

Intelligent testing



With passion and competence

"Passion in customer orientation." If anyone asks about our corporate philosophy - that is our reply! The fact that over a third of our employees are engaged in service and support shows that these are far from being empty words.

As a family-run concern, with a tradition stretching back 150 years, we place great value on honesty and fairness. Over the years an ethos of close collaboration based on mutual trust between our customers, partners, suppliers and employees has evolved, something which we all value highly.

This collaboration has also had a positive effect on the development of the company. The Zwick/Roell Group is today the world leader in the static materials testing market and a leading supplier of dynamic testing systems. We are actively engaged in over fifty countries throughout the world and have over a thousand employees.

We manufacture products with the greatest possible care and precision for customers from all sectors and provide state-of-the-art solutions for research and development. Our testing machines are the embodiment of the proverbial 'Made in Germany' quality. See for yourself – for example, visit our annual testXpo testing technology forum at our headquarters in Ulm. You will be most welcome!

Yours sincerely,

Dr. Jan Stefan Roell
Chief Executive Officer, Zwick Roell AG

1854

1854 Amsler

1870 Mannheimer
Maschinenfabrik MFL

1920

1920 Roell + Korthaus

1935 Zwick

1979

1979 Zwick Testing
Machines England

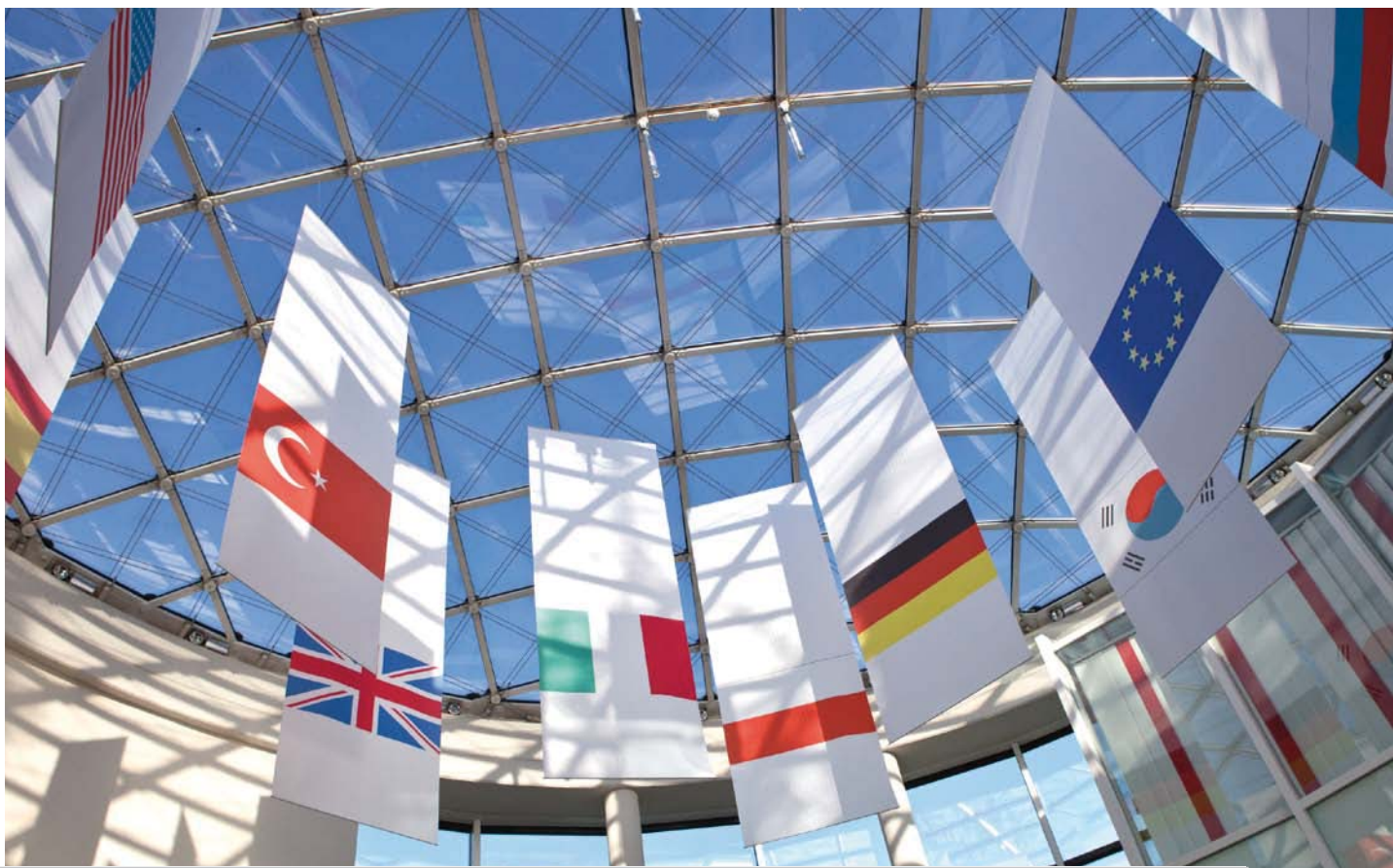
1982 Acquisition
of Amsler

1986

1986 Acquisition
of MFL

1986 Zwick France

Looking to the future. Zwick/Roell.



1992

1992 Merging of the
Roell Group and Zwick

1997 Zwick USA

1998

1998 Zwick Singapore

1998 Acquisition
of Indentec

2001 Establishment
of Zwick Roell AG

2005

2005 Collaboration
with Tokyo Koki
Seizosho in Japan

2006 Acquisition
of Messphysik

2007

2007 Acquisition of GTM

2007 Shanghai Zwick
Technology

2007 Zwick Spain

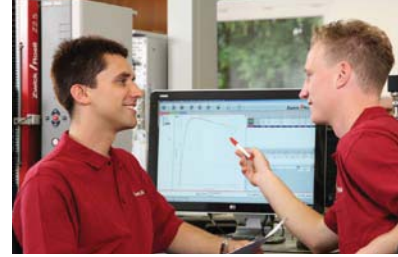
2010

2010 Panambra-Zwick
Brazil

2010 Zwick Avrasya Turkey

2011 Acquisition of Asmec

We are proud of our employees.
Zwick/Roell.



Our headquarters in Ulm employs over seven hundred people, many of whom have been with us for years – decades even. Their knowledge, ability and commitment lies behind the worldwide success of the Zwick/Roell Group.

To safeguard our high standards we invest in continuous advanced training. Our testing technology specialists leave no question unanswered, while our engineers are continually developing innovative testing technologies.

"The highest professional competence and tangible enthusiasm for our individual jobs make it easy for us to constantly question the status quo and to search hard for new and better customer solutions."

Zwick Corporate Guidelines



Many young people receive vocational qualifications after spending time in our training workshops or in our parallel 'practice firm', offering them the opportunity of secure employment.

Our commitment to HR issues is rewarded by the day-to-day performance of our employees. In 2009 this was recognized when we achieved 29th place in the category for companies with between 501 and 5,000 employees in the national 'Great Place to Work'® competition to find 'Germany's Best Employer for 2009'.

This 'seal of approval' confirms what we experience, on a daily basis, a strong team spirit within the company, collaboration between management and employees based on fairness, mutual respect and strong identification by employees with their work.

That is why we are proud of our 1,000+ employees around the world!

Concept-based industry solutions. Zwick/Roell.

ACADEMIA



AEROSPACE



FOODSTUFFS



MECHATRONICS



MEDICAL ENGINEERING



"Our customers trust in us because they know that they can rely on the exceptional quality of our products and support."

Zwick Corporate Guidelines

LEISURE/SPORT



SPRING INDUSTRY



AUTOMOTIVE



BUILDING MATERIALS



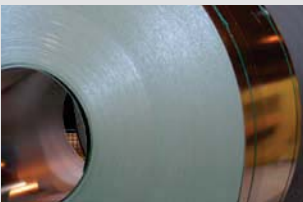
RENEWABLE ENERGIES



PLASTICS



METALS



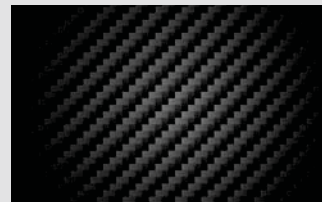
PAPER



TEXTILES



COMPOSITES

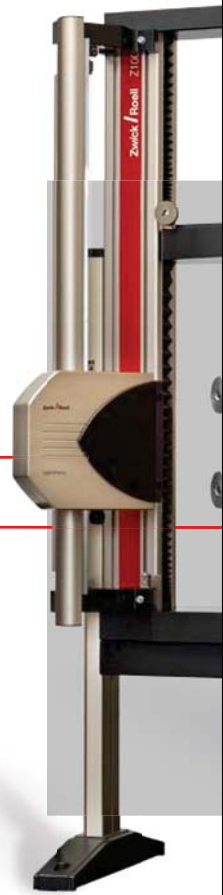


Whether plastics or metals, automotive or medical engineering – we provide tailor-made solutions for over twenty industries. Our wide range of testing machines, instruments and systems are equally at home in research laboratories or in production and quality control environments.

Our experts are familiar with the individual requirements of many different industries right down to the smallest detail, allowing them to tailor the solution exactly to the needs of the end user.

Our portfolio also includes a huge number of standardized solutions for standard tests – experts from the Zwick/Roell Group sit on numerous international standards committees.

System-based technologies. Zwick/Roell.



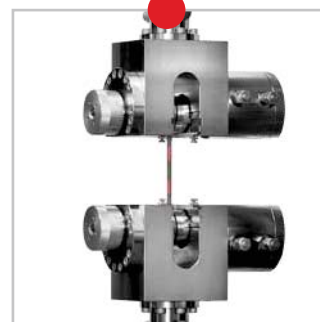
EXTENSOMETERS

SPECIMEN GRIPS



Unbeatable precision

Whether a contact or non-contact extension measurement system is required – both feature unbeatable measuring accuracy. Our systems undergo continuous development to deliver even greater precision.



Keeping a firm grip

We supply specimen gripping systems for all applications – ensuring that your specimens are held firmly and securely. We also have test fixtures available for the full range of compression and flexure tests.



LOAD CELLS

MEASUREMENT AND
CONTROL ELECTRONICS

TESTING SOFTWARE



Uncompromising accuracy

Our patented Xforce load cells offer significant advantages. They are extremely robust and so accurate that they satisfy all five criteria of the ISO 7500-1 accuracy classes in one large measurement range.



The core

For ten years *testControl* has been the core of every testing machine. Our sophisticated control electronics combine reliability with maximum user-friendliness.



Simply intelligent

Our intuitive *testXpert*® II testing software is an intelligent program developed by Zwick especially for materials testing. Today it is the market leader, with over 20,000 installations worldwide.

A standard made in Germany.
Zwick/Roell.



Static testing machines

Low-load-range precision.
PrecisionLine

Versatile in use.
zwickiLine

Maximum flexibility.
Zwick electro-mechanical testing actuator

The Zwick/Roell Group is the world's leading supplier of static materials testing machines, developed by our experts for use in demanding testing situations and in a wide range of applications.

Our static testing machines have been specially designed for tensile, compression and flexure tests, as well as shear and torsion tests, making them ideal for the most rigorous materials and component testing requirements.

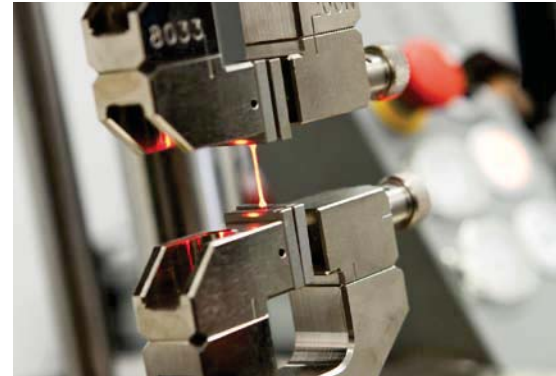
Machine frames in the 200 N to 2,500 kN force range offer a wide choice of test strokes and speeds, with high-quality frames combined with intelligent drive systems. All systems feature simple, flexible integration of load cell, specimen grips and extensometer.

Our testing machines in the range up to 5 kN include zwickiLine and PrecisionLine, while ProLine and AllroundLine feature load frames from 5 to 250 kN. The high-capacity machines in the E and Y series are available in a load range up to 2,500 kN.

testControl, the sophisticated measurement and control electronics at the core of every testing machine, combines ease of operation with total reliability.

Developed specifically for materials and component testing, our intuitive *testXpert®* testing software adapts intelligently to varying situations and guarantees maximum accuracy and reproducibility for test results.

All our testing systems comply with the current EC Machinery Directive.



Ideal for standard testing situations.
ProLine



For complex testing applications.
AllroundLine



For major challenges.
High-capacity machines up to 2,500 kN

Dynamic performance. Zwick/Roell.



Dynamic testing machines

High cycle fatigue.
Vibrophores with
resonance drive system

Simple and compact.
Servo-hydraulic table-top testing machines
for materials and component testing

Multi-axial applications.
Multi-axial test-stands
for component testing

For several decades the Zwick/Roell Group has been providing successful solutions for fatigue-testing applications.

Our experts work hand-in-hand with our customer, ensuring perfect solutions for every industry.

From the compact servo-hydraulic table-top testing machine to the multi-axial test portal in the meganewton range, we can provide the optimum solution for our customers.

As well as testing systems, the Zwick/Roell Group's product range includes specimen grips, measurement and control electronics, testing software and essential hydraulic

components such as power packs, hydraulic pipework, testing actuators - everything to cover your individual requirements.

The efficiency of a testing system, is to a large extent, determined by the control electronics in use. We offer high-performance solutions to suit different needs: Control Cube for multi-axial applications and modernizations and *testControl II* for complex testing situations.



Ready for anything.
Fatigue testing machines
up to 2,500 kN

When speed is essential.
Servo-hydraulic high-speed
testing machines

Equipped for the big jobs.
Tension-torsion testing machines
up to 1,000 kN



Variety from the specialists. Zwick/Roell.

For decades we have maintained an up-to-date product range which we have continuously expanded and adapted to provide a tailored solution to the demanding testing situations of our customers. This approach means that today we have a high-quality range of state-of-the-art testing systems available for all industries.

Whether sheet-metal testing machines, extrusion plastometers for determining melt index or pendulum impact testers for impact tensile tests – we have the optimum solution to hand for all types of application.

The Zwick/Roell Group are also hardness testing specialists – we can supply the right system for all test methods.



Sheet metal testing machines

Sheet-metal testing with optical strain measurement

Sheet metal testing machines up to 1,000 kN



HDT/Vicat instruments and extrusion plastometers

Flexible determination of HDT/Vicat characteristic values of thermoplastics

Manual and fully automatic determination of melt index



Pendulum impact and drop-weight testers

From 5 to 50 J.
The HIT range of pendulum impact testers

Pendulum impact testers up to 750 J.
Impact tensile tests to all established standards

Puncture tests on plastics and composites with the HIT drop weight tester



Hardness testing machines

Universal nanomechanical testing system for surfaces and thin coatings

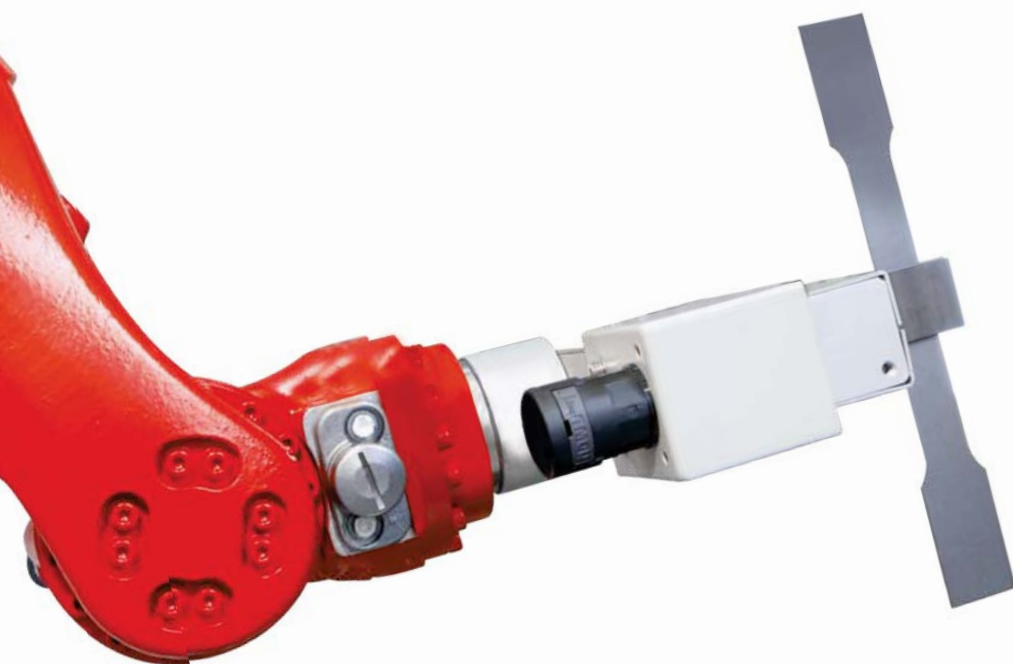
Vickers hardness testers for automated individual and multiple hardness tests

Various testing instruments for all Rockwell methods

Individuality and quality. Zwick/Roell.

Did you know that the world's biggest pendulum impact tester was built by Zwick? With an overall height of over 6.5 meters and a total weight of 90 tonnes, it is used in China for tests on raw materials for pipelines to ASTM E436 and API RP5L3.

This shows that the Zwick/Roell Group are the experts when it comes to special solutions. We set new benchmarks in the design and development of unique products and make testing possible on a new and greater scale than ever before.



Multi-axis testing solutions for static and dynamic testing situations



Creep-testing machines for relaxation and retardation tests

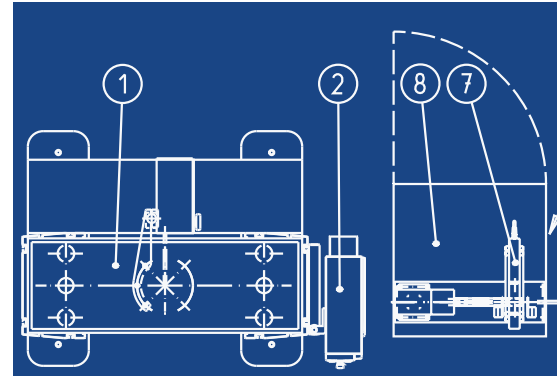


Robotic testing systems for a wide range of materials and tests

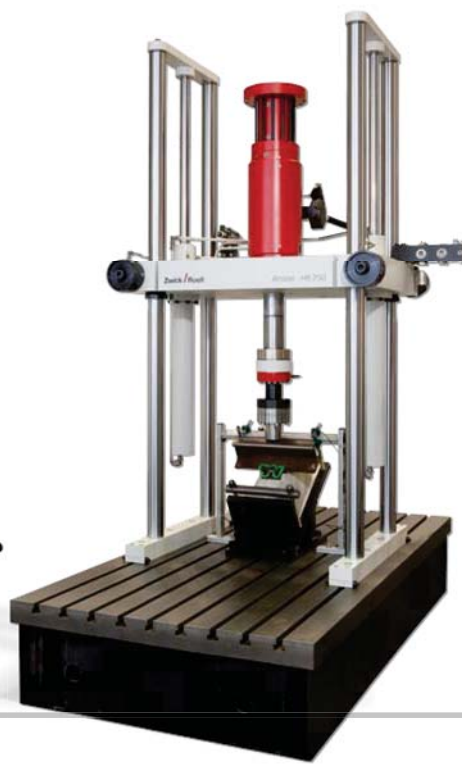
In whichever field special testing instruments and systems are required, we can supply appropriately tailored solutions. Testing system expansion is also part of our portfolio, for example installing high-temperature furnaces, climatic chambers or additional sensors.

Our experts are in constant contact with our customers to determine their exact testing and performance requirements and to respond to their needs.

Our tailor-made solutions also include robotic testing systems developed by Zwick to reduce operator influence and ensure reproducible test results. So far we have successfully installed over 400 systems worldwide.



Compact robotic testing systems – the first step to automation



Servo-hydraulic test portals for single and multi-axis applications



The world's biggest pendulum impact tester, used for impact tensile tests on pipeline materials

Services worldwide. ZwickService.

Passion in customer orientation is our top priority at ZwickService. That is why we are active on your behalf in over 56 countries worldwide with one aim – to provide first-class service.



„With Zwick it is Service with a capital ‘S’. We are very satisfied with all Zwick services and appreciate our friendly business relationship.“

M. Löberich, Linde + Wiemann

Your testing system is in good hands at Zwick, with expert support provided by experienced applications engineers and technical consultants. Our Applications Test Laboratories are comprehensively equipped with a wide range of static and dynamic materials testing systems.

Our service technicians guarantee successful, trouble-free commissioning – from preliminary acceptance and installation, through initial calibration to instruction on hardware and software, including all necessary safety briefing.

Naturally we can also carry out the required annual inspection and calibration. Whenever our customers need help of any kind – we are at their service!

Our Hotline provides support in the event of hardware and software malfunctions, while our Support Desk guarantees individual advice or rapid assistance via remote access.

We effect repairs directly on the spot or at our premises, including 24-hour spare-part dispatch and individual spare-part packages.

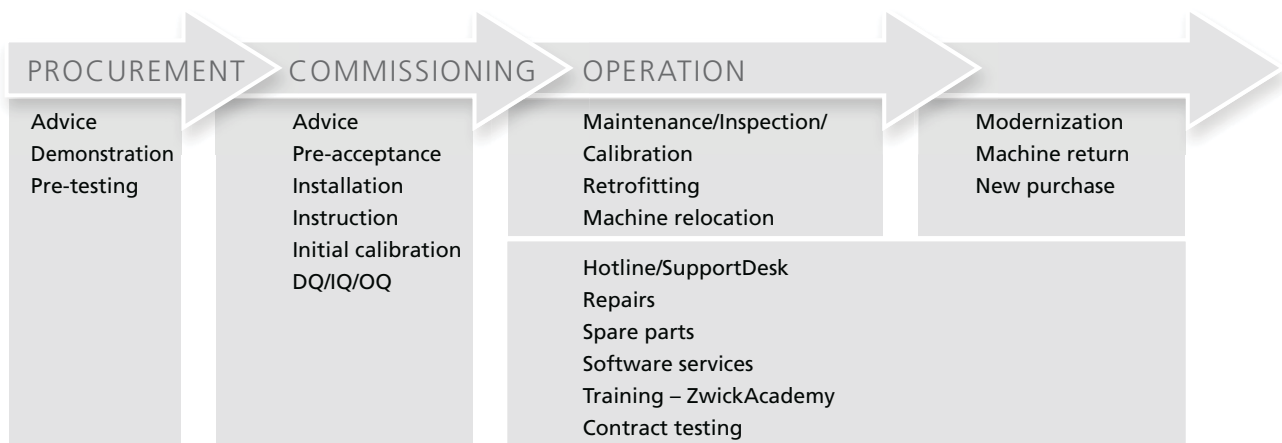
For our customers in the medical and pharmaceutical industries, Zwick provides specialized support in the form of DQ/IQ/OQ qualification.

Training courses either at our ZwickAcademy in Ulm or at our customers' sites, cover all subjects connected with materials testing.



Does your testing machine no longer match up to today's requirements? We can perform retrofits and modernizations of testing systems, bringing them up to date using state of the art controllers and software.

We provide continuous support throughout the entire life-cycle of materials testing systems.



Service from start to finish. ZwickService – advice you can trust!

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Zwick GmbH & Co. KG

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Indentec

Hardness Testing Machines Ltd.
www.indentec.com

Messphysik Materials Testing GmbH

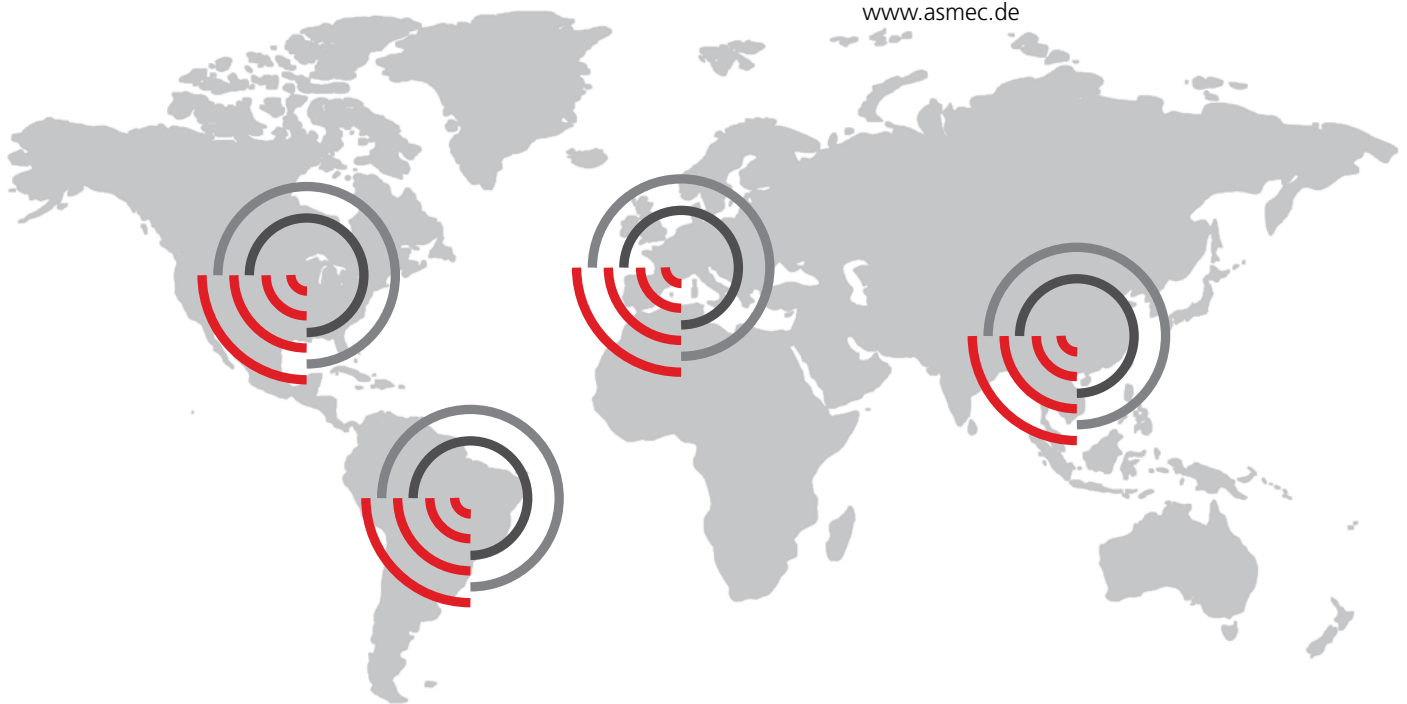
www.messphysik.com

GTM Gassmann Testing and Metrology

www.gtm-gmbh.com

ASMEC GmbH

www.asmec.de



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