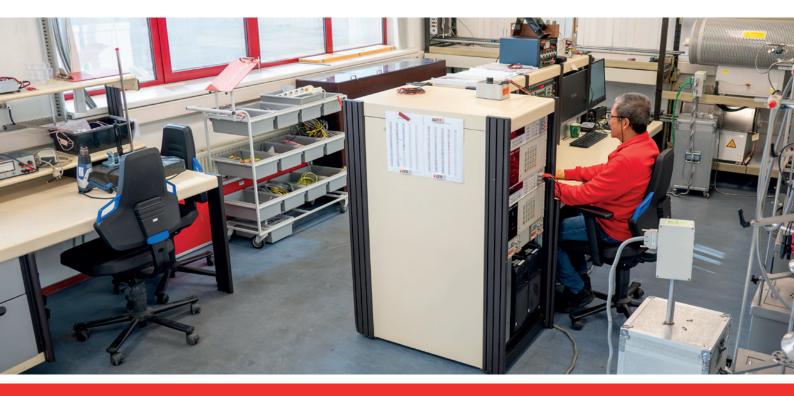


# YOUR PARTNER IN TEMPERATURE



# CALIBRATION SERVICES





**Calibration Services For Accurate Temperature Measurement** 

At Thermo Electric Instrumentation, we understand the importance of reliable and accurate temperature measurement in today's demanding industrial environments. Our calibration services are designed to meet the highest standards, ensuring that your measurement instruments maintain their accuracy over time. With an RvA-accredited laboratory and a comprehensive quality assurance system, we deliver calibration services that exceed industry requirements.

#### WHY CALIBRATION MATTERS

Calibration is essential for maintaining the accuracy, reliability, and traceability of measurement systems. Uncalibrated or poorly calibrated instruments can lead to inaccurate data, compromising product quality, safety, and compliance. Our calibration services provide a trusted solution to ensure your measurement systems perform to the highest standards, helping you maintain operational efficiency and product quality.

#### PARTNERING WITH INDUSTRY LEADERS

For over 60 years, we have provided calibration services to leading companies across a wide range of industries, including oil and gas, power generation, semiconductor manufacturing, and pharmaceutical production. Our expertise and dedication to quality have made us a trusted partner for calibration needs.







## **Features And Benefits**

#### **FEATURES**

- RvA-Accredited Laboratory: Our temperature calibration laboratory is accredited by RvA (Raad van Accreditatie), ensuring that our services meet stringent international standards.
- ISO 17025 Accreditation: Compliance with ISO 17025 means that our calibration procedures are validated, reliable, and follow the highest industry standards.
- Traceable Calibration: All calibrations are traceable to national and international standards, providing you with documented proof of measurement accuracy.
- Comprehensive Temperature Ranges: We calibrate a wide range of sensors, including thermocouples, resistance thermometers (RTDs), and temperature transmitters, covering temperatures from -196°C to 1500°C.
- Advanced Calibration Methods: Utilizing the latest calibration furnaces and baths, our lab ensures the most accurate calibration for your instruments, with measurement uncertainties as low as 0.012°C.

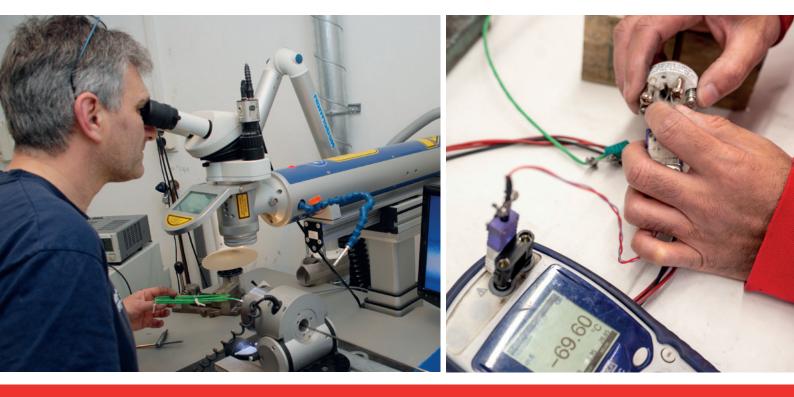
#### **BENEFITS**

- Assured Quality: Accredited calibration services guarantee the precision of your instruments, helping you maintain compliance with ISO and other regulatory standards.
- Reduced Risk: Accurate temperature measurement is

critical for product quality and safety. Our calibration services reduce the risk of errors and ensure that your processes are reliable.

- International Recognition: RvA (ILAC) calibration certificates are recognized globally, providing assurance of the reliability and quality of our services.
- Confidence in Measurement: Our calibrated instruments provide repeatable and precise measurements, ensuring that you can trust the data you collect for critical processes.





## **Calibration Services Offered**

Our calibration services cover a wide range of temperature measurement devices and instrumentation; designed to meet the specific needs of your industry. We offer the following calibrations: temperature, current, resistance, and voltage.

- Thermocouples and RTDs: Calibration of thermocouples and RTDs across a broad range of temperatures to ensure their accuracy and reliability.
- Temperature Transmitters: Calibrating temperature transmitters, ensuring they provide precise output in response to sensor input.
- Calibration Furnaces and Baths: Precision calibration of furnaces and baths for accurate temperature control in various industrial processes.
- Temperature Indicators and Simulators: Calibration of temperature indicators, simulators, and reference thermometers to ensure that your measurement systems are always accurate.

#### **CUSTOMIZATION OPTIONS**

We understand that every industry has unique requirements, which is why we offer customizable calibration solutions. Our team works closely with you to determine the best calibration approach for your specific equipment, whether you need on-site calibration, specialized test points, or tailored calibration certificates.

#### TRACEABILITY AND ACCURACY

Our RvA-accredited laboratory ensures that every calibration performed is traceable to internationally recognized standards, guaranteeing the highest level of accuracy. We use validated calibration methods and maintain strict quality control to ensure consistent, repeatable results.







# Why Choose Us

At Thermo Electric Instrumentation, we are committed to delivering the highest quality calibration services to help our customers maintain accurate and reliable measurement systems. Our extensive experience, technical expertise, and dedication to customer satisfaction make us a trusted partner for all your calibration needs.

- Extensive Experience: With over 60 years of experience in temperature calibration, we are well-equipped to handle even the most challenging calibration requirements. Our team is dedicated to providing reliable and precise calibration services that meet the unique needs of your industry.
- Certified Quality: Our calibration laboratory is accredited to ISO 17025, ensuring that all calibration procedures are performed to the highest standards. Our quality management system is certified to ISO 9001, demonstrating our commitment to continuous improvement and customer satisfaction.
- International Recognition: Our RvA accreditation ensures that our calibration certificates are recognized and accepted throughout Europe and beyond, providing you with confidence in the accuracy of your measurements.
- State-of-the-Art Calibration Equipment: We use advanced calibration furnaces, baths, and temperature indicators to provide precise and reliable calibration services for your instruments. Our commitment to using the latest technology ensures that your measurement systems are calibrated with the highest level of

accuracy.

 Customer-Centric Approach: We work closely with our customers to provide calibration services that meet their specific needs. From flexible scheduling to customized calibration certificates, we are dedicated to delivering exceptional service and quality.

### **Commitment To Quality**

Our rigorous quality control processes and accredited calibration methods ensure that every calibration performed by Thermo Electric Instrumentation meets the highest standards. We are committed to helping our customers maintain their measurement systems with precision, ensuring safety, efficiency, and compliance across all operations.





# **Manufacturing Facilities**

Our production and engineering facilities are centrally located in the Netherlands and manned by our highly skilled employees. This setup is essential for upholding our high standards and best practices in engineering and design. The expertise of our personnel, coupled with state-of-the-art facilities, guarantees the efficient manufacture of Thermo Electric temperature sensors and their consistent high-quality performance in the field.

#### **CALIBRATION FACILITIES**

Our laboratory holds ISO17025 accreditation for temperature measurements ranging from -200 °C to 1,500 °C, as well as for evaluating electrical parameters including millivolts (mV), milliamperes (mA), ohms ( $\Omega$ ), and volts (V).



#### SERVICES

- Wake frequency calculations for Thermowells as per ASME PTC19.3
- Cleaning for oxygen services
- Customized drawings
- Customized Inspection and test plans / procedures

#### CERTIFICATIONS

- Material certificate as per EN10204 3.1 or 3.2 and NACE
- Welding procedure specification (WPS) including procedure qualification records (PQR) and Welder performance qualifications (WPQ) as per ASME IX and ISO15614
- Certificate of conformance (EN10204 2.1)
- Certificate of origin

#### HAZARDOUS AREA CERTIFICATES

	XPS1	XPS2	XPS3	XPS4
IECEx:	Exeb	Exia/b	Exdb	Exec
ATEX:	Exeb	Exia/b	Exdb	Exec
CSA/US:	(A)Exe	(A)Exia/b	(A)Exd	(A)ExnA
KTL:	Exe	Exia	Exd	ExnA
CCOE(PESO):	Exeb	Exia/b	Exdb	
CCC:	Exia	Exdb		

#### **TESTING FACILITIES**

- Visual inspection
- Dimensional check
- Pressure testing (up to 1100Bar)
- High pressure testing (up to 5500Bar)
- Dye penetrant examination (DP)
- Radiographic testing (X-ray)
- Ultrasonic testing (US)
- Vacuum testing
- Helium leak testing
- Positive material identification (PMI)
- Batch calibration certificates
- Sensor calibration certificates





# **Other Products and Services at a Glance**

#### **TEMPERATURE SENSORS**

- Industrial temperature sensors
- Multiple temperature sensors
- Profiling temperature sensors
- High-pressure temperature sensors
- Resistance temperature detectors
- PT100, PT1000, NTC
- Miniature temperature sensors
- Tubeskin temperature sensors

#### **INSTRUMENTS**

- Optical temperature meters
- Controllers
- Transmitters
- Dry well calibrators

#### **CONNECTORS, PANELS AND WIRES**

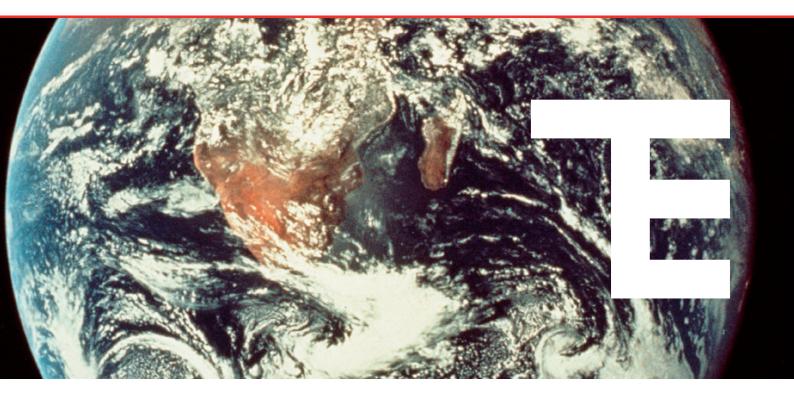
- Standard thermocouple connectors
- Miniature thermocouple connectors
- Standard thermocouple panels
- Miniature thermocouple panels
- PVC, PTFE, Kapton, Silicon, Glass Fiber

#### **SERVICES - RvA/ILAC ACCREDITED CALIBRATION**

- Calibration of temperature sensors
- Repair of instruments







# Your trusted partner in the development and production of temperature measurement solutions

#### THERMO ELECTRIC INSTRUMENTATION B.V.

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