



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

DICKSON AND OCEASOFT, A DICKSON COMPANY
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Addison, IL 60101
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CALIBRATION

Valid To: July 31, 2021

Certificate Number: 1621.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1,3}:

I. Mechanical

| Parameter/Equipment | Range | CMC ^{2,4} (±) | Comments |
|---------------------|------------------------------------|---------------------------|---------------------------------|
| Pressure – Measure | | | |
| Standard | Up to 500 psi (500 to 1000) psi | 0.34 psi 6 psi | Standard pressure transducer |
| Differential | (-2 to 2) in H ₂ O | 0.006 in H ₂ O | Standard flow meter |

II. Thermodynamics

| Parameter/Equipment | Range | CMC ^{2,4} (±) | Comments |
|-----------------------------|------------------------------------|------------------------|---|
| Relative Humidity – Measure | (5 to 95) % RH at (15 to 35) °C | 0.56 % RH | Chilled mirror standards |
| | (10 to 95) %RH at (5 to 50) °C | 3 % RH | Rotronic HygroPalm meter and HygroClip |

| Parameter/Equipment | Range | CMC ^{2,4} (±) | Comments |
|---|-------------------------------------|------------------------|---------------------------------------|
| Resistance Thermometry | (-100 to 400) °F (-73 to 204) °C | 0.15 °F 0.08 °C | Platinum RTD |
| | (-80 to 0) °C | 0.07 °C | Alcohol bath and platinum RTD |
| | (-30 to 150) °C | 0.06 °C | Silicone oil bath and platinum RTD |
| Fixed Points | 0 °C | 0.05 °C | Ice bath and platinum RTD |
| | -196 °C | 0.4 °C | Liquid nitrogen bath and platinum RTD |
| Thermocouple Temperature Simulation – Type K | (-200 to 2000) °F | 0.94 °F | Thermocouple simulator |

¹ This laboratory offers commercial calibration service for Dickson and Ocaseoft products only.

² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

³ This scope meets A2LA's *P112 Flexible Scope Policy*.

⁴ The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



Accredited Laboratory

A2LA has accredited

DICKSON AND OCEASOFT, A DICKSON COMPANY

Addison, IL

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSLI Z540-1-1994 and R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 15th day of July 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1621.01
Valid to July 31, 2021

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.