



Hugh E. Weathers
Commissioner

State of South Carolina Department of Agriculture

Metrology Laboratory

Mailing Address
PO Box 11280
Columbia, SC 29211

Physical Location
237 Catawba Street
Columbia, SC 29201

803.253.4052 (Phone/Fax)
agriculture.sc.gov

CERTIFICATE OF CALIBRATION FOR

One weight set ranging from 0.001 Pound through 10 Pounds consisting of 19 weights

Manufacturer
Troemner

Serial Number
Asset # 1100

State Test Number
SC131211-2-16



Submitted by

NCR Corporation
200 Highway 74 South
Peachtree City, GA 30269

The test weights described above have been compared with the standards of the State of South Carolina using procedure SOP 8 from NIST IR 6969 and were found (adjusted) to be within NIST Class F tolerances with the following exceptions:

None

Date of Test: 02/17/16

Robert L. McGee, Director
Metrology Laboratory

Comments:

- This calibration was performed within the requirements of the laboratory Quality Management System version 6, Jan 2010 which is compliant with the ISO/IEC 17025, 2005 standard. The laboratory has demonstrated measurement proficiency through training and interlaboratory comparisons and has been issued a NIST Certificate of Measurement Traceability effective through December 31, 2017.
- This calibration has metrological traceability to the International System of Units (SI) through South Carolina primary standards traceable to the National Institute of Standards and Technology through NIST Test Numbers 822/275141-07, 822/278993-10, 684/283739-13.
- Date received: 01/29/16
- Laboratory environment: Temperature: 22.19 °C Humidity: 54.07 %RH
- Density corrections are negligible at the applied tolerance but are included as a component in the uncertainty calculation.
- The calibration values reported on the following pages are Conventional Mass corrections based on a reference density of 8.0 g/cm³ and a reference temperature of 20 °C.
- If the standard was not adjusted the "As Found" and "As Left" values are the same.

Certificate of Calibration
 Metrology Laboratory
 State Test Number: SC131211-2-16

Date of Test: 02/17/16

Weight Identification	Nominal	"As Found" Correction (mg)	"As Left" Correction (mg)	Uncertainty (mg)	Tolerance (mg)
	10 lb	213.2		6.7	450
dot	10 lb	220.2		6.7	450
	5 lb	143.1		3.8	230
	2 lb	15.32		0.75	91
dot	2 lb	48.21		0.75	91
	1 lb	27.04		0.75	70
	0.3 lb	11.68		0.50	27
	0.2 lb	6.27		0.50	18
dot	0.2 lb	5.62		0.50	18
	0.1 lb	3.69		0.50	9.1
dot	0.1 lb	3.16		0.50	9.1
	0.05 lb	0.45		0.50	4.5
	0.02 lb	0.18		0.50	1.8
dot	0.02 lb	0.35		0.50	1.8
	0.01 lb	0.78		0.23	1.5
	0.005 lb	0.18		0.23	1.2
	0.003 lb	0.06		0.23	0.99
	0.002 lb	-0.10		0.23	0.87
dot	0.001 lb	0.29		0.23	0.70

Note: The measurement uncertainty is calculated at an approximate 95 percent confidence level.

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Metrological Traceability For:

South Carolina

This laboratory has demonstrated evidence of an unbroken chain of metrological traceability of its standards to the international system of units (SI), documented measurement uncertainties, uses documented measurement procedures, successfully completed training and proficiency tests, documented calibration intervals, submitted a quality management system, and demonstrated suitable measurement assurance for the Scope listed on this certificate.

The Office of Weights and Measures Program assesses laboratories to NIST Handbook 143 - Program Handbook for State Weights and Measures Laboratories and ISO/IEC 17025:2005.

Scope

Mass Echelon I	Weight Carts	Volume Transfer, II
30 kg to 1 mg	6000 lb to 2500 lb	20 L to 1 L
Mass Echelon II	Wheel Load Weighers	1500 gal to 1 gal
50 kg to 1 mg	36 000 lb to 12 000 lb	100 gal to 20 gal LPG
1000 lb to 0.001 lb	Volume Gravimetric, I	Grain Moisture
8 oz to 0.015625 oz	20 L to 100 mL	23 % to 13 %
Mass Echelon III	5 gal to 1 gal	
1000 kg to 1 mg		
2500 lb to 0.001 lb		
8 oz to 0.015625 oz		



2016 to 2017

Carol T. Hockert, Chief
NIST Office of Weights and Measures

Effective Dates: 2016-01-01 to 2017-12-31