

WELCOME TO
KoCos
A FRIEND OF ENERGY

kocos.com





KoCoS

- 1988 Foundation of the company in Korbach, Germany with load management systems
- 1995 Foundation of the first KoCoS subsidiary in South Africa
- 2000 Foundation of KoCoS Optical Measurement GmbH in Weimar
- 2002 Foundation of the KoCoS subsidiary in the USA
- 2006 Foundation of KoCoS Engineering GmbH in Dorsten
- 2007 Foundation of the KoCoS subsidiary in China
- 2013 Foundation of the KoCoS branch in Poland
- 2013 Foundation of the KoCoS branch in Bahrain



Thomas Becker, CEO





Electrical Metrology

- Circuit Breaker Testing
- Resistance Measurement
- Protection Relay Testing
- Meter Testing
- Digital Fault Recording
- Power Quality Measurement
- Power Sources



Optical Metrology

- Wafer Edge Profile Measurement
- Vacuum Inspection
- 3D Measurement and Inspection
- Catalytic Converter Measurement



Engineering & Services

- Maintenance services for electrical installations
- Optimization of power supply networks



Seminars & Training Courses

- Know-how based on experience



All KoCoS products and solutions from one source

- Idea
- Conception
- Development
- Design
- Production
- Marketing





KoCoS

1988	(Foundation) Load optimisation systems	EVU2000
1992	Digital fault recorder systems	SHERLOG
1993	Switchgear test systems	ACTAS
1996	Protection relay test systems	ARTES
1999	Meter test systems	METES
2000	Power quality measuring systems	EPPE
2003	Edge profile measuring systems	WATOM
2004	Catalytic converter measuring systems	OMCAT
2007	Power sources	EPOS
2008	Resistance measuring system	PROMET
2011	Vacuum test systems	INDEC
2018	Optical measuring system	LOTOS

ACTAS:
KoCoS has been world market leader in circuit breaker testing for over 30 years

WATOM:
KoCoS defines SEMI standard M73 in the wafer edge profile measurement

SHERLOG:
KoCoS defines standards with one of the world's most successful fault recorder systems



Measuring and test systems for the power engineering sector

- Circuit breaker testing
- Resistance measurement
- Protection relay testing
- Meter testing
- Digital fault recording
- Power quality measurement
- Power sources



ACTAS – Circuit breaker testing

- Portable and stationary test systems for performing fully automatic function tests on all types of switchgear devices
- Precise information as to the condition of the chambers and drive unit without them having to be opened
- Close cooperation with all leading switchgear manufacturers worldwide for 30 years
- Consistency of the comparative measurements made during production and continuing on throughout the lifetime of the circuit breaker





PROMET – Resistance measurement

- High-precision micro-ohm measuring systems for determining resistances
- Test current of up to 600 A delivers measurement results which meet stringent accuracy requirements
- High accuracy with four-wire measurement method
- Resistance measurement on inductive loads up to 1 GVA and 1000 Henry
- Connection to ACTAS test instruments via an appropriate interface





ARTES – Protection relay testing

- Compact, powerful relay test systems with 4 voltage and 6 current outputs
- Test currents of up to 6 x 32 A / 250 VA and 3 x 64 A / 500 VA
- Various communication interfaces such as USB, 3 x Ethernet, Wi-Fi, GPS
- Testing IEC 61850-compliant protection equipment
- Internal TJCP operator interface for stand-alone operation without a PC
- The scope of delivery includes the comprehensive testing software with all software modules





METES – Meter testing

- Meter test systems with high accuracies of up to 0.02%
- Testing the accuracy of Ferraris meters and electronic electricity meters under any operating conditions
- Precise measurements in 1-phase and 3-phase applications
- Network analysis functions, including harmonics / waveform display





SHERLOG – Digital fault recording

- Power quality analyser for monitoring and assessing low, medium and high voltage networks in power plants / transformer substations
- High-resolution recordings of faults in power supply systems
- Recording of the behaviour of protection and switchgear devices during system disturbances
- Used by the world's leading power supply companies
- Certification even for extreme operating conditions





EPPE – Power quality measurement

- Power quality measuring systems with integrated fault recorder functionality for automatically monitoring electrical installations at all voltage levels
- Continuous, precise recording of all the electrical parameters of the power supply
- Detailed quality evaluations reveal even the slightest of deviations, identification of the cause of disturbances
- Monitoring of decentralized power supply systems





EPOS – Power sources

- AC/DC sources for powering and testing motors and release coils of switchgear devices as well as electronic three-phase signal generators for generating any waveform
- Maximum power and high signal precision
- For testing, setting and calibrating electricity meters, protection relays, fault recorders, power meters and power quality analysers
- Stand-alone operation, PC control





Measuring and test systems for optical metrology

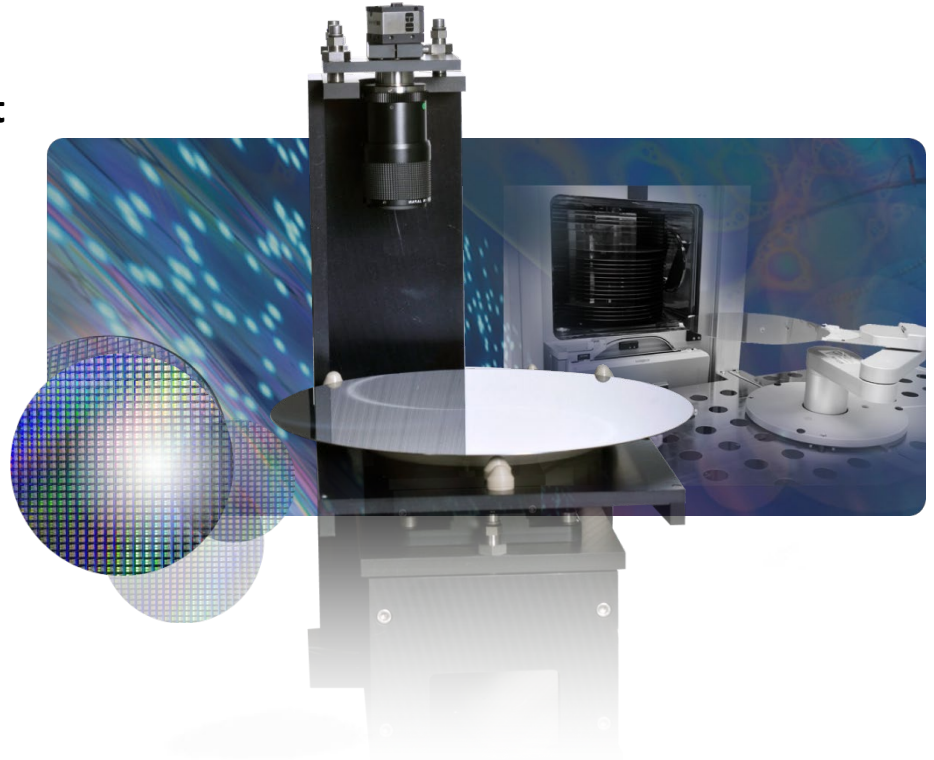
- Wafer edge profile measurement
- Vacuum inspection in the food industry
- 3D measurement and inspection
- Catalytic converter measurement





WATOM – Wafer edge profile measurement

- Fully automatic, non-contact measurement of edge profiles and diameters in accordance with SEMI standards
- Edge profile measurement in the notch area of the wafer
- High measurement accuracy of less than $1.5\ \mu\text{m}$ for shop-floor geometrical quality control
- Definition of the SEMI standard M73





INDEC – Vacuum inspection of containers in the food industry

- Fully automatic, non-contact inspection of the leak tightness of containers (bottles, jars, cans) in the production process
- Identification / rejection of defective containers
- Very sensitive measuring procedure from 50 μm cap deformation or 150 mbar differential pressure
- Teach-in function/self-learning procedure for generating sensor parameters (recipes) - no KoCoS technician required
- Suitable for all cap materials including plastic from 30...110 mm in diameter





LOTOS - 3D measurement and inspection

- Precise measurement of outer and inner contours of various measurement objects / testing for defects
- Non-contact, three-dimensional measurement using optical measurement sensors with accuracy in the μm range
- Representation of the measurement result in a 3D model
- Fast assessment of measurement results thanks to powerful, intuitive software





OMCAT – Catalytic converter measurement

- Geometrical measurement tasks on exhaust catalytic converters
- Determination of the gap bulk density GBD
- Innovative measurement functions combined with reliable technology
- High measurement accuracy and measurement speed
- Used by all leading automobile manufacturers and suppliers





Services for the power industry

- Engineering and other services related to all aspects of the electrical power supply
- Secondary and protection equipment testing
- Measurements and analyses for power quality
- Network concepts and network calculations
- Project management, installation and commissioning of secondary equipment





Seminars & Training Courses

- Regular product training courses in Korbach / Weimar or on customers' premises
- Training courses by qualified engineers with many years of professional experience
- Optimum learning environment with small workgroups
- State-of-the-art measuring and test equipment for the practical application of what has been learned





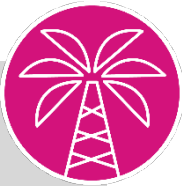
Over 30 years of trust

Our partners

- KoCoS is one of the world's leading manufacturers in the field of electrical and optical metrology
- Many well-known companies rely on products and services provided by the KoCoS group

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- SOS Children's Villages
- Misereor
- Balthasar Children's Hospice
- Children's Hospice of Central Germany



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