CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

United Scale & Engineering Corporation
A TRANSCAT COMPANY
16725 W. Victor Road
New Berlin WI 53151
(including satellite location listed on the scope)

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.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 07 September 2023
Certificate Number: AC-2489.16

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
16725 W. Victor Road
New Berlin, WI 53151
Dan Christianson 800-236-1733

CALIBRATION

Valid to: **September 7, 2023** Certificate Number: **AC-2489.16**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class I Balances [1]			ASTM E617 Class 1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(10 µg resolution)	Up to 100 g Up to 230 g	0.29 mg 0.59 mg	
(0.1 mg resolution)	Up to 610 g	1.5 mg	
Class II Balances [1]			OIML Class F1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
(1 mg resolution)	Up to 610 g	3.2 mg	
(10 mg resolution)	Up to 6 100 g	32 mg	
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	1.9 g	
(0.1 g resolution)	Up to 32 kg	2.9 g	
(0.5 g resolution)	Up to 34 kg	3.9 g	
(1 g resolution)	Up to 64 kg Up to 100 kg Up to 200 kg	7.3 g 12 g 24 g	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
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 7 lb	
(0.001 lb resolution)	Up to 5 lb	0.006 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	2.8 lb	
(5 lb resolution)	Up to 20 000 lb	6.9 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 kg resolution)	Up to 400 kg Up to 600 kg	0.14 kg 0.15 kg	
(0.2 kg resolution)	Up to 1 000 kg	0.28 kg	
(0.3 kg resolution)	Up to 2 500 kg	0.48 kg	
(0.5 kg resolution)	Up to 5 000 kg	0.87 kg	
(1 kg resolution)	Up to 9 000 kg	1.2 kg	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class IIIL Heavy Capacity Scales [1] (10 lb resolution) (20 lb resolution)	 Up to 50 000 lb Up to 100 000 lb Up to 200 000 lb	 14 lb 26 lb 26 lb	NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.

Services performed at satellite laboratory
1322 Russett Court
Green Bay, WI 54313

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class I Balances [1] (10 µg resolution) (0.1 mg resolution)	 Up to 100 g Up to 230 g Up to 610 g	 0.29 mg 0.59 mg 1.5 mg	ASTM E617 Class 1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
Class II Balances [1] (1 mg resolution) (10 mg resolution)	 Up to 610 g Up to 6 100 g	 3.2 mg 32 mg	OIML Class F1 Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.
Class II Balances [1] (1 mg resolution) (0.1 g resolution) (0.5 g resolution) (1 g resolution)	 Up to 6 400 g Up to 32 kg Up to 34 kg Up to 64 kg Up to 100 kg Up to 200 kg	 1.9 g 2.9 g 3.9 g 7.3 g 12 g 24 g	NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
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 7 lb	
(0.001 lb resolution)	Up to 5 lb	0.006 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	2.8 lb	
(5 lb resolution)	Up to 20 000 lb	6.9 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 kg resolution)	Up to 400 kg Up to 600 kg	0.14 kg 0.15 kg	
(0.2 kg resolution)	Up to 1 000 kg	0.28 kg	
(0.3 kg resolution)	Up to 2 500 kg	0.48 kg	
(0.5 kg resolution)	Up to 5 000 kg	0.87 kg	
(1 kg resolution)	Up to 9 000 kg	1.2 kg	

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Class IIIL Heavy Capacity Scales [1] (10 lb resolution) (20 lb resolution)	 Up to 50 000 lb Up to 100 000 lb Up to 200 000 lb	 14 lb 26 lb 26 lb	NIST Class F Weights and internal calibration procedure CPM-CAL-001 utilized for the calibration of the weighing system.

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-2489.16.

R. Douglas Leonard Jr., VP, PILR SBU