# Hellenic Accreditation System

# ACCREDITATION CERTIFICATE

# No. 1120-3

**The Hellenic Accreditation System (ESYD), as the national accreditation body of Greece in accordance with the Law 4468/2017,**

**ACCREDITS**

the

## Laboratory of Thermal Turbomachines (LTT)

of the

## School of Mechanical Engineering

of the

## National Technical University of Athens

in Zografou, Attiki, Greece

**under the terms of the ELOT EN ISO/IEC 17025: 2017 Standard and the ESYD Criteria, to carry out measurements, as specified in the attached Scope of the Accreditation, which may be revised by decisions of ESYD.**

**The initial accreditation was issued on 29.03.2018. This Certificate renews the accreditation, and it is valid until 28.03.2026, provided that the accredited body will comply with the above Standard and the ESYD Criteria.**

**Athens, 11.10.2022**

**Christos Nestoras**
**CEO of ESYD**

ΕΘΝΙΚΟ ΣΥΣΤΗΜΑ ΔΙΑΠΙΣΤΕΥΣΗΣ ESYD ΑΦΜ: 997009397 ΔΟΥ: ΚΑΛΛΙΘΕΑΣ

*ESYD is a signatory of the European co-operation for Accreditation (EA) Multilateral Agreement for the activities*

# Hellenic Accreditation System

## Annex F2/7 to the Certificate No. **1120**-3

# SCOPE of ACCREDITATION

of the

## Laboratory of Thermal Turbomachines (LTT)

of the

## School of Mechanical Engineering

of the

## National Technical University of Athens

***for the performance of calibrations***

| Calibration item / Parameters | Range of measurement | Expanded measurement uncertainty (k=2)* | Remarks |
|---|---|---|---|
| **Flow rate measurements** | | | |
| Gas flow meters of type:<br>- Diaphragm<br>- Rotary<br>- Turbine | | | Calibration according to:<br>OIML R 137:2012 (E)<br>EN 1359: 2017<br>EN 12480:2018<br>EN 12261:2018<br>Calibration medium: air at atmospheric conditions. |
| | 0,006 $m^3/h$ to 0,04 $m^3/h$ | 0,63 % | Using drum type gas flow master meter. |
| | 0,04 $m^3/h$ to 0,1 $m^3/h$ | 0,79 % | |
| | 0,1 $m^3/h$ to 0,36 $m^3/h$ | 0,38 % | |
| | 0,16 $m^3/h$ to 0,25 $m^3/h$ | 0,65 % | Using rotary type gas flow master meters. |
| | 0,25 $m^3/h$ to 0,65 $m^3/h$ | 0,50 % | |
| | 0,65 $m^3/h$ to 1600 $m^3/h$ | 0,35 % | |

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

*Calibration & Measurement Capability (CMC), includes the measured quantity, measurement range and measurement uncertainty and expresses the smallest measurement uncertainty that can be achieved during a calibration.*

Permanent laboratory premises address: **9, Iroon Politechniou str., 157 80 Zografou Campus, Zografou, Attiki, Greece.**

Approved signatories: **Konstantinos Mathioudakis, Nikolaos Aretakis.**

This Scope of Accreditation replaces the previous one dated 11.10.2022.
The Accreditation Certificate No.**1120**-2 to ELOT EN ISO/IEC 17025:2017, is valid until 28.03.2026.

Athens, 25.01.2024

Christos Nestoras
*CEO of ESYD*