CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Charles S. Freeman Co., Inc.
3755 Harlem Road
Buffalo, NY 14215

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 19 January 2026

Certificate Number: AC-3062

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

Charles S. Freeman Co., Inc.
3755 Harlem Road
Buffalo, NY 14215
Russ Cordier 716-836-3801

CALIBRATION

Valid to: **January 19, 2026** Certificate Number: **AC-3062**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Scales [1]	Up to 10 lb	0.001 6 lb	NIST Class F Weights
	10 lb to 100 lb	0.01 lb	NIST Class F Weights
	100 lb to 1 000 lb	0.063 lb	NIST Class F Weights
	1 000 lb to 120 000 lb	11.5 lb	NIST Class F Weights
Balances [1]	Up to 12 kg	0.116 g	ASTM Class 1 Mass
	12 kg to 300 kg	6.08 g	ASTM Class 4 Mass
Force Measurement (Compression/Tension)	Up to 175 lbf	0.055 lbf	ASTM Class 4 Mass
	175 lbf to 10 000 lbf	13.02 lbf	ASTM E74 Load Cells
NIST Class F Test Weight	0.05 lb	0.000 002 8 lb	ASTM Class 1 Mass
	0.1 lb	0.000 002 8 lb	
	0.2 lb	0.000 003 1 lb	
	0.5 lb	0.000 003 2 lb	
	1 lb	0.000 004 1 lb	
	2 lb	0.000 029 lb	
	5 lb	0.000 031 lb	
	10 lb	0.000 027 lb	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
NIST Class F Test Weight	25 lb	0.000 23 lb	ASTM Class 1 Mass
	50 lb	0.000 27 lb	
ASTM Class 4 Weight	0.2 lb	0.000 003 1 lb	ASTM Class 1 Mass
	0.5 lb	0.000 003 2 lb	
	1 lb	0.000 004 1 lb	
	2 lb	0.000 029 lb	
	5 lb	0.000 031 lb	
	10 lb	0.000 027 lb	
	25 lb	0.000 23 lb	
	50 lb	0.000 27 lb	

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. The CMC for scales and balances is highly dependent upon the resolution of the unit under test. The CMC presented here does not include the resolution of the unit under test. The resolution will be included in the reported measurement uncertainty at the time of calibration.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-3062.

Jason Stine, Vice President