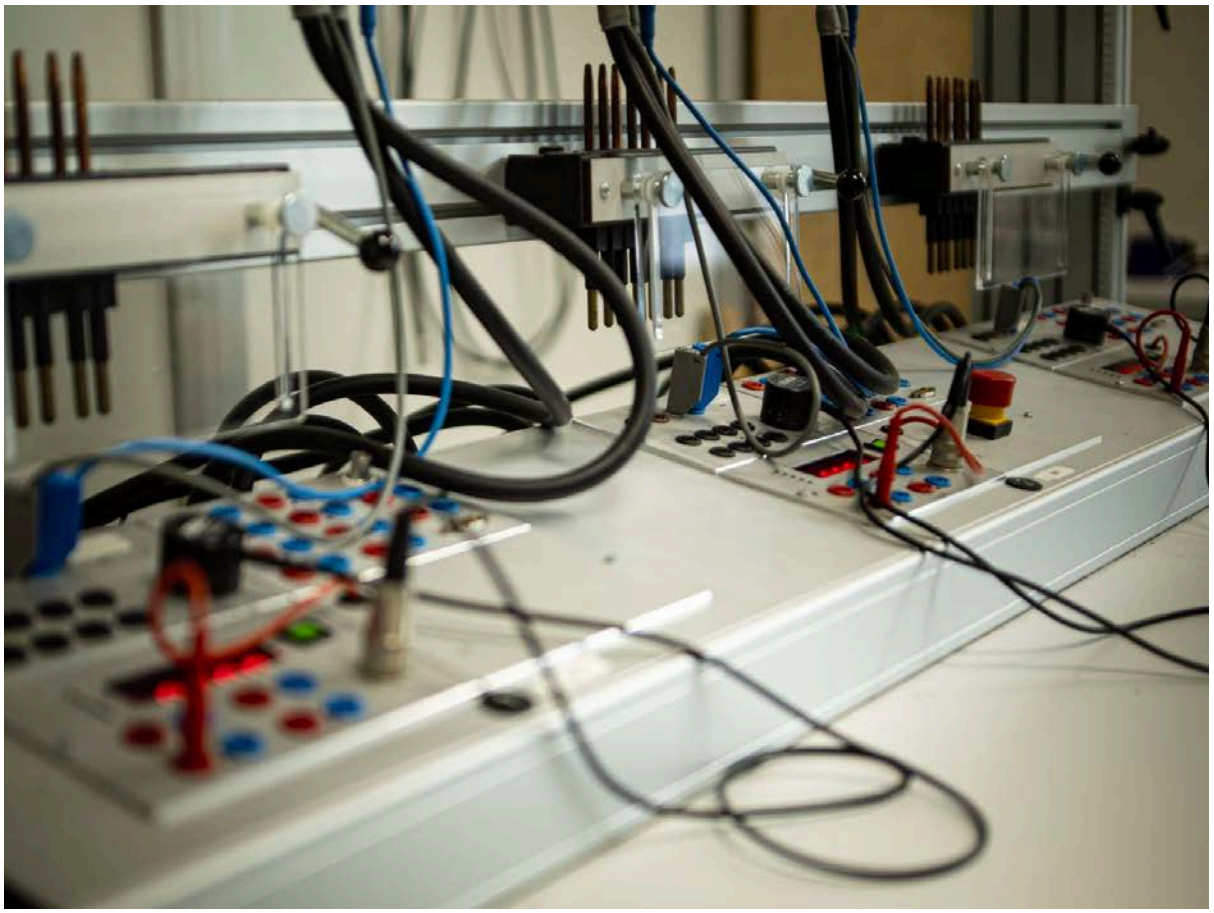
Metrological Evaluation of Electricity Meters

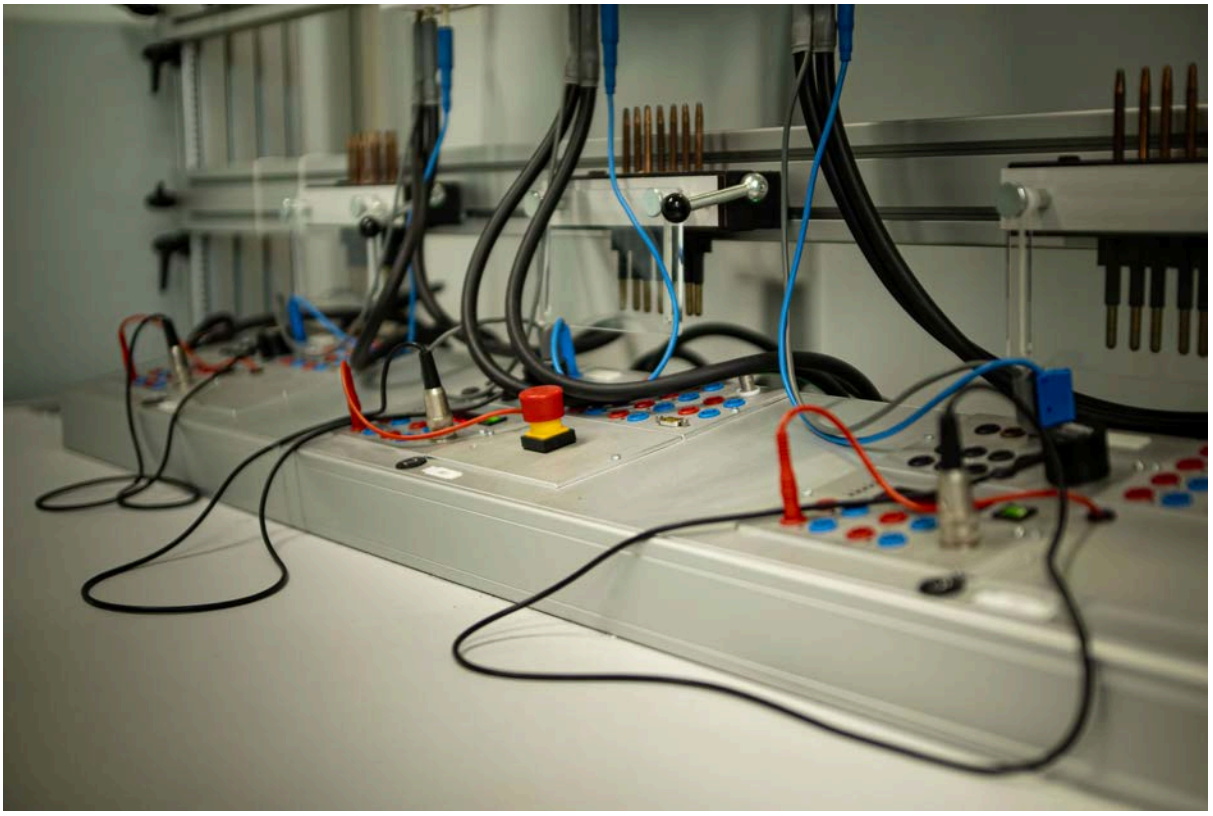
The **metrological evaluation of meters** plays a fundamental role in **measuring consumed electrical energy**. It is essential to achieve the correct level of accuracy and compliance for these devices, ensuring accurate quantification of consumption. As an accredited laboratory with extensive experience, **INTEK** can support **electricity meter manufacturers** in this specific field.



Metrological Evaluation for Meter Accuracy

The accuracy of **electricity meters** is necessary to ensure the correct measurement of consumption for both end users and electrical distribution companies. During the **metrological evaluation**, meters

are subjected to **accuracy tests under various load conditions**, **including changes in ambient temperature**. This ensures the reliability of the meters and their compliance with stringent industry standards, resulting in accurate measurement results and correct **energy billing**.



The INTEK laboratory offers **metrological evaluation services for electricity meters**, ensuring their accuracy and compliance with the main reference standards.

Standards for Metrological Evaluation

Metrological evaluation tests for electricity meters are regulated by standards **EN 50470, EN 62052-x, and EN 62053-x**, which establish the requirements, procedures, and evaluation criteria to be applied during testing. This includes, for example, the definition of test loads to be applied to the meter, the methods for recording data during the tests, and the tolerance limits on measurements. Adherence to these standards is essential to ensure the r**eliability of meters and the accuracy of measurements**.

INTEK Specializes in Metrological Testing

Since 2014, INTEK has had a specialized area for the **metrological evaluation of electricity meters**, performing tests in compliance with standards EN 50470, EN 62052-x, and EN 62053-x. The INTEK testing site, developed in collaboration with ZERA GMBH, an industry leader, offers **advanced automation and rapid turnaround**, ensuring high-quality results. The system includes a class 0.02

wattmeter integrated into an automated station that allows testing up to five meters simultaneously, two of which are in a climatic chamber, with the ability to vary temperature and humidity.

INTEK also has a dedicated testing area for vibration tests to evaluate the resistance of products to dynamic stresses.

Accreditation and Prestigious Collaborations

Thanks to its solid experience in metrology, **INTEK obtained ACCREDIA accreditation** with highly positive feedback immediately after commissioning. Additionally, it collaborates with the leading Italian company producing electricity meters, further confirming its excellence and reliability.

Request information for Metrological Evaluation of Electricity Meters

INTEK is an independent test and measurement laboratory, an Italian excellence in test and measurement services. **Request information online about the Metrological Evaluation of Electricity Meters service:**

https://www.intek.it/en/metrological-evaluation-of-electricity-meters/