



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

United Scale & Engineering Corporation
A TRANSCAT COMPANY
4123 Terminal Drive
McFarland, WI 53558

Fulfills the requirements of

ISO/IEC 17025:2017

and the national standard

ANSI/NCSL Z540-1-1994 (R2002)

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.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 07 September 2023
Certificate Number: AC-2489.17



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)**

United Scale & Engineering Corporation

A TRANSCAT COMPANY
4123 Terminal Dr.
McFarland, WI 53558
Dan Christianson 800-236-1733

CALIBRATION

Valid to: **September 7, 2023**

Certificate Number: **AC-2489.17**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class I Balances ¹ (10 µg resolution)	Up to 100 g	0.11 mg	ASTM E617 Class 1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
	Up to 230 g	0.2 mg	
(0.1 mg resolution)	Up to 610 g	0.52 mg	
Class I Balances ¹ (10 µg resolution)	Up to 100 g	0.15 mg	ASTM E617 Class 0 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
	Up to 230 g	0.29 mg	
(0.1 mg resolution)	Up to 610 g	0.72 mg	
Class II Balances ¹ (1 mg resolution)	Up to 610 g	1.4 mg	ASTM E617 Class 1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(10 mg resolution)	Up to 6 100 g	13 mg	
Class II Balances ¹ (0.1 g resolution)	Up to 32 kg	0.24 g	ASTM E617 Class 2 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(0.5 g resolution)	Up to 34 kg	0.6 g	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class II Balances ¹			NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(1 mg resolution)	Up to 6 400 g	7.1 mg	
(0.1 g resolution)	Up to 32 kg	0.12 g	
(0.5 g resolution)	Up to 34 kg	0.65 g	
(1 g resolution)	Up to 64 kg Up to 100 kg Up to 200 kg	7.1 g 12 g 24 g	
Class III Light Capacity Scales ¹			NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(0.000 5 lb resolution)	Up to 2 lb	0.000 6 lb	
(0.001 lb resolution)	Up to 5 lb	0.002 lb	
(0.002 lb resolution)	Up to 10 lb	0.003 lb	
(0.005 lb resolution)	Up to 20 lb	0.006 lb	
(0.01 lb resolution)	Up to 50 lb	0.013 lb	
(0.02 lb resolution)	Up to 100 lb	0.026 lb	
(0.05 lb resolution)	Up to 200 lb	0.062 lb	
Class III Medium Capacity Scales ¹			NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(0.1 lb resolution)	Up to 500 lb	0.13 lb	
(0.2 lb resolution)	Up to 1 000 lb	0.26 lb	
(0.5 lb resolution)	Up to 2 000 lb	0.62 lb	
(1 lb resolution)	Up to 5 000 lb	1.3 lb	
(2 lb resolution)	Up to 10 000 lb	2.3 lb	
(5 lb resolution)	Up to 20 000 lb	5.8 lb	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class III Medium Capacity Scales ¹ (0.1 kg resolution)	Up to 400 kg	0.13 kg	NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
	Up to 600 kg	0.14 kg	
(0.2 kg resolution)	Up to 1 000 kg	0.24 kg	
(0.3 kg resolution)	Up to 2 500 kg	0.45 kg	
(0.5 kg resolution)	Up to 5 000 kg	0.65 kg	
(1 kg resolution)	Up to 9 000 kg	1.1 kg	
Class III Heavy Capacity Scales ¹ (10 lb resolution)	Up to 50 000 lb	12 lb	NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(20 lb resolution)	Up to 100 000 lb	23 lb	
	Up to 200 000 lb	23 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. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2489.17.



R. Douglas Leonard Jr., VP, PILR SBU