

Calibration Certificate

201 Wolf Drive • P.O. Box 87 • Thorofare, NJ 08086-0087 • Phone:856-686-1600 • Fax:856-686-1601 • www.troemner.com • e-mail: troemner@troemner.com

Page 1 of 3
Magnetic Susceptibility
Certificate Number : 999999T
Date of Calibration : 29-Jun-13

SECTION 1: NAME AND ADDRESS OF CUSTOMER

End User
Troemner LLC
201 Wolf Dr
Thorofare, NJ 08086

Client
Troemner LLC
201 Wolf Dr
Thorofare, NJ 08086

SECTION 2: APPROVED SIGNATORY

Joseph Moran

SECTION 3: PERSON PERFORMING WORK

Annemarie Love

SECTION 4: CERTIFICATE INFORMATION

Description of Masses: 1kg – 1g Weight Set	
Order Number	: 8888
Construction	: One Piece
Material	: Stainless Steel
Serial Number	: 4000000002
Date Received	: 29-Jun-13
Date of Calibration	: 29-Jun-13
Date of Issue	: 29 Jun-13
Weight Range	: 1kg - 100g

SECTION 5: ENVIRONMENTAL CONDITIONS DURING TEST

Temperature: 21.5°C Pressure: 761.56 mm Hg Relative Humidity: 47%

SECTION 6: PERTINENT INFORMATION

Reference standards and balances used to perform the calibration are listed in Section 9.

The weights calibrated for this report have been calibrated in accordance with Troemner's calibration procedure.

This calibration also meets specifications as outlined in ISO/IEC 17025, ANSI/NCSL Z540-1-1994 and applicable documents.

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SECTION 7: SUSCEPTIBILITY CALIBRATION DATA

Nominal Value	Serial Number	Magnetic Susceptibility (χ)	Uncertainty (χ)
1kg		0.0035	0.00035
500g		0.0034	0.00044
300g		0.0034	0.00049
200g		0.0034	0.00052
100g		0.0034	0.00057
50g		0.0034	0.00063
30g		0.0034	0.00065
20g		0.0034	0.00067
10g		0.0034	0.00046
5g		0.0034	0.00068
3g		0.0034	0.00068
2g		0.0034	0.00069
1g		0.0034	0.00069

SECTION 8: SUSCEPTIBILITY CALIBRATION PROCEDURE DATA

Nominal Value	Standard Set No.	Balance Used	Procedure Used
100g	Titanium	Susceptometer	CAL-CLASS1



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SECTION 9: GENERAL INFORMATION

This susceptibility calibration was performed in Troemner's Mass Certification Laboratory at 201 Wolf Drive, Thorofare, NJ 08086 unless otherwise noted on page one. The Weights listed on this calibration report have been compared to reference standards that are directly traceable Bureau International Des Poids Measures (BIPM) Report of Test 1996-10-30

SECTION 10: DEFINITIONS AND TERMS

UNCERTAINTY - The error in assignment of the susceptibility due to the measurement process. Uncertainty is calculated per NIST Technical Note 1297 using a coverage factor of $k = 2$ ($k = 2$ defines an interval having a level of confidence of approximately 95 percent).

SUSCEPTOMETER - The instrument described in the "Determining the Magnetic Properties 1kg Mass Standard" by Richard S. Davis NIST Volume 100 number 3 dated May-June 1995. Balance used in the determination of susceptibility is a Sartorius YSZ 02C Susceptometer