



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board
11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Gerhart
603 Washington Ave.
South Amboy, NJ 08879

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

AC-1345
Certificate Number


ANAB Approval

Certificate Valid Through: 10/01/2020
Version No. 008 Issued: 09/06/2019



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND ANSI/NCSL Z540-1-1994 (R2002)

Gerhart

603 Washington Ave.
South Amboy, NJ 08879

Stuart Cattell (President), Carol Rendfrey (Quality Manager), John J. Smith (Lab Manager)
732-525-1000

CALIBRATION

Valid to: October 1, 2020

Certificate Number: AC-1345

Mass and Mass Related

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|---------------------------|---------|---|--|
| Laboratory & Test Weights | 5 000 g | 0.65 mg | ASTM Class 1 Weights |
| | 3 000 g | 0.28 mg | |
| | 2 000 g | 0.26 mg | |
| | 1 000 g | 0.08 mg | OIML Class E1 Weights |
| | 500 g | 0.14 mg | |
| | 300 g | 0.026 mg | |
| | 200 g | 0.021 mg | Sartorius CCE5004 |
| | 100 g | 0.02 mg | |
| | 50 g | 0.015 mg | |
| | 30 g | 0.015 mg | Sartorius CC310 |
| | 20 g | 0.006 5 mg | |
| | 10 g | 0.006 6 mg | |
| | 5 g | 0.004 6 mg | Sartorius MC21S |
| | 3 g | 0.004 2 mg | |
| | 2 g | 0.003 mg | Sartorius MC21S |

Mass and Mass Related

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|--|----------------|---|--|
| Laboratory & Test Weights | 1 g | 0.002 9 mg | Sartorius CCE6 |
| | 500 mg | 0.001 8 mg | |
| | 300 mg | 0.001 2 mg | |
| | 200 mg | 0.000 94 mg | |
| | 100 mg | 0.000 78 mg | |
| | 50 mg | 0.000 69 mg | |
| | 30 mg | 0.000 8 mg | |
| | 20 mg | 0.000 53 mg | |
| | 10 mg | 0.000 61 mg | |
| | 5 mg | 0.000 5 mg | |
| | 3 mg | 0.000 58 mg | |
| | 2 mg | 0.000 39 mg | |
| | 1 mg | 0.000 45 mg | |
| Commercial Test Weights NIST Class F | 25 kg | 0.12 g | ASTM Class 1 Weights |
| | 20 kg | 0.12 g | |
| | 10 kg | 0.12 g | |
| | 50 lb | 0.12 g | ASTM Class 2 Weights Sartorius isi20 Sartorius CCE5004 |
| | 25 lb | 0.12 g | |
| | 20 lb | 0.12 g | |
| | 10 lb | 0.72 mg | |
| | 5 lb | 0.52 mg | |
| | 1 lb | 0.13 mg | |
| Laboratory Balances ¹ (0.001 mg resolution) (0.01 mg resolution) (0.1 mg resolution) | Up to 5 g | 0.002 mg | ASTM Class 1 Weights |
| | Up to 200 g | 0.03 mg | |
| | Up to 500 g | 0.1 mg | |
| Top Loading Balances ¹ 0.001g resolution 0.01g resolution 0.1g resolution | Up to 1 000 g | 0.001 g | ASTM Class 2 Weights |
| | Up to 5 000 g | 0.01 g | |
| | Up to 20 000 g | 0.1 g | |



Mass and Mass Related

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|--|--|--|--|
| Industrial Scales ¹ (0.01 lb resolution) (0.1 lb resolution) (0.5 lb resolution) (1 lb resolution) (2 lb resolution) | Up to 500 lb Up to 500 lb Up to 3 000 lb Up to 5000 lb Up to 10 000 lb | 0.006 1 lb 0.058 lb 0.29 lb 0.58 lb 1.15 lb | NIST Class F Weights NIST Handbook 44 |
| Heavy Capacity Scales ¹ (5lb resolution) (10lb resolution) (20 lb resolution) | Up to 30 000 lb Up to 90 000 lb Up to 200 000 lb | 2.89 lb 5.89 lb 11.68 lb | |
| Pressure | (150 to 1500) psi (1500 to 15 000) psi | (0.08 + 0.06 % of reading) psi (0.17 + 0.13 % of reading) psi | Amtek T-150 Deadweight Tester |

Thermodynamic

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|---------------------|-----------------------------------|---|---|
| Temperature | (-20 to 100) °C (20 to 350) °C | 0.12 °C 0.12 °C | Hart Temperature Probe and Bath Hart Temperature Probe and Dri-Block |

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. Gerhart has resident technicians in Painted Post, NY; Allentown, PA; Newark, DE; and Pennsauken, NJ.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1345.


Vice President

