



# Mass Calibration Certificate



Certificate #: 76018

This calibration is accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AC-1222.

**Calibration Performed By**  
 PREMIER SCALES & SYSTEMS  
 4901 NORTH SAINT JOSEPH AVE.  
 EVANSVILLE, IN 47720

**Customer**  
 KOENIG SCALE  
 4779 EAST MARGARET DRIVE  
 TERRE HAUTE, IN 47803

**Weight and Test Information**

Equipment I.D.: **24567**  
 Description: TEST WEIGHTS, STAINLESS STEEL  
 Manufacturer: TROEMNER  
 Denomination: KIT: (50 TO 1) G  
 Class: ASTM CLASS 1  
 Condition of Item(s) as Received: GOOD

Serial Number: 24567  
 Temp. / Humidity / Pressure: 20.30 °C / 49.1 % / 745.4 mmHg  
 Performed By: *Ranshel Hundt* RHUNDT  
 Receive Date: 14-Sep-18  
 Calibration Date: 11-Oct-18  
 Calibration Due: **11-Oct-19**

**Comments**

**Calibration Results**

Nominal / I.D.	Results	As Found	Tolerance ±	Uncertainty ±	Results	As Left	Assumed Density (g/cm³)
50 g	P	-0.068 mg	0.120 mg	0.020 mg	P	-0.068 mg	7.95
20 g	P	-0.0269 mg	0.0740 mg	0.0098 mg	P	-0.0269 mg	7.95
20 g •	P	-0.0354 mg	0.0740 mg	0.0098 mg	P	-0.0354 mg	7.95
10 g	P	-0.0047 mg	0.0500 mg	0.0090 mg	P	-0.0047 mg	7.95
5 g	P	-0.0016 mg	0.0340 mg	0.0044 mg	P	-0.0016 mg	7.95
2 g	P	0.0157 mg	0.0340 mg	0.0033 mg	P	0.0157 mg	7.95
2 g •	P	0.0122 mg	0.0340 mg	0.0033 mg	P	0.0122 mg	7.95
1 g	P	-0.0062 mg	0.0340 mg	0.0038 mg	P	-0.0062 mg	7.95

**Standard(s) Used**

Kit/I.D. Number	Description	Traceability Number	Calibration Due
2XQL	METRIC WORKING STANDARD KIT	2407650J	3/29/2020

**Procedure(s) Used**

Procedure Number	Description	Revision Level	Revision Date
NISTIR 6969 SOP 4	DOUBLE SUBSTITUTION	0	10/4/2006

**Test Point Descriptors:**

- P = Pass** : Compliance - The measurement result is within the specification limit when the measurement uncertainty is taken into account.
- \*F = Fail** : Non-compliance - The measurement result is outside the specification limit when the measurement uncertainty is taken into account.
- NP = Not Possible** : It is not possible to state compliance even though the measurement result ± the uncertainty value overlaps the specification limit.

All values listed were determined by comparing the artifacts to Premier Scales & Systems' reference standards which are traceable to the International System of Units (SI), by an accredited lab or a NIST recognized state laboratory, through the traceability number(s) listed. All "As Found" and "As Left" values are reported as the correction value of the conventional mass of the artifact. Documented results contained within this calibration certificate relate only to the artifacts calibrated on the date listed. The uncertainty is obtained by taking the root sum square of the Type A and Type B components and multiplying by a *k* factor of 2 to obtain a confidence level of approximately 95%. The uncertainty values and measurement results are included in the pass / fail condition of the artifact(s). The uncertainty values do not include a component for magnetic properties, air buoyancy corrections or handling and use. Premier Scales & Systems shall not be held liable for any inaccuracies of the artifacts after time of test. This document may not be reproduced, except in full, without the written approval of Premier Scales & Systems.

ANSI/NCSL Z540-1-1994: Part 1 & ISO/IEC 17025 Compliant

*Chris O'Connell* 10/15/2018