

# TESTING IN MACHINERY MANUFAC-TURING

For Enhanced Productivity and for the Electrical Safety of Products and Systems





#### **TRAINING**



Ongoing qualification enjoys top priority, because complex measuring tasks, standards and regulations are subject to continuous change. Our trainers are experienced experts who are familiar with the requirements based on actual practice and always keep themselves up to date.

## PRODUCT SUPPORT



GMC-I Messtechnik GmbH offers comprehensive services and consultation. Specially trained experts provide you with support concerning all aspects of our product range.

Our product support department makes numerous support services available, regardless of whether you need to solve a problem with a product, require on-site technical support, want help with one of our software products or are seeking technical advice regarding standards or measuring applications.

#### PRODUCTION EQUIPMENT

To the greatest possible extent, the operation of production equipment should be interference and interruption-free, as well as cost-effective, and should assure maximized safety for operating and assembly personnel. When a malfunction or an interruption occurs, it has to be eliminated as quickly as possible in order to maintain optimized systems utilization. Production is rendered efficient and resources are conserved by monitoring and optimizing the flow of energy.

#### **OUR SOLUTIONS FOR YOUR REQUIREMENTS**

- Energy management systems for monitoring and optimizing energy consumption,
   e.g. ENERGYMID, SMARTCONTROL, SMARTCOLLECT
- Heavy current and power quality monitoring, e.g. AM3000, MAVOWATT
- Multimeters for maintenance and troubleshooting, e.g. METRAHIT ETECH
- Test instruments for testing the electrical safety of permanently installed and portable electric devices,
   e.g. SECUTEST, PROFITEST
- Instruments for testing machines per DIN VDE 0113-1, e.g. PROFITEST PRIME





## **DESIGN ENGINEERING, R&D**

Those who seek out and develop innovative solutions are confronted with challenges again and again. The functional demands placed upon measuring and test technology are accordingly diverse and extensive – and simple, intuitive operation should also be assured.

#### **OUR SOLUTIONS FOR YOUR REQUIREMENTS**

- Power supplies for simulating energy sources, e.g. the SSP 32N series and the SYSKON P series
- Electronic loads for simulating consuming devices, e.g. the SPL series
- Power quality monitoring instruments, e.g. MAVOWATT, PQ3000
- Heavy current monitoring and measuring transducers for systems monitoring, e.g. AM3000, DM5
- Energy logging, e.g. ENERGYMID
- Multimeters for testing parts and components, e.g. METRAHIT

#### **MANUFACTURING**

Comprehensive quality assurance documentation has become a standard customer requirement in the field of machinery and equipment manufacturing. The use of measuring and test technology is thus imperative in production and final inspection.

#### **OUR SOLUTIONS FOR YOUR REQUIREMENTS**

- Multimeters for testing parts and components, e.g. METRAHIT 27M
- Power supplies for endurance and stress tests, e.g. the SSP 32N series and the SYSKON P series
- Electronic loads for endurance tests, e.g. the SPL series
- Test instruments with high-voltage and remote operation for testing the electrical safety of permanently installed and portable devices, e.g. SECUTEST
- Testing of insulation resistance up to 40  $T\Omega$  with up to 10,000 V, e.g. METRISO





#### **BUILDING MANAGEMENT**

As a subdomain of facility management, technical building management involves the maintenance of the functional performance of buildings and systems along with their technical equipment such as elevators, heating, air conditioning, lighting etc.

#### **OUR SOLUTIONS FOR YOUR REQUIREMENTS**

- Energy management systems for monitoring and optimizing energy consumption, e.g. ENERGYMID, SMARTCONTROL, SMARTCOLLECT
- Heavy current monitoring and measuring transducers for systems monitoring, e.g. AM3000, DM5
- Power quality monitoring instruments, e.g. MAVOWATT, PQ3000
- Test instruments for testing the electrical safety of electrical installations in buildings, e.g. PROFITEST
- Multimeters for testing, servicing and maintenance of electrical installations, e.g. METRAHIT PRO
- Photographic technology und photometry for optimizing lighting, e.g. MAVOLUX-5032BUSB

#### **AFTER-SALES**

Where after-sales service is concerned, maintenance and repair options are of central significance for customer satisfaction and long-term loyalty.

#### OUR SOLUTIONS FOR YOUR REQUIREMENTS

- Multimeters for maintenance and repair services, e.g. METRAHIT
- Test instruments for testing the electrical safety of permanently installed and portable electric devices,
   e.g. SECUTEST
- Test instruments for monitoring the effectiveness of protective measures, e.g. PROFITEST
- Power quality monitoring instruments, e.g. MAVOWATT





#### RESEARCH AND DEVELOPMENT

Those who seek out and develop innovative solutions are confronted with challenges again and again. The functional demands placed upon measuring and test technology are accordingly diverse and extensive – and simple, intuitive operation should also be assured.

#### **OUR SOLUTIONS FOR YOUR REQUIREMENTS**

- Multimeters for testing parts and components, e.g. METRAHIT H+E CAR
- Power supplies for simulating energy sources, e.g. the SSP 32N series and the SYSKON P series
- Electronic loads for simulating consuming devices, e.g. the SPL series
- Power quality monitoring instruments, e.g. MAVOWATT

## SERVICE/CALIBRATION



The GOSSEN METRAWATT calibration center is accredited per DIN EN ISO / IEC 17025 as a DAkkS calibration lab under registration no. D-K-15080-01-01. We calibrate the following measured quantities:

Electrical quantities, temperature, pressure, mass, scales, parallel gauge blocks, industrial measuring instruments, atmospheric humidity, viscosity, pH value, density, torque

#### PROJECT ENGINEERING



We plan and implement your project in accordance with your requirements – right on up to initial start-up.

Complete project solutions targeted at reducing energy costs by logging, controlling and optimizing energy consumption by means of control cabinets with measuring transducers, as well as complete test benches with automatic VDE test instruments including our own and other supplementary products

#### **SECUTEST PRO**

## **SYSKON SERIES**



The SECUTEST generation provides you with even more safety when testing electric devices. The unique operating concept based on a rotary switch with two operating levels assures error-free, quick and safe testing. The optimized test cycles make it additionally possible to complete more tests per day.



SYSKONP series KONSTANTERS (SYSTEM KONSTANTERS) are single-channel, programmable laboratory power supplies for demanding professional use in R&D, production and test systems.

#### EM2389

## 50SSEN METRAWATT 97KWh 18 KY 18 KY

ENERGYMID energy meters offer maximized functionality at a low price. The extremely compact design leaves you with more room in the distributor or control cabinet for other necessary functions.

Thanks to numerous interfaces, the meters are easy to integrate into existing systems. The energy meter is approved in accordance with MID as of shipment from the factory and can be used for logging and billing active energy.

#### SINEAX AM3000



The SINEAX AM3000 is a complete unit for measurement and monitoring in power systems.

It's distinguished by the quality of its display and intuitive operation. The instrument makes broad-ranging functionality available to the user, which can be further expanded with optional components. It can be used directly for all systems without any hardware changes — from single-phase right on up to 4-wire systems with unbalanced load.

## **PROFITEST PRIME**



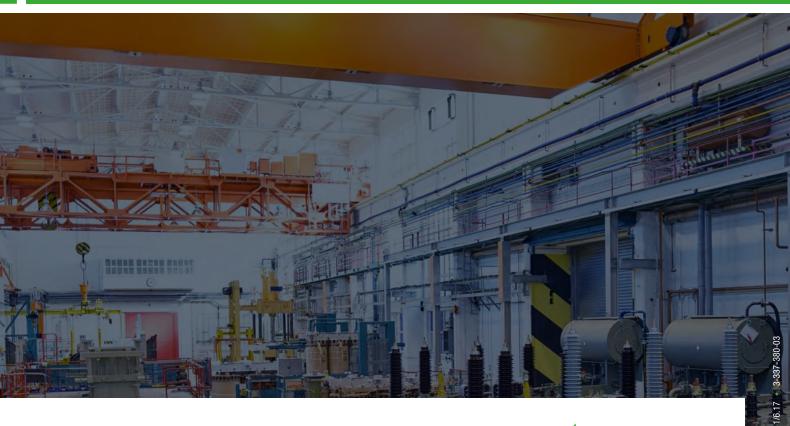
Test instrument for testing the effectiveness of protective measures in electrical installations per DIN VDE 0100-600, machines and systems per VDE 0113-1, low-voltage switchgear and controlgear assemblies per VDE 0660-600-1, PV systems per VDE 0126-23 and electric charging stations per VDE 0122-1.

## METRAHIT ETECH



With a digital multimeter from the METRAHIT E series, you get an ultramodern, top quality measuring instrument with unique precision:

with a resolution of 60,000 digits and basic accuracy of 0.05%, these instruments assure extremely reliable results. Thanks to their broad-ranging scope of functions, they cover an extensive spectrum of demanding measuring tasks and their ergonomic design makes it a pleasure to work with them every day.



**GMC** INSTRUMENTS

GOSSEN METRAWATT CAMILLE BAUER

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