take maximum advantage of this potential."

"We were tired of dealing with a constantly changing rotation of contact persons with competing firms. ELABO is more consistent."

"It's clear just from what ELABO offers that they really know what they're doing."

"When there are problems, ELABO provides help quickly and without fuss. We always reach the specialists we need."

"In addition to our own ideas, the solution offered by ELABO included many additional features of interest to us."

"ELABO offers the full spectrum of measurement and testing technology. This is of interest for us especially in automated solutions and provides ELABO a competitive advantage."

"ELABO supplied testing stands that worked from the very beginning. The competition was never able to do that in several years."

"Those of us in the medical technology field have to be able to rely on the measurement technology. We've had the best experience with ELABO."

"We were worried about reliability in service, but up to the present day, we've never had a single failure."

"The systems have run for so many years with no problems at all that our maintenance department doesn't even know they exist anymore!"

These customers trust ELABO.

Home appliances	Automotive	Medical technology	Solar systems	Components	Tools
AEG	Amphenol	B. Braun	ACI	ABB	Bosch
Amica	ASIC	Dräger	Benning	Bachmann	Cooper
Arcelik	BMW	Ivoclar	Berger	Bosch-Rexroth	Eulenbach
Ascobloc	Bosch	Julabo	Ersol	Bürkert	Fein
Bauknecht	Continental	Maquet	Fraunhofer	CEAG	Friedrich
Bosch	Delphi	Richard Wolf	Fronius	EPCOS	Gardena
B/S/H/	Grammer	Siemens	Heidenhain	ETO-Magnetic	Gedore
Convotherm	Harting	Tyco	KACO	Hahn	Husquarna
EGO	Inovan	Zeiss	Komax	Hemstedt	Knipex
Electrolux	John Deere		SMA	Magnet Schultz	Leister
Franke	Komax		Solibro	Merten	
Gardena	Kummer		Würth	Pepperl + Fuchs	
Glen Dimplex	MD Electronic			R. Stahl	
Imperial	Molex			Riedel	
JUMO	Porsche			Schneider	Testing and certification institutes
Kärcher	Schleuniger Solutions			Siemens	
LG	SIM			TDK	
Liebherr	Tyco			WAGO	Fraunhofer
Miele	Volkswagen			Waldmann	Hansecontrol
Neff	ZF			WIKA	Phoenix Testlab
PAS				Wittenstein	TÜV
Petra Electric				Woodward	VDE
Rodri					
Schaerer					
Schulthess					
Siemens					
Stiebel Eltron					
TEKA					
Vaillant					
WMF					

Working environments for people with ideas.



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