



**calibration & metrology**



- ✔ Europe`s largest owner managed metrology laboratory
- ✔ Established in 1976
- ✔ Manufacturer independent
- ✔ Accredited since 1997:  
D-K-15019-01-00,  
DIN EN ISO/IEC 17025:2018

# ABOUT US



## esz AG in figures

- ✔ 25.000 satisfied customers
- ✔ 200.000 calibrations per year
- ✔ Over 200 accredited quantities
- ✔ 45 years of experience
- ✔ 7 locations in Europe
- ✔ 200 employees
- ✔ 2 mio Euro annual investment





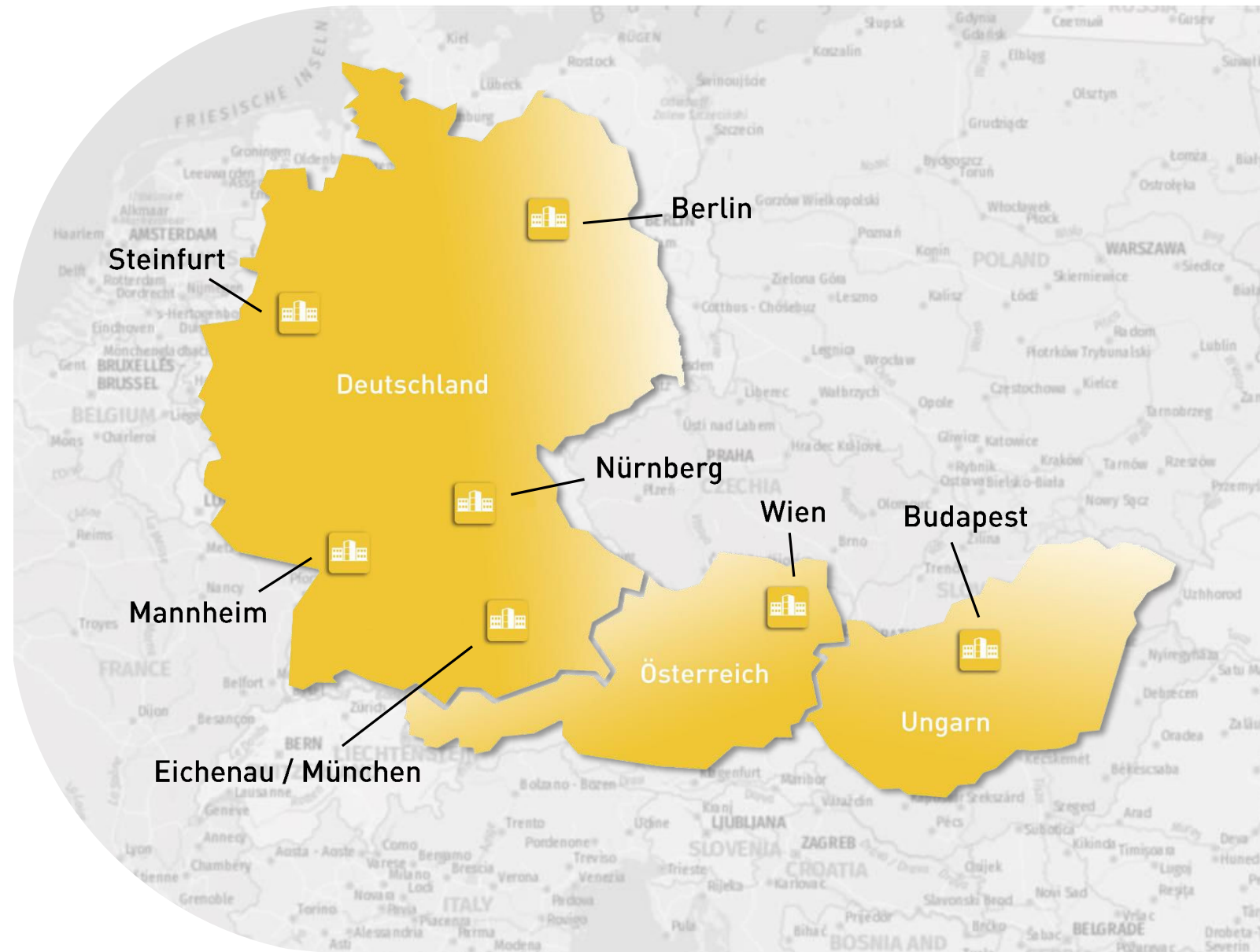
# Teamwork

- ✔ 200 employees at 7 locations
- ✔ Colleagues from 20 nations
- ✔ Continuous growth  
(2009: 63 > 2023: 243)
- ✔ Above-average period of employment
- ✔ High level of expertise



# Our locations

- ✓ Eichenau (Headquarter)
- ✓ Nürnberg
- ✓ Mannheim
- ✓ Steinfurt
- ✓ Berlin
- ✓ Vienna (Austria)
- ✓ Budapest (Hungary)





# Customers & Markets

Industries



Medical Technology



Mechanical Engineering



Telecommunications



Electronics



Automotive



IT / Software



Automotive inspection bodies



Transportation / Logistics



Environment



Energy





■ Calibration



# CALIBRATION

# Calibration

- ✔ Accredited :  
DAkkS D-K-15019-01-00  
DIN EN ISO/IEC 17025:2018
- ✔ Factory calibration /  
ISO-compliant calibration
- ✔ Customized







## DAkkS- und ISO-Calibration

- ✓ DAkkS accredited calibration
- ✓ ISO calibration according to the requirements of DIN EN ISO/IEC 17025:2018
- ✓ Traceability, specifications and quality characteristics, conformity assessment, procedures and requirements are identical
- ✓ Fast and flexible order processing in own laboratories
- ✓ Calibration certificate available digitally as pdf document (full version) and/or as paper document (short version)

## Digital Calibration Certificate

- ✔ Full evaluation with detailed measurement data
- ✔ Download with QR code or certificate data via
  - esz-calibration certificate portal: [www.esz-ag.de/kalibrierscheindownload](http://www.esz-ag.de/kalibrierscheindownload)
  - Test equipment management software asset expert





## Hardcopy Calibration Certificate

- ✓ On customer request
- ✓ Content:
  - Calibration object and method
  - Ambient and measurement conditions
  - Place of calibration
  - Measurement uncertainties, traceability chain and due date
  - Evaluation, whether given results meet specified requirements or not



# Calibration certificates with customer logo

- Available on request for accredited calibrations (DAkkS) and factory calibrations (ISO)
- Factory calibration certificates also available without esz-Logo on request





# ON-SITE CALIBRATION



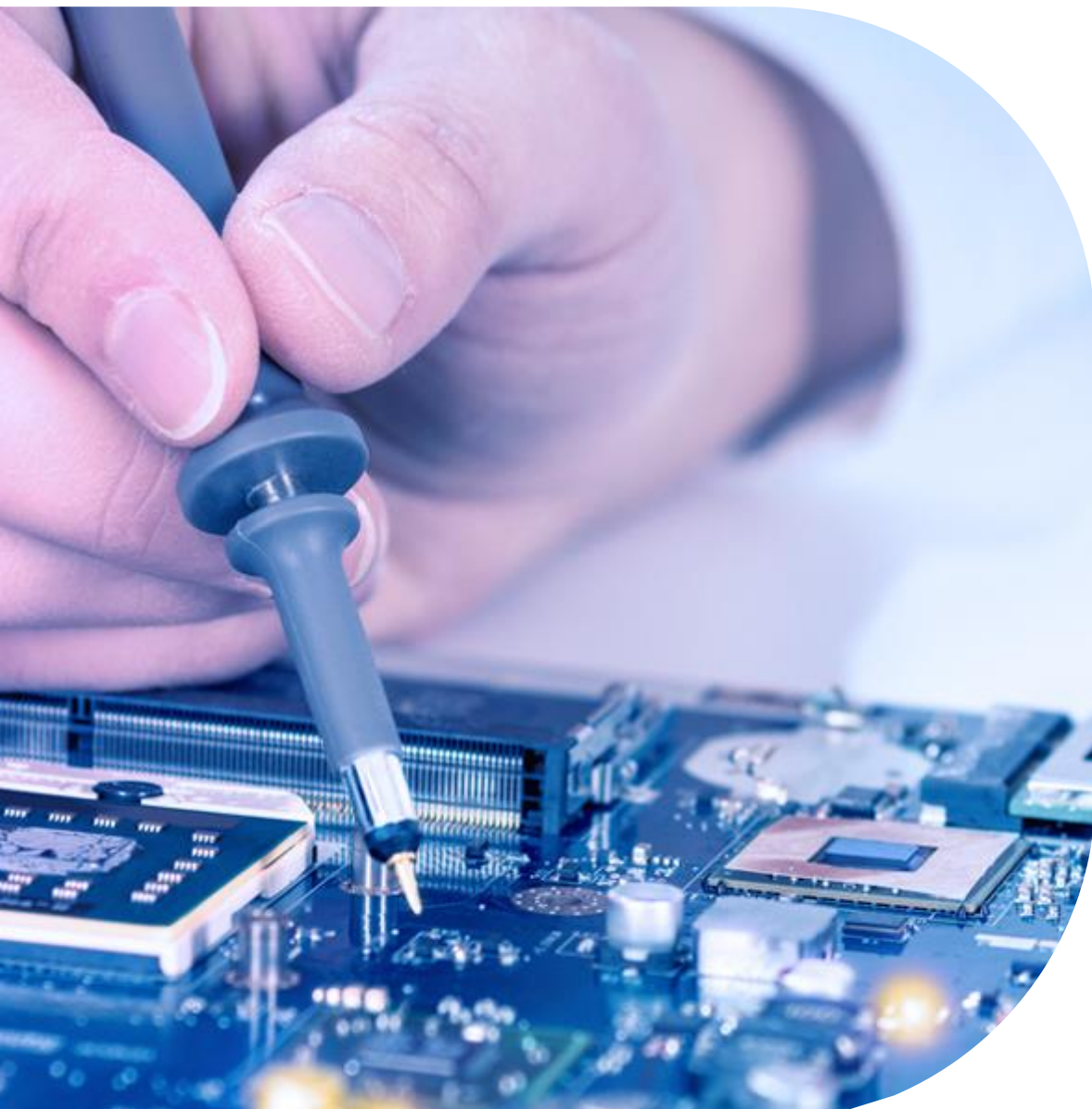
## Calibration with customers

- ✓ Minimal downtime for measuring devices
- ✓ Standard-compliant calibration, like in the laboratory
- ✓ No transportation costs and no transportation risk
- ✓ Own laboratory containers available
- ✓ DAkkS-accredited calibrations and ISO/factory calibrations possible





**REPAIR**



## Equipment service and repair

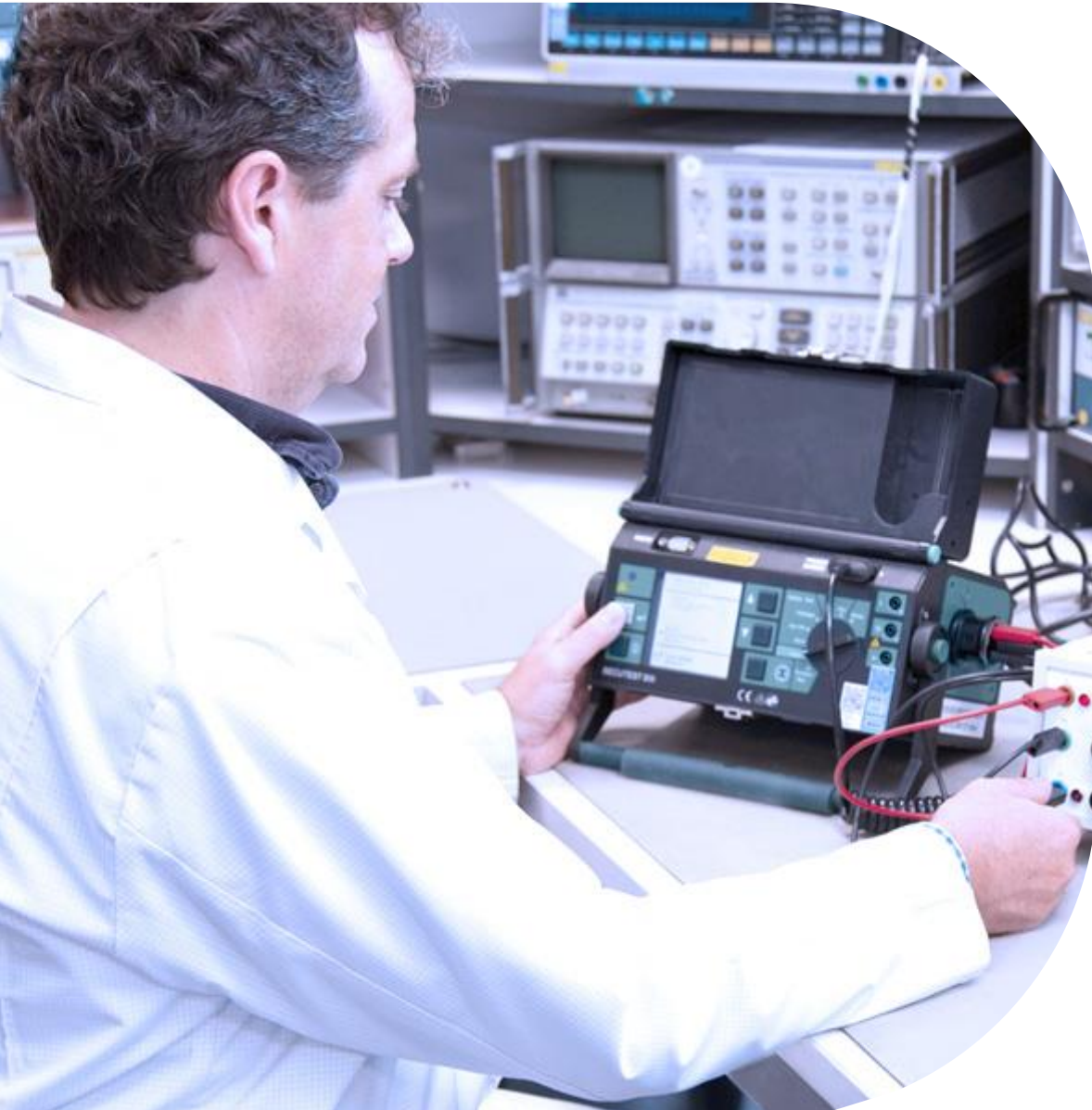
- ✔ Manufacturer-independent repair hub
- ✔ Extensive service catalog
- ✔ Archive with over 20,000 service documents/manuals
- ✔ Service cooperation with well-known manufacturers
- ✔ esz adjustment is only charged if 100% possible





# SAFETY INSPECTION / DGUV-V3





## Safety inspection / DGUV-V3

- ✓ Manufacturer-independent safety testing of electrical measuring equipment according to DGUV V3 as part of the calibration order or as an individual order.
- ✓ Safety tests of electrical equipment in three sections according to the DGUV V3 test protocol:
  - ✓ visual inspection
  - ✓ functional test
  - ✓ measurement check
- ✓ Legally compliant test protocol
- ✓ Marking of the device with test sticker



# LOGISTIK EXPERT

tion & metrology



## Logistik Expert / On-site

- ✔ Professional pick-up and transport service in Germany, Austria, Hungary, Poland and Benelux
- ✔ Short downtimes
- ✔ Trained specialist personnel
- ✔ Own equipment-specific transport packaging
- ✔ Full value insurance
- ✔ Daily delivery routes
- ✔ Cost transparency for on-site service
- ✔ Onsite calibration at the customer's location





# CONSULTING & TRAINING



## Trainings

- ✓ esz competence training
- ✓ Seminars
- ✓ Trainings
- ✓ Employee trainings



# Consulting

- ✔ Feasibility check for metrological projects
- ✔ Calibration procedure descriptions and measurement uncertainty budgets
- ✔ Implementation in calibration expert
- ✔ Training of esz departments and external partners
- ✔ Development of calibration procedures and measuring stations for esz AG
- ✔ Accreditation sharing and authorization network coordination for external organisations







■ Software

The logo for CEPS, consisting of the letters 'CEPS' in a bold, dark blue, sans-serif font. The 'E' is stylized with three horizontal bars. Above the 'E' are two horizontal yellow lines, and below the 'E' are two horizontal yellow lines.

calibration expert partner system



## CEPS

- ✓ Calibration of test equipment directly in the company
- ✓ Creation of individual calibration description with complete measurement uncertainty balance in accordance with EA 4/02 (prev. DAkkS-DKD-3)
- ✓ Traceability of the calibration equipment / standards used, verification and test equipment monitoring
- ✓ Organisation, processing and evaluation of interlaboratory comparisons (proficiency tests)



**calibration expert plus:**  
Calibration management



**asset expert plus:**  
Test & Measurement equipment management

# SOFTWARE





With over 200 accredited quantities, esz AG is one of the leading laboratories in Europe. The scope of accreditations is growing every year.

# ACCREDITATION

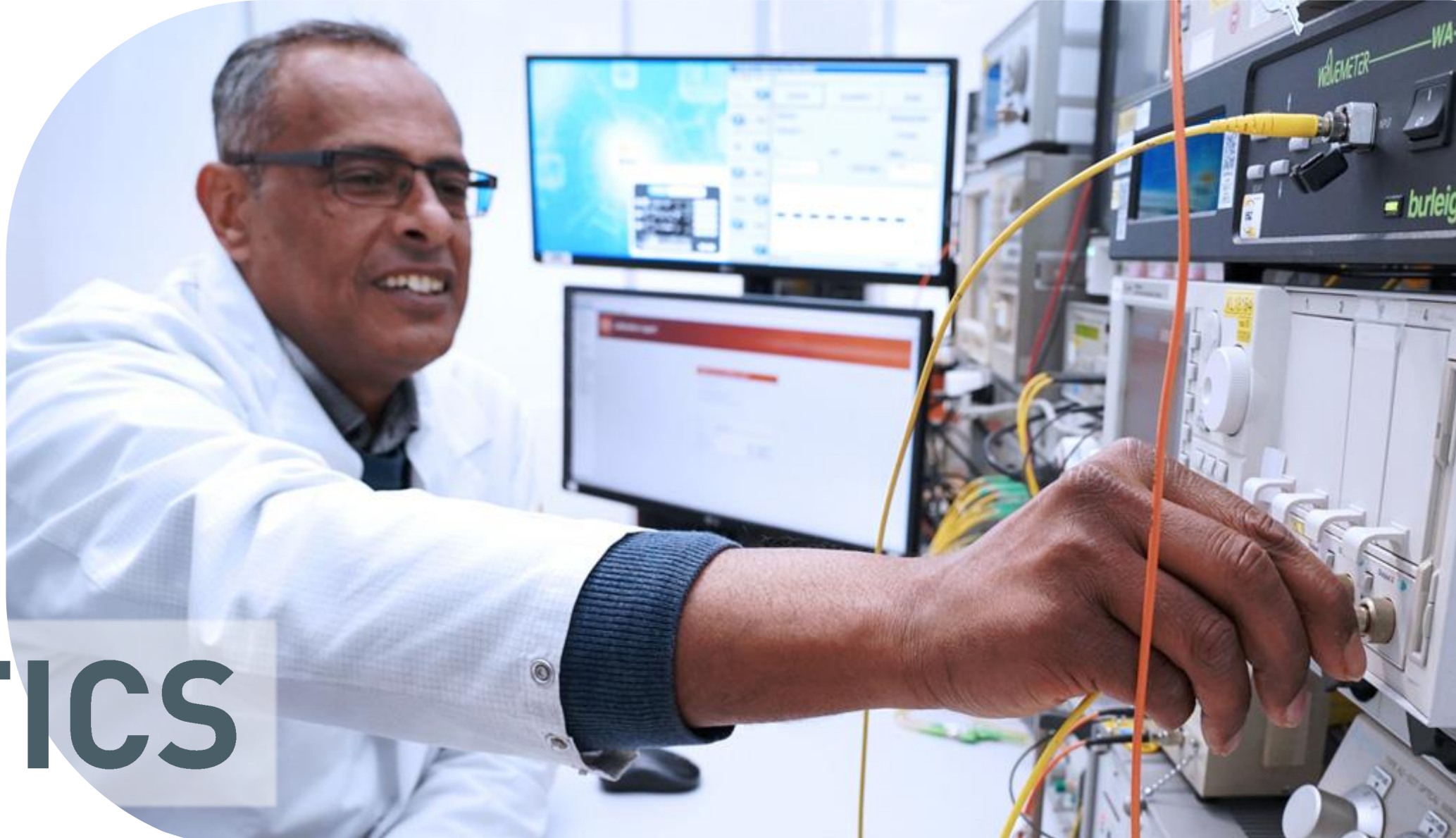


Quantities



# ELECTRICS





# OPTICS





# HUMIDITY

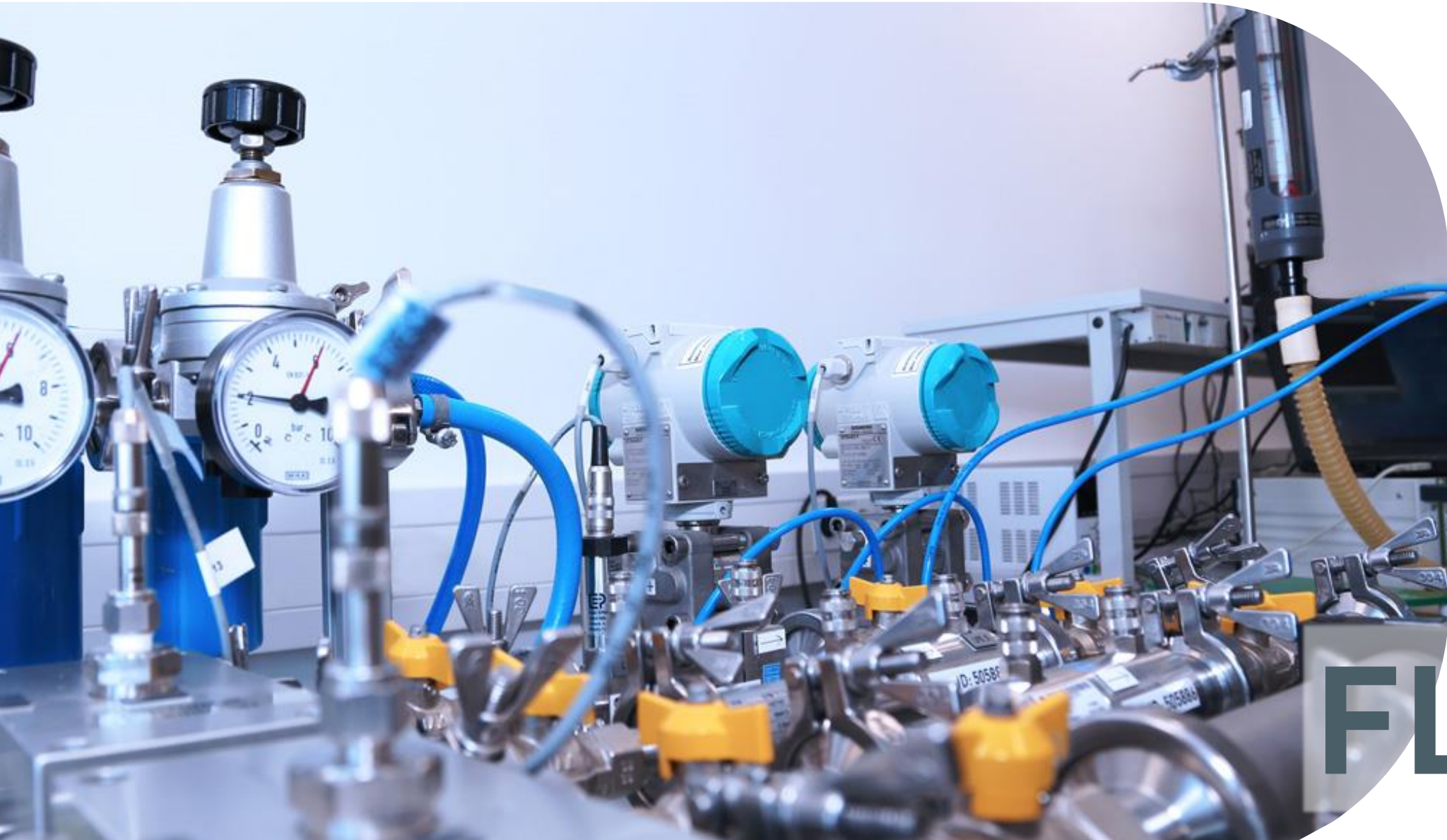


# MECHANICS





Quantities



**FLOW**

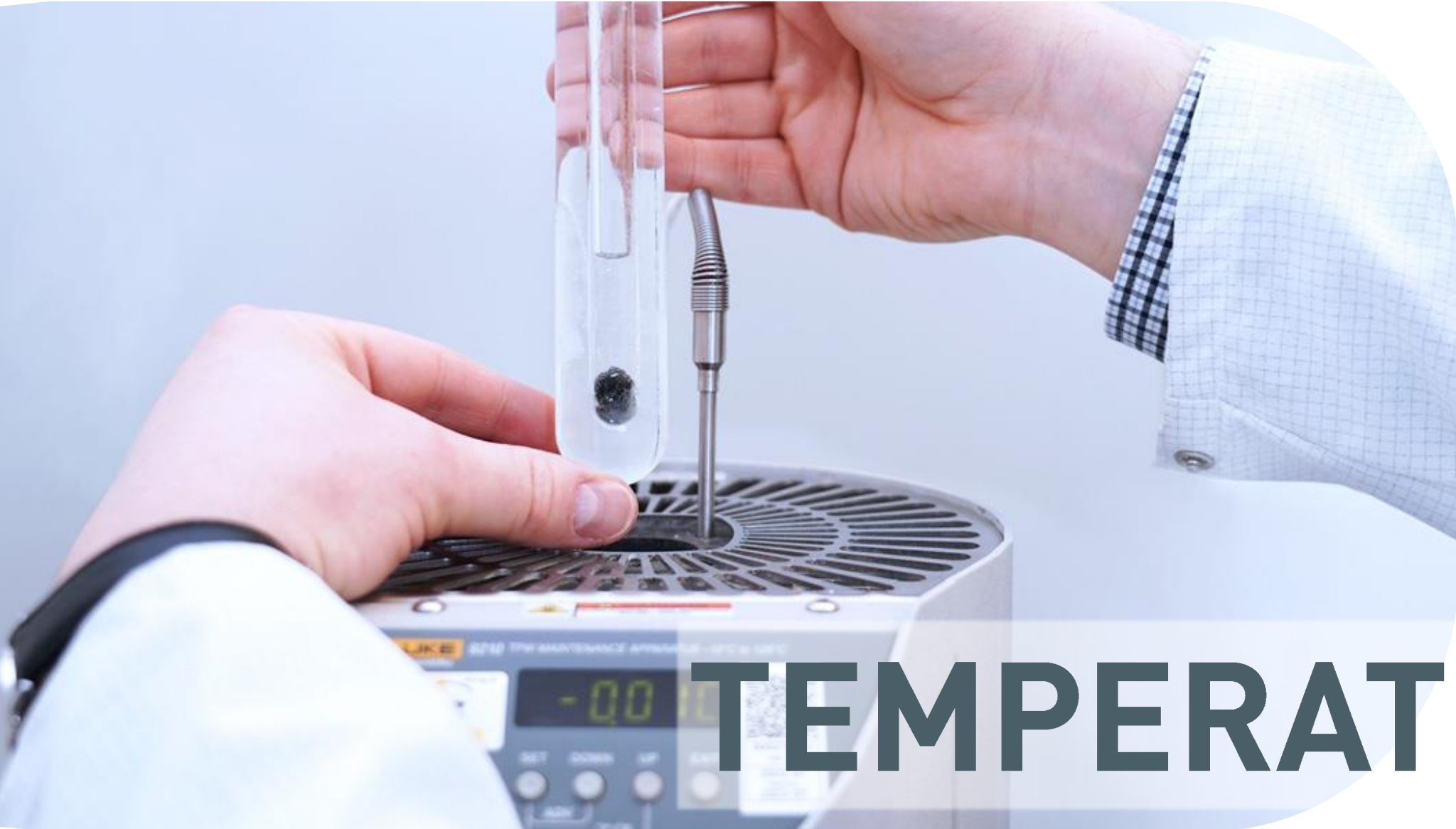




Quantities



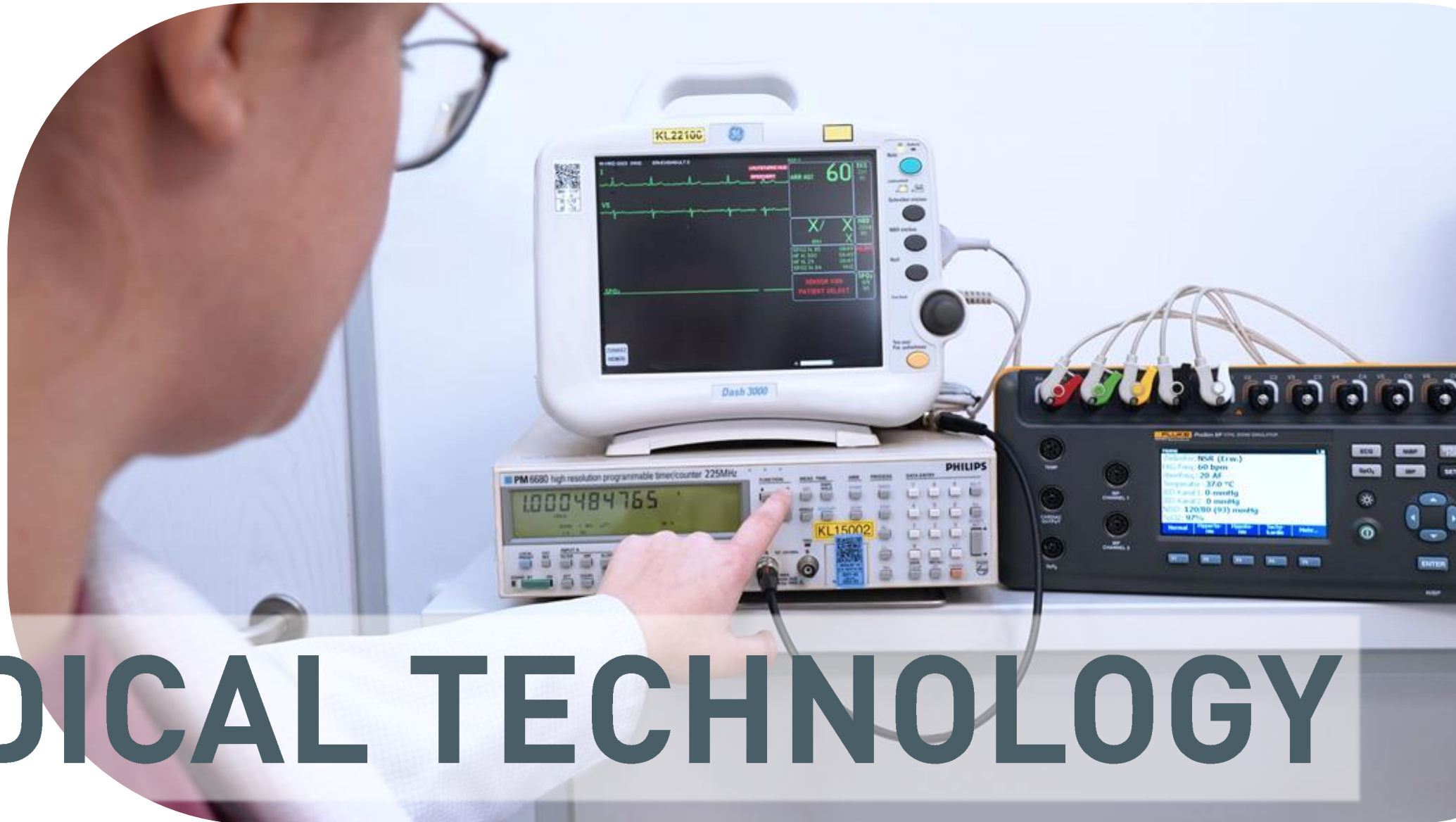
# PRESSURE



# TEMPERATURE



Quantities



# MEDICAL TECHNOLOGY





**FORCE**



MASS

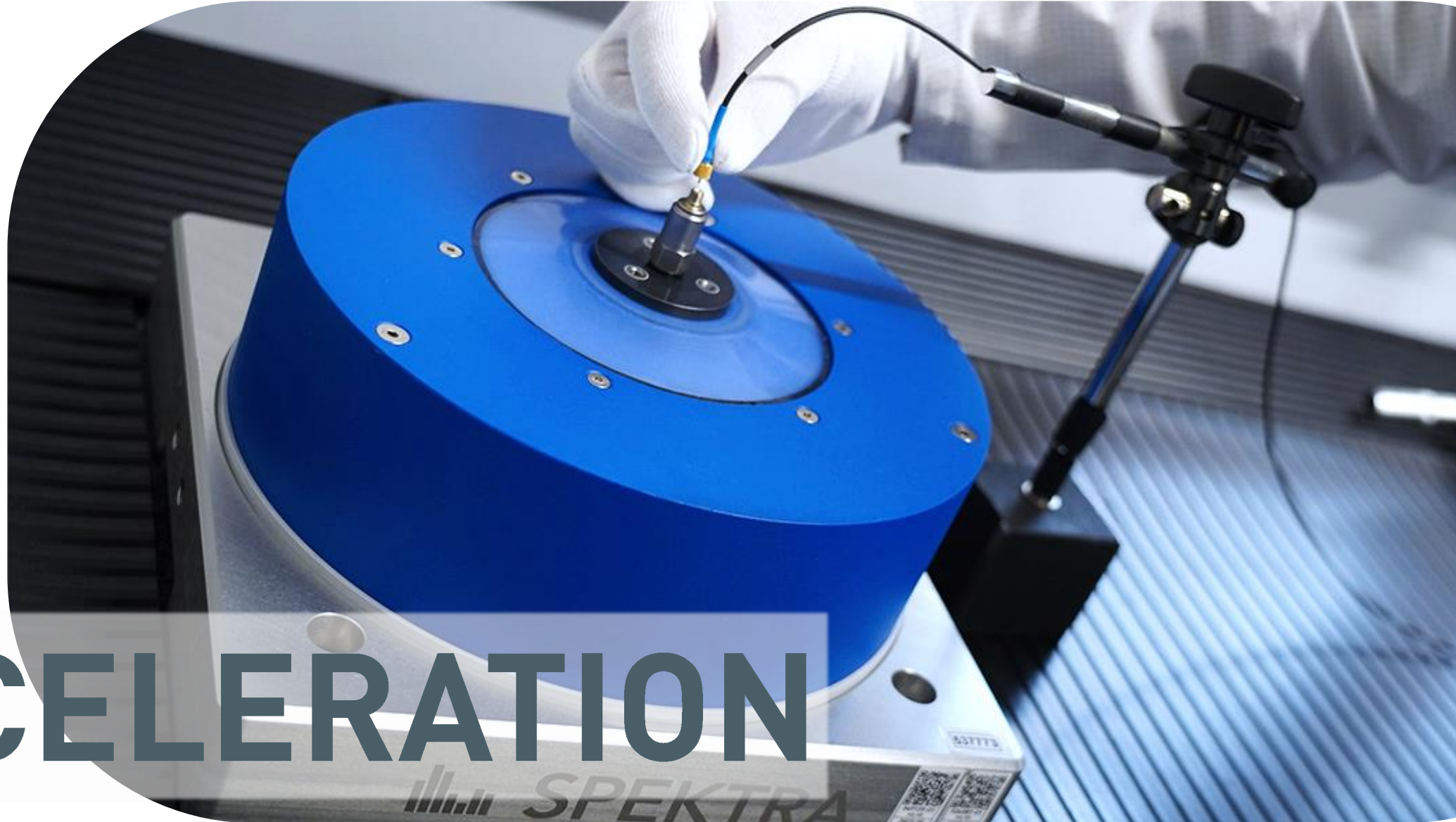


Quantities

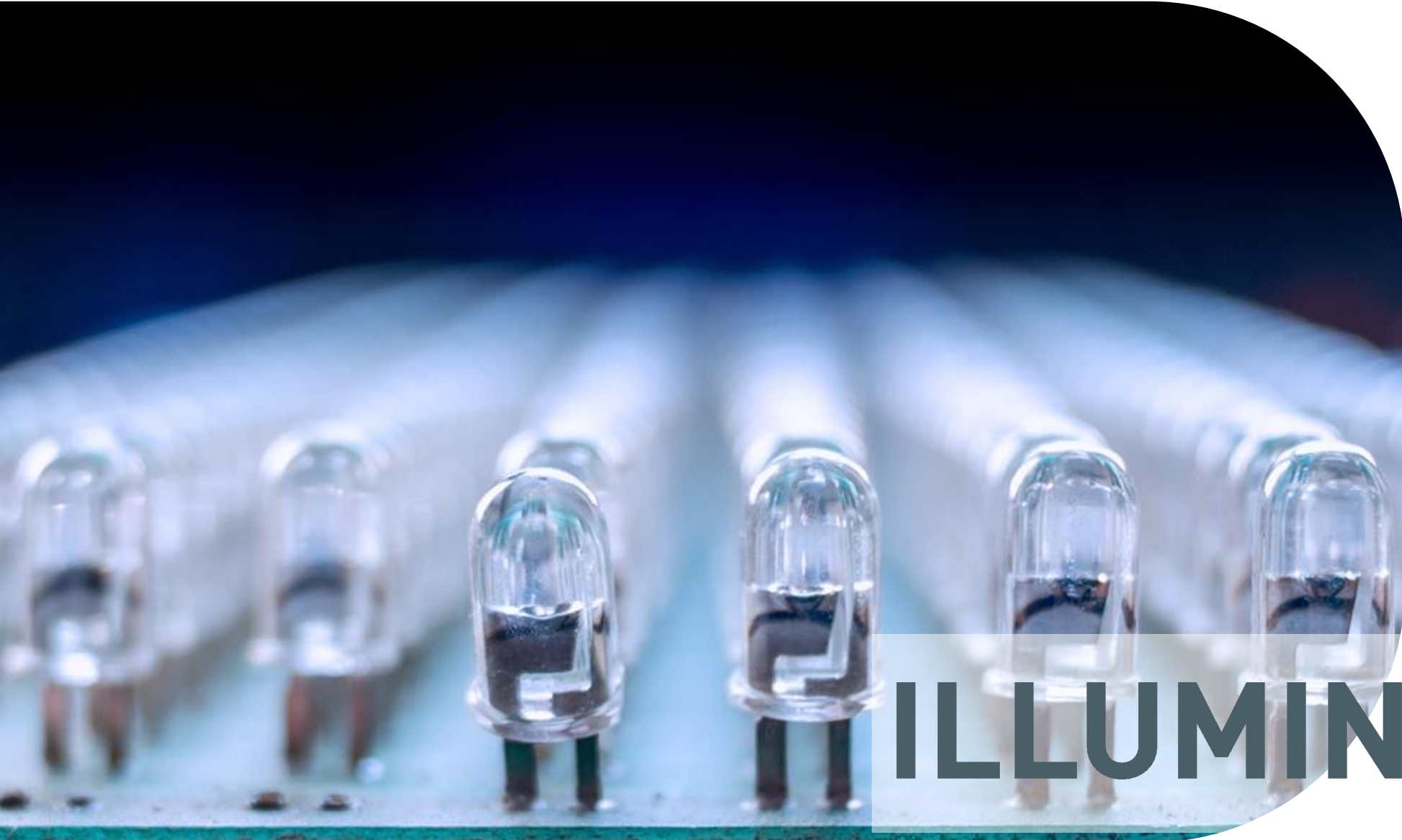


**TORQUE**





# ACCELERATION



# ILLUMINANCE





# KFZ TEST BENCHES





Electrics



Optics



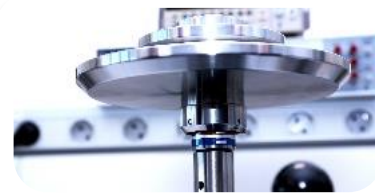
Humidity



Mechanics



Flow



Pressure



Temperature



Medical Technology



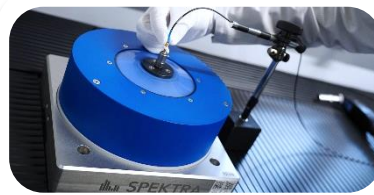
Force



Mass



Torque



Acceleration



Illuminance



KFZ test benches

# ALL QUANTITIES



# Safety

needs **confidence.** We make  
confidence **measurable.**

For today's **decisions**  
and **products**  
for the **future.**