Hellenic Accreditation System

Annex F2/14 to the Certificate No. **738**-6

SCOPE of ACCREDITATION

of the

Calibrations Laboratory

of

METRON S.A.

Calibration item / Parameters	Range of measurement	Expanded measurement uncertainty (k=2)*	Remarks
Volume measurements			
Steel volumetric vessels of type “to contain (wet)” and “to deliver”	[10 to 100) L	0,06 %	Using volumetric vessels according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 4: Tank provers (1998) SECTION 7: Field Standard Test Measures (2009) Calibration medium: potable water. Calibration can also be performed on site.
	[100 to 500) L	0,04 %	
	[500 to 5000) L	0,05 %	
	[5000 to 10000] L	0,06 %	
Positive displacement meters	[0,5 to 120] m^3/h	0,08 %	Using volumetric vessels according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2021) Calibration medium: liquid refined products and lubricant oils. according to API MPMS. Calibration can also be performed on site.
Coriolis meters		0,1 %	Using volumetric vessels according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2021) CHAPTER 5: Metering SECTION 6: Measurement of Liquid Hydrocarbons by Coriolis Meters (2021) Calibration medium: liquid refined products and lubricant oils. according to API MPMS. Calibration can also be performed on site. Minimum calibration flow is 10% of the max nominal flow of the meter under calibration (turn down ratio 10:1).

Calibration item / Parameters	Range of measurement	Expanded measurement uncertainty (k=2)*	Remarks
Positive displacement meters	[0,5 to 120] m^3/h	0,11 %	Using positive displacement master meter according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2021) Calibration medium: liquid refined products and lubricant oils according to API MPMS. Calibration can also be performed on site.
		0,12 %	Using Coriolis master meter according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2013) CHAPTER 5: Metering SECTION 6: Measurement of Liquid Hydrocarbons by Coriolis Meters (2021) Calibration medium: liquid refined products and lubricant oils according to API MPMS. Calibration can also be performed on site.
Coriolis meters	[0,5 to 120] m^3/h	0,13 %	Using positive displacement master meter according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2021) CHAPTER 5: Metering SECTION 6: Measurement of Liquid Hydrocarbons by Coriolis Meters (2021) Calibration medium: liquid refined products and lubricant oils according to API MPMS. Calibration can also be performed on site. Minimum calibration flow is 10% of the max nominal flow of the meter under calibration (turn down ratio 10:1).
		0,13 %	Using Coriolis master meter according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2013) CHAPTER 5: Metering SECTION 6: Measurement of Liquid Hydrocarbons by Coriolis Meters (2021) Calibration medium: liquid refined products and lubricant oils according to API MPMS. Calibration can also be performed on site. Minimum calibration flow is 10% of the max nominal flow of the meter under calibration (turn down ratio 10:1).

Calibration item / Parameters	Range of measurement	Expanded measurement uncertainty (k=2)*	Remarks
Positive Displacement meters	[0,5 to 120] m^3/h	0,10 %	Using volumetric vessels according to standard: ISO 4269:2001 Calibration medium: potable water. Calibration can also be performed on site.
Coriolis meters	[0,5 to 120] m^3/h	0,10 %	Using volumetric vessels according to standards: ISO 4269:2001 API MPMS CHAPTER 5: Metering SECTION 6: Measurement of Liquid Hydrocarbons by Coriolis Meters (2021) Calibration medium: potable water. Calibration can also be performed on site. Minimum calibration flow is 10% of the max nominal flow of the meter under calibration (turn down ratio 10:1).
Pipe provers	[0.02 to 10] m^3 (Round trip)	0,06 %	Using volumetric vessels according to standards: API MPMS CHAPTER 4: Proving Systems SECTION 2: Displacement Provers (2003 with Addendum 1 dated February 2015) SECTION 5: Master Meter Provers (2016) SECTION 8: Operation of Proving Systems (2021) Calibration medium: potable water. Calibration is performed on-site.
Temperature Measurements			
Resistance sensors with direct, analog or digital reading	[-20 ^{0}C to 100 ^{0}C]	0,05 ^{0}C	DKD-R 5-1 (09/2018) Calibration can also be performed on-site.
	(100 ^{0}C to 120 ^{0}C]	0,08 ^{0}C	
Resistance sensors with indirect reading in ohm	[-20 ^{0}C to 100 ^{0}C]	0,05 ^{0}C	
	(100 ^{0}C to 120 ^{0}C]	0,08 ^{0}C	
Resistance sensors with indirect reading in mA	[-20 ^{0}C to 100 ^{0}C]	0,07 ^{0}C	
	(100 ^{0}C to 120 ^{0}C]	0,09 ^{0}C	

* *Where the expanded uncertainty (with coverage probability 95 %) is accompanied by the corresponding unit, it is absolute, while where it is not accompanied by a unit, it is relative.*

The Calibration & Measurement Capability (CMC) includes the measurand, the measurement range and the measurement uncertainty and expresses the smallest measurement uncertainty that can be achieved in a calibration.

Permanent laboratory premises address: **45 D. Rigou Str. 19018 Magoula, Greece**
Approved Signatories: **S. Valsamos, A. Boutos**

This Scope of Accreditation replaces the previous one dated August 21st, 2023.

The Accreditation Certificate No. **738**-6, to ELOT EN ISO/IEC 17025: 2017, is valid until 26.05.2028.

Athens, December 9th, 2025

Konstantinou Evangelos Apostolos
CEO of ESYD