

WINTER 2023

# ISWM NEWS

International Society of Weighing & Measurement

## 2024 ISWM ANNUAL SOCIETY MEETING

Holiday Inn & Suites  
3900 Atlantic Avenue Virginia Beach, VA  
on February 20 - 22, 2024





# AUROLA

## REMOTE DISPLAYS



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\*Aurora MINI not pictured



Aurora 45



Aurora 10

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### International Society of Weighing & Measurement ( or ISWM)

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*Executive Director*

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Front cover photograph  
courtesy of Holiday  
Inn & Suites and Hart  
Photographic, Inc.



## COMING EVENTS

Please visit ISWM.org (Home page for more details).

Please visit ISWM.org (home page for more details)

### December 12, 2023

Board of Director's Meeting (zoom)

### February 19, 2024

Board of Directors Meeting

Holiday Inn & Suites, Virginia Beach, VA

### February 20-22, 2024

ISWM Annual Society Meeting

Holiday Inn & Suites, Virginia Beach, VA

### May 3 & 4 2024

South Atlantic Spring 2024 Meeting

Orlando, Florida

### October 4 & 5, 2024

South Atlantic Fall 2024 Meeting

Beach Cove Resort, North Myrtle Beach, SC

## Magazine Submittal Deadlines:

**Spring: Editorial**  
February 1, 2024

**Ads:**  
April 14, 2024

The circle denotes the next available issue open for submissions.

## ISWM 2023 Board of Directors

### Executive Committee

#### President 2021–2023

George Williamson

Greenville Scale Company, Inc.

#### Vice President 2022–2023

Tammy Schmitz

NBS Calibrations

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Jerry Finnegan (Past President)

Anyload, Inc.

#### Executive Committee Member 2022–2024

Tom Boughter

Maine Scale

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Coti Global Sensors

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Jim Perry ..... Central Northwest

Alison Weiss ..... Greater New York

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Steve Dishon ..... Potomac

Bert Baxter ..... South Atlantic

John Hallak ..... Western

Rob Woodward ..... Manufacturing Division

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Mail goes to P.O. Box 148474 • Nashville, TN 37214 • United States.  
To contact Ann Crowley, call 715-651-9123 or email Ann@iswm.org.





# Seasons Change

By George Williamson

*ISWM President*

Summer is over and colder weather is on the way. Please come back Summer. The ISWM is back in business with multiple divisions holding their spring and fall division meetings. Thank you to all who make the effort to make this happen. Thank you to all who attended any of these meetings. The ISWM 2024

Annual Meeting will be held on February 20th at the Holiday Inn & Suites Virginia Beach – North Beach, Virginia Beach, VA. I would like to see as many as possible attend this meeting to help grow and support our society.

To all of our members, while you are out performing your duties please re-

member our society the ISWM and help advertise to others the benefits of joining.

Thank you again for your commitment to the ISWM.

Sincerely,  
George Williamson



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# NEW MEMBERS

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Illinois Department of Agriculture  
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Springfield, Ill 62794  
Phone: (217) 785-8300  
Doug.rathbu2@illinois.gov

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Phone Number  
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### NOTE:

*We have plenty of room for new members!  
And you know who they should be -  
so please encourage them to join today!*

*Point them to our website:  
[www.ISWM.org](http://www.ISWM.org) or have them contact  
Ann Crowley at: [Ann@iswm.org](mailto:Ann@iswm.org)*

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Corrosion of the internal boards is a common cause of equipment failure. Most balances are not rated to prevent moisture from getting inside the unit. With an IP65 balance you don't have to worry about accidental spills, high humidity environments or cleaning procedures causing damage to boards or critical electronics. Additionally, 100% dust ingress protection means that they are perfect for use in laboratory environments!



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# Hazardous Area Weighing Solutions from A&D Solutions for Environments with Potentially Explosive Atmospheres

## What is a Hazardous Area?

Hazardous areas are environments where there are sufficient amounts of explosive gases, dusts or vapors in the atmosphere under normal or abnormal conditions which could potentially cause a fire or explosion. In addition to the presence of these flammable substances there are 2 other requirements in order for an explosion to occur:

**Oxidizer:** Must be present in sufficient quantity (typically oxygen)  
**Source of ignition:** Either from a spark or high heat

If any of the 3 requirements are missing, an explosion will not occur.

For weighing equipment there are two methods of ensuring hazardous area safety. The first type of protection is known as explosion proof – meaning that the equipment itself does not prevent an explosion from occurring, however, it confines the

explosion and prevents it from spreading. This type of

equipment is usually much bigger and heavier (in order to contain an explosion), which typically makes them more expensive to manufacture and to transport. It also means that if an explosion does occur, it will need to be replaced.

The other type of protection is known as intrinsically safe. Intrinsically safe means that the equipment is designed to limit the energy available for ignition. If there isn't enough energy to create a spark, then the 3rd requirement for an explosion to occur is not present. The advantage of intrinsically safe equipment is that it typically has the same size and appearance as standard equipment, but with additional safeguards to lower the energy output.

Regardless of the type of protection the device offers, they must be certified

for specific areas of classification, substance classes and temperature based on the National Electrical Code (NEC). The categories for substances are Gases/Vapors (Class I), Dusts (Class II) and Fibers (Class III). Classes I and II are then further divided into material groups A,B,C,D,E,F and G, specifying the types of gases or materials the equipment is protected against (propane or combustible metal dust, for example). Temperature is rated from T1 to T6 with T1 being the highest temperature rating and T6 being the lowest.

Lastly, the areas are rated as Division 1 or Division 2. Division 1 areas mean that the potential for an explosion is always present. Division 2 areas mean that there is the potential for explosion only under abnormal conditions (a leak at a gas station).

Substance	Substance Class	Area Classification		Hazardous Location Characteristics
		NEC500	NEC505	
Gases/Vapors	Class I (NEC 501)	Division 1	Zone 0	Explosion hazard present continuously or occasionally under normal operating conditions
			Zone 1	
		Division 2	Zone 2	Ignitable concentrations of flammable gases or vapors are not normally present, but could be present in the case of a fault
Dusts	Class II (NEC 502)	Division 1		Combustible dusts are present in quantities sufficient to produce explosive and ignitable mixtures
		Division 2		Combustible dust due to abnormal operations may be present in quantities sufficient to produce explosive or ignitable mixtures
Fibers	Class III (NEC 503)	Division 1		Easy ignitable fibers / flyings are handled or manufactured
		Division 2		Easy ignitable fibers / flyings are stored or handled



## A&D offers two solutions for hazardous area weighing environments:

**EK-AEP** for lower capacity/higher resolution applications

**HW-CEP** for heavier capacity/industrial applications.



Both models are Factory Mutual (FM) approved for Class I, Div I, Groups C&D and Temperature T4 in both the United States and Canada. The Class I rating and high resolution offered by the EK-AEP make it ideal for expensive gas filling applications and the heavy capacity of the HW-CEP allows for taring of heavy gas cylinders which are commonly used.

The EK-AE comes in capacities from 300 g to 12 kg and readabilities down to 0.01 g. The HW-CEP offers capacities from 10 kg up to 220 kg, with readabilities as low as 1 g.

For more information on A&D's products or for assistance with your hazardous area application please contact A&D Weighing at 888-726-5931

EK-AEP Series	EK-300AEP	EK-3000AEP	EK-12KAEP
Weighing capacity	300 g	3000 g	12 kg
Minimum weighing value	0.01 g	0.1 g	1 g
Repeatability (Standard Deviation)	0.01 g	0.1 g	1 g
Linearity	±0.02 g	±0.2 g	±1 g
Display	7 segment LCD (character height: 16 mm) with backlight		
Battery life	Approx. 250 hours (with four AA alkaline batteries* <sup>i</sup> , backlight off)		
Weighing pan size	Ø110 mm	133 × 170 mm	
Dimensions	190 (W) × 218 (D) × 54 (H) mm	190 (W) × 218 (D) × 53 (H) mm	

\*<sup>i</sup> To be used only with four DURACELL AA alkaline MN1500 LR6, ENERGIZER AA E91 alkaline LR6 AM3, or Panasonic AA alkaline LR6 (XJ) 1.5V batteries.

		HV-15KCEP	HV-60KCEP	HV-200KCEP	HW-10KCEP	HW-60KCEP	HW-100KCEP	HW-200KCEP
kg	Capacity	3 / 6 / 15	15 / 30 / 60	60 / 150 / 220	10	60	100	220
	Min. display	0.001 / 0.002 / 0.005	0.005 / 0.01 / 0.02	0.02 / 0.05 / 0.1	0.001	0.005	0.01	0.02
Stabilization time		Within 1 second			Within 1.5 seconds			
Repeatability (std. deviation) [kg]		0.001 / 0.002 / 0.005	0.005 / 0.01 / 0.02	0.02 / 0.05 / 0.1	0.002	0.01	0.02	0.04
Linearity (kg)		±0.001 / ±0.002 / ±0.005	±0.005 / ±0.01 / ±0.02	±0.02 / ±0.05 / ±0.1	±0.002	±0.01	±0.02	±0.04
Display		7 segment LCD (Character height: 25 mm) with backlight; 3-color, 5-step LED comparator lights						
Power supply		Four D-size, alkaline, 1.5 V batteries* <sup>2</sup>						
Battery Life (approx.)		1,500 hours with LED and backlight OFF or 1,000 hours with LED and backlight ON						
Weighing Pan size		250 × 250 mm 9.8 × 9.8 in	330 × 424 mm 13.0 × 16.7 in	390 × 530 mm 15.4 × 20.9 in	250 × 250 mm 9.8 × 9.8 in	330 × 424 mm 13.0 × 16.7 in	390 × 530 mm 15.4 × 20.9 in	
Dimensions (W × D × H)		250 × 439 × 397 mm 9.8 × 17.3 × 15.6 in	330 × 585 × 776 mm 13.0 × 23 × 30.6 in	390 × 691 × 776 mm 15.4 × 27.2 × 30.6 in	250 × 439 × 397 mm 9.8 × 17.3 × 15.6 in	330 × 585 × 776 mm 13.0 × 23 × 30.6 in	390 × 691 × 776 mm 15.4 × 27.2 × 30.6 in	



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# RAPP/MANTES EDUCATION FUND

The Rapp/Mantes Education Fund awards scholarships to those involved in the scale industry, their children and grandchildren. The number of scholarships and the amount of each varies from year to year. The original source of these funds – Mack Rapp and Ted Mantes, were long-standing leaders in the scale industry and supports of education in the field of metrology. Following the discontinuance of measurement science studies at both Alfred Tech N.Y. and Yuba College CA, the fund was redirected. Now awards are available to applicants with a variety of career goals. Scholarships are issued in the recipient’s name directly to their chosen university.

This year the Scholarship Committee met by conference call. Eight scholarships were awarded as follows:

Maxine Mohesky.....	Rockhurst University.....	\$1500
Iris Mohesky .....	Southeast Missouri State .....	\$1500
James Molina.....	The Ohio State University.....	\$1000
Gain Honerlaw .....	Cincinnati State Technical College.....	\$1000
James Santarpio .....	Montana State University.....	\$1000
Joe Molina .....	Ohio University .....	\$1000
Ansley Fowler .....	North Greenville University .....	\$1000
Jerry Robertson.....	Erskin College.....	\$1000

It is the sincere wish of the committee that all continue their pursuit of education and apply again in future years.

Applications for a scholarship for the 2024-2025 school year will be available on or shortly after January 1, 2024. See the form following to apply:

*Continued on page 13*

A promotional banner for the International Society of Weighing & Measurement (ISWM) 2023 training. The banner features a white background on the left and a red background on the right. The red background contains a photograph of industrial weighing equipment, including a large white scale and a blue hose. The ISWM logo is in the top left, and the year '2023' is in the top right. Text in the center encourages visiting the website for training, noting that membership is required. A 'Training' button is located in the bottom left.

 **ISWM**  
INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

2023

VISIT [www.iswm.org](http://www.iswm.org) for training.  
Membership required to access  
this comprehensive training site.

**International Society of  
Weighing & Measurement**

Training



# RAPP/MANTES EDUCATION FUND SCHOLARSHIP APPLICATION FORM - 2024

The Rapp/Mantes Education Fund awards scholarships to those involved in the scale industry, their children and grandchildren. To be considered for a scholarship this form must be completed in full and in addition the following items must be submitted.

1. An official copy of your academic transcripts complete with your latest GPA.
2. Two letters of recommendation from people other than your relatives.
3. A type-written/computer generated one page letter, expressing your feelings as to why you should receive this award.

MAIL TO: Rapp/Mantes Education Fund  
C/O Ohio State Scale  
3240 Leesville Way  
Dublin, Ohio 43017  
Phone: 614-459-5152  
Email: ossweigh@msn.com

Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone No: \_\_\_\_\_ Social Security No.: \_\_\_\_\_

## Your relationship to the scale industry:

Name: \_\_\_\_\_ Relationship: \_\_\_\_\_

Company Affiliation: \_\_\_\_\_ Years with Co.: \_\_\_\_\_

Working or Retired: \_\_\_\_\_

Name & address of the Institution you will be attending beginning with the fall semester/quarter 2024/2025:

\_\_\_\_\_  
\_\_\_\_\_

# RAPP/MANTES EDUCATION FUND SCHOLARSHIP APPLICATION FORM - 2024 (continued)

Address of Bursar's Office (if different):

---

---

Name & Address of the Institution currently attending (if different):

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Your work experience. This may be volunteer work or paid employment:

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Your extra-curricular activities.

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---

Your occupational or career goals:

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THE RAPP/MANTES EDUCATION FUND SCHOLARSHIP COMMITTEE WILL REVIEW ALL APPLICATIONS BY JUNE 15, 2024.  
NOTIFICATIONS OF AWARDS WILL BE MADE TO EACH RECIPIENT ON OR BEFORE JULY 1, 2024.



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Fundamentals of Electronic Systems

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April 14-19

June 23-28

August 4-9

September 8-13

December 15-20

### ES-222

Advanced Scale System Troubleshooting

January 21-26

May 19-24

August 25-30

October 20-25

### ES-300

1280 Enterprise Workshop

March 3-8

November 3-8

### ES-301

Indicator iRite Programming

March 10-15

November 10-15

### RS-111

Retail Scales Training

February 18-23

June 2-7

July 21-26

October 6-11

### AW-111

Automatic Wrapper Training

January 14-19

March 24-29

July 7-12

December 1-6

### AW-112

WM-Nano Wrapper Training

October 1-3

## Online

### ES-111

Fundamentals of Electronic Systems

### ES-222

Advanced Scale System Troubleshooting

### SB-111

Setpoints and Batching

### HB-44

Handbook 44 Training

## Other Locations

### Handbook 44 Training

January 16 ..... Portland, OR

April 4 ..... Cincinnati, OH

September 24 .... Concord, CA

October 22 ..... Columbus, OH

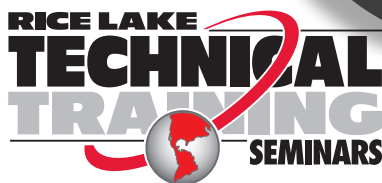
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# Central Illinois Scale Company Celebrates 70 Years of Success

Central Illinois Scale Company is proud to announce the celebration of its 70-year anniversary. Since its inception in 1953, Central Illinois Scale Company has been committed to excellence, innovation, and customer satisfaction. This milestone marks a momentous journey of growth and success.

Over the years, Central Illinois Scale Company has grown from a modest business to a prominent player in the scale industry. Through unwavering dedication and a relentless pursuit of excellence, the company has successfully grown over the years. They currently have 30 employees

and 3 offices spread across central Illinois. Collectively the company has over 500 years of scale experience.

In addition to celebrating 70 years of being in business, Central Illinois Scale Company also celebrated Owner Dennis Fox's 50th anniversary in the scale industry. Dennis started with the company in 1973 and took a few years to work in Alaska for another scale company. From the mechanical age of scale to the digital age Dennis has worked as technician, a service and sales manager, to Vice President to sole owner. His drive to provide excellent customer service and passion to

solve the customers' problems are pillars in Central Illinois Scale Company's values as a company.

In celebration of this significant milestone, Central Illinois Scale Company hosted an open house dinner at Sleepy Creek Winery for past and present employees, as well as several colleagues and contacts in the scale industry. The anniversary celebration provided an opportunity to reflect on the company's journey and acknowledge the contributions of its employees both past and present.



Ryan Fox/Central Illinois Scale Company



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# What Is The True Meaning Of A “Scale Division” (d) Versus A “Verification Scale Division” (e)

By Jan Konijnenburg

## Introduction

If you are a state weights and measures official, scale manufacturer, or any other stakeholder dealing with scales used for commercial transactions, then this article may be of interest to you.

In 1984, an initiative was taken by the National Conference on Weights and Measures (NCWM) to harmonize the scale code in section 2.20, *Scales*, of the NIST Handbook 44 (NIST HB 44) with OIML R 76, the international standard on non-automatic weighing instruments used in legal metrology applications. Although many aspects of OIML R 76 were adopted in NIST HB 44, the exact same wording was not incorporated directly which led to unintended deviations, including the application of “scale division” (d), and the “verification scale division” (e). Furthermore, the current text in NIST HB 44 section 2.20 contains some inconsistencies and contradictions. This has led to confusion by field inspectors and has created non-uniformity in application of NIST HB 44 to scales where the “scale division” (d) differs from the “verification scale division” (e).

There is a current item (SCL-23.3, *Verification Scale Division e: Multiple Sec-*

*tions...*) on the agenda of the Specifications and Tolerance (S&T) Committee of the National Conference on Weights and Measures (NCWM) to amend the scale code, Section 2.20 of NIST HB 44 for the correct implementation of “scale division” (d) and the “verification scale division” (e). This item has prompted much discussion (and some confusion) recently among the weights and measures community.

What are the exact implications of this proposal? What do the “scale division” (d), and “verification scale division” (e) actually represent? And what is wrong with the current language in section 2.20 of NIST HB 44? How did we get here?

Let’s begin by first understanding the differences between “scale division” (d) and the “verification scale division” (e).

## What are the differences between the “scale division” (d) and the “verification scale division” (e)?

The indication on a scale has a certain resolution. This is the incremental size between two consecutive indications on a digital indication or two consecutive marks on an analog indication. This resolution is in the scale requirements called

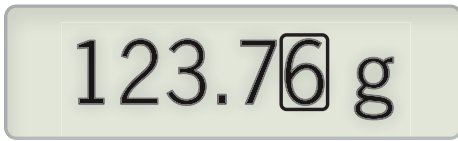
“scale division” and is denoted with the letter (d). But a scale used for commercial transactions also has a “verification scale division”, denoted in NIST HB 44 with the letter (e), which is specified by the manufacturer and is basically a measure for the accuracy of the instrument. The “verification scale division” is a value that is used to determine the tolerance of the scale.

The tolerance of a scale is expressed in e. For example, the maintenance tolerance at the lower end of the measuring range is equal to 1 e. For a scale with a “verification scale division” of  $e = 10 \text{ g}$ , the tolerance is therefore 10 g at the start of the weighing range. For most scales in the field, the “verification scale division” (e) is the same as the “scale division” (d) which is probably the biggest reason why there is confusion about the meanings of “scale division” and “verification scale division”.

Although the “scale division” and “verification scale division” are entirely different concepts for the verification of scales, they are related. Except for weight classifiers, on all scales of classes III, IIII and IIII, the resolution of the indication “scale division” (d), must be the same as the “verification scale division” (e). Only on class I or class II scales and dynamic



monorail scales, the “scale division” (d) may be smaller than the “verification scale division” (e). In case of a digital scale, the display contains an additional digit. This digit differs in size, color, shape or in any other distinctive way indicating that this extra digit does not contribute to the accuracy of the scale.



**FIGURE 1:** Example of an indication with a differentiated scale division. In this example the “verification scale division” (e) equals 0.1 g and the “scale division” (d) equals 0.01 g.

When the “scale division” is the same as the “verification scale division”, only the “scale division” (d) is mentioned on the name plate of the scale (or near the display). If the “scale division” (d) deviates from the “verification scale division” (e), then both values must be mentioned.

### **What are the issues with the current regulation in NIST HB 44?**

During the prior effort in 1984 to harmonize NIST HB 44 with OIML R 76, some unintended deviations between the two codes were introduced. The most significant deviation with respect to the “scale division” and “verification scale division” was introduced in Table 6, *Maintenance Tolerances*, of NIST HB 44, section 2.20 in which scales are to be based on the tolerance on the “scale division” (d), whereas for OIML R 76, it is based on the tolerance on the “verification scale division” (e). This is an unintended deviation because the definition of “verification scale division” in NIST HB 44 clearly states that the value of e is used to determine the tolerance of the scale.

Besides the issue with the tolerances defined in Table 6, the scale code in NIST HB 44 contains several other inconsistencies and contradictions regarding the use of the “scale division” (d) and “verification scale division” (e). To avoid confusion and maintain uniformity in the application of the scales code, it is important that these inconsistencies and contradictions are corrected.

### **But what are the consequences of this unintended deviation?**

The vast majority of scales used for commercial transactions are class III and class IIII scales. With these scales the “scale division” (d) is required to be the same as the “verification scale division” (e) and should not pose an issue in field applications since they have the same value. However, the problem may occur with class I and class II scales (and dynamic monorail weighing systems) where the “scale division” (d) is smaller than the “verification scale division” (e).

Table 6, *Maintenance Tolerances*, of NIST HB 44, Section 2.20 is basing the tolerance on the “scale division” (d) (the resolution of the indication) instead of the “verification scale division” (e). Because d is now smaller than e, the tolerance for a class II scale with an auxiliary digit is also smaller than the tolerance of the same scale without the auxiliary digit. This could be as small as one-tenth of the tolerance based on e as it was originally intended. It is very likely that these scales with a differentiated scale division ( $d < e$ ) will not pass inspection when these tighter tolerances are applied.

Alternatively, states might deviate from the tolerances in Table 6, *Maintenance Tolerances*, and apply tolerances based on the “verification scale division” (e). If this occurs, these scales will not be held to tighter tolerances, which affects the accuracy requirements and hinders harmonization among the states. Besides the applied tolerances in Table 6, *Maintenance Tolerances*, there are other inconsistencies and deviations between NIST HB 44 and OIML R 76 with respect to the use of “scale division” (d) and the “verification scale division” (e). One being the inconsistent language within the Scale Code, which has caused an incorrect understanding among some stakeholders on the meaning and correct application of the “scale division” (d) and the “verification scale division” (e).

### **What commercial applications are affected?**

The only instruments that may have a “scale division” (d) smaller than the “verification scale division” (e) are class I

and class II scales and dynamic monorail weighing systems. Table 7a, *Typical Class or Type of Device for Weighing Applications*, in user requirement UR.1.1, *General*, of NIST HB 44, section 2.20 provides an overview of the typical type of device or weighing application for each accuracy class. According to this table class I and II scales are typically used in laboratories, applications for weighing of precious metals and gems and in applications to test grain.

Another possible application for inclusion in Table 7a is the commercial transaction of cannabis products\*. It can be expected that states will require a class II scale in these transactions due to the high value and cost of these type of commodities.

### **NCWM Verification Scale Division Task Group**

In 2020, the NCWM Verification Scale Division Task Group was formed to identify all instances within the section 2.20 of NIST HB 44 where the code deviates from OIML R 76, or where inconsistencies exist with respect to the “scale division” (d) and the “verification scale division” (e). The task group’s goal is to provide a proposal for reparation of these instances. This work has resulted in the submittal of a proposal to the NCWM S&T Committee and is currently on the S&T agenda under item SCL-23.3 as stated above.

### **Need more information?**

For more information regarding “scale division” (d) and the “verification scale division” (e), and how they were intended to be implemented in the scales code in section 2.20 of NIST HB 44, please visit the in the NIST OWM’s FAQs or contact Jan Konijnenburg (jan.konijnenburg@nist.gov).

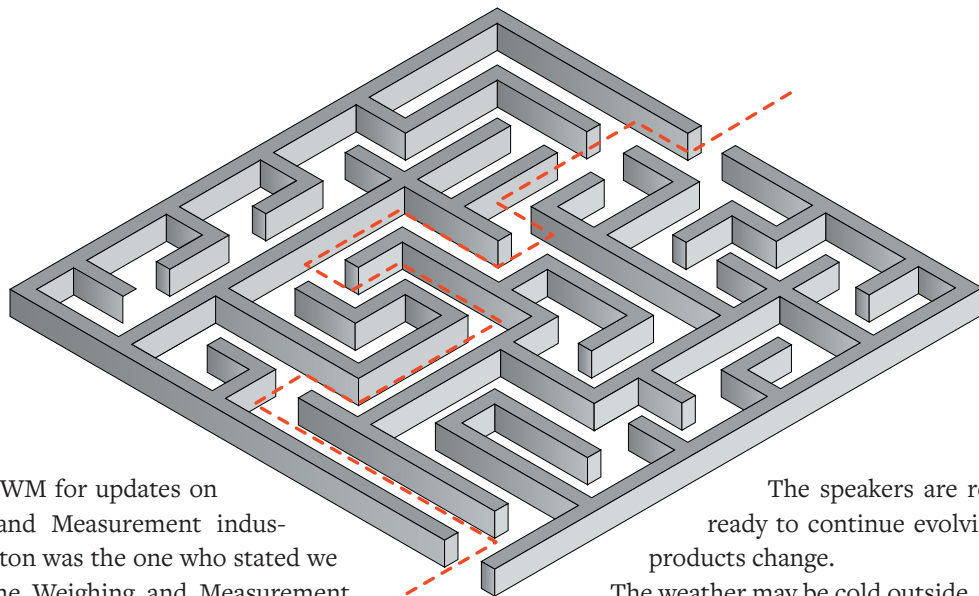
*\*In contrast to hemp, marijuana remains a Schedule I substance under the Controlled Substances Act. NIST does not have a policy role related to the production, sale, distribution, or use of cannabis (including hemp and marijuana). NIST participates in the National Conference on Weights and Measures (NCWM) as part of NIST’s statutory mission to promote uniformity in state laws, regulations, and testing procedures.*



INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

# FUTURE OF WEIGHING & MEASUREMENT

**Metrology Milestones**  
**Keeping up with our evolving business**  
**Essential business – Weighing and Measurement**



Come join the ISWM for updates on the Weighing and Measurement industry. George Washington was the one who stated we need to establish the Weighing and Measurement programs. During the last couple of years, it was apparent how much our economy depends on our industry to keep everything fair and equitable in the marketplace. Please join us to share ideas and hear the latest in the industry.

The speakers are ready. Our industry is ready to continue evolving as technology and products change.

The weather may be cold outside, but inside we are mingling and gaining knowledge.

Join us February 20 through February 22, 2024, at the Holiday Inn Hotel & Suites Virginia Beach – North Beach, 3900 Atlantic Avenue, Virginia Beach, VA.



#### **HOTEL INFORMATION:**

Room rates at Holiday Inn & Suites Virginia Beach – North Beach, 3900 Atlantic Avenue, Virginia Beach, VA., are \$120 per night Sunday through Thursday plus a mandatory \$2.00 fee and tax per standard room. The cut-off date for room reservations at the group rate at Holiday Inn & Suites is January 20, 2024. To make reservations guests can call: 757-428-1711 and use the code IWM to receive the special group rate. Here is the booking link to make reservations online: <https://tinyurl.com/v89cnmd4>

**Travel Information:** Norfolk International Airport is the closest airport.

Parking is free at the Holiday Inn Resort & Suites

**Visa Information:** Check with your local U.S. Embassy or Consulate regarding current visa requirements. If you need a letter of invitation, please email Ann Crowley at [ann@iswm.org](mailto:ann@iswm.org).



## Sponsorships:

### Sponsorships Platinum: \$2,000

- Recognized sponsor of the Conference and Expo's Icebreaker Opening Reception. Sponsorship acknowledgment and appropriate signage at the Opening Reception of ISWM's Conference and Expo.
- Half-page ad in the ISWM Conference and Expo Program.
- Prominence on all sponsorship listing/signage.
- Distinctive identification badges for all company employees attending the Conference and Expo.

### Gold: \$1,500

- Recognized sponsor of the 2012 ISWM Conference and Expo.
- Gold sponsors will have their company logo displayed on ISWM's online Membership Directory.
- Third-page ad in the 2012 ISWM Conference and Expo Program.
- Prominence on all sponsorship listings/signage.
- Distinctive identification badges for all company employees attending the Conference and Expo.

### Silver: \$1,000

- Recognized sponsor of the 2012 ISWM Conference and Expo.
- Quarter-page ad in the 2012 Conference and Expo Program.
- Listing on all sponsorship rosters/signage.
- Distinctive identification badges for all company employees attending the Conference and Expo

## Education Session Coffee Break \$400 sponsorship for one day.

Two sponsorships available. Who wouldn't love the company that brought them a hot cup of coffee to combat the morning slump! Make your company the hero of the ISWM Conference as a Coffee Break sponsor at the Education sessions.

You will be identified as the Coffee Break sponsor with signage bearing your company name and logo, and you will also be entitled to set up a tabletop display in the education session hallway at the time of your sponsored Coffee Break. Also, your

company will be acknowledged in the ISWM Conference and Expo Program for its sponsorship. If you are interested in sponsoring, go to [iswm.org](http://iswm.org) under Events and download the full exhibit and sponsorship prospectus.

## Speakers:



**DON ONWILER** - National Conference of Weights and Measures - Executive Director at National Conference on Weights & Measures update.



**ELIZABETH BENHAM** - Physical Scientist, Metric Program Leader - Since 2005, Ms. Benham has served as the nation's focal point for voluntary conversion to the International System of Units (SI), com-

monly known as the metric system. As Metric Coordinator, she provides information and assistance to Federal, State and Local weights and measures officials, business, industry, educational institutions, and the public concerning the metric system (SI) and identifies opportunities for increasing the understanding and use of the SI measurement system in trade and commerce. Ms. Benham is actively involved in Science, Technology, Engineering, and Mathematics (STEM) education and outreach activities.



**MARK RUEFENACHT** - ASTM E617 and Proficiency Testing - Metrology, Statistics, Uncertainty Standards Development & Research Instructor at National Institute of Standards and Technology.



**JEFF CANFIELD** - Regional Manager at Rice Lake Weighing. - Presenting on sales for service professionals.

## Exhibit Information:

Exhibit set up will begin on February 20, 2024, at 10 am. All Exhibits need to be removed by 11:00 am on Friday, February 23, 2024. All equipment shipped should be marked with the name and date of the

Conference. All equipment crates or material needs to be on wheels. The hotel cannot move the crates as there is no pallet jack on the property. Equipment should arrive no sooner than 3 days before the

conference. All boxes must be removed by one day after the conference. The exhibit tables are one six-foot table with cloth skirting, two chairs, and a wastebasket.

## Call for Nominations for Awards: (Nominations to be completed by January 15, 2024.)

### MARK PICKELL AWARD:

Recognizing and honoring that member whose outstanding activities and efforts

during the preceding year or years has contributed greatly to strengthening the effectiveness, benefits, and growth of his/

her local Division of ISWM.

In memory of Mark W. Pickell, who was associated with the weighing industry and

NSMA from the early publication days of Scale Journal (now Weighing and Measurement Magazine). Mr. Pickell served as Secretary-Treasurer of NSMA for years.

### **Purpose**

The Mark Pickell award was created to recognize and honor that member whose outstanding activities and efforts during the preceding year or years has contributed greatly to strengthen the effectiveness, benefits, and growth of his/her local Division of ISWM.

### **Eligibility Requirements**

The candidate must be a member in good standing of the Division placing the nomination for at least one year. The candidate must be active in his/her division affairs during the year in which he/she is nominated, regularly attend meetings, and help when asked.

The candidate does not have to be active on an international level, nor present at the society Conference. The candidate may not be nominated by his/her division for another international award in the same year. Candidates may be nominated more than once, but not in two consecutive years.

### **THOMAS “MIC” HENDRICK AWARD**

Recognizing an individual for his/her discovery or successful application of a principle or concept which has benefited the weighing industry (formerly known as the Technical Excellence Award).

Established in 1979, the Thomas “Mic” Hendrick memorial Award for Technical Excellence (formerly known as the Technical Excellence Award) is sponsored and funded by the ISWM.

### **Purpose**

To recognize an individual for his/her discovery or successful application of a principle or concept which has benefited the weighing industry.

### **Eligibility Requirements**

The recipient may be any person credited with a discovery or successful application of a principle or concept which has ben-

efited the weighing industry. The principle must be of a technical nature, have been introduced to the weighing industry within the last 100 years, be unique, represent an improvement to increase efficiency and/or accuracy of weighing equipment and have been in use for a reasonable time by a significant portion of the industry. It must be of economic significance to the weighing industry and foster further advancements in the industry by building on the concept.

The award may be presented posthumously, but preference will be given to a living person. The recipient or some living person or representative of an organization must be interested enough to be at the conference to accept, receive, and acknowledge the award.

Nominations can be sent to the ISWM headquarters and will be forwarded to the Selection Committee.

### **LADY OF THE YEAR AWARD**

To encourage active participation in the Society on the part of wives of members and the women in the weighing industry, and to recognize their valuable contributions to the Society and the industry.

Sponsored by a trust fund in care of ISWM set up in 1979 by Raymond C. and Charlotte M. Canfield, Pittsburgh, PA.

### **Purpose**

To encourage active participation in the Society on the part of wives of members and the women in the weighing industry and to recognize their valuable contributions to the Society and the industry.

### **Eligibility Requirements**

The candidate should be a member in good standing of the International Society of Weighing and Measurement or the wife of a member in good standing. The candidate should present at the Society Conference. The candidate must participate in the guest program seminar and at least one other guest program activity during the conference; or be registered as a conference attendee. The candidate shall have been active in ISWM Division and District activities. Consideration also will be given for participation in activities of her church,

her community, and other outside organizations. Paid staff members of ISWM shall not be eligible for this award.

### **Nominations**

Each Division may submit at least one nomination for the award, and more than one may be submitted. Nominations shall be sent to the ISWM headquarter office no later than thirty (30) days prior to the Society Conference and shall be no more than two pages in length. Nominations shall include pertinent information on the activities and achievements of the candidate in ISWM, in her community, church, and other outside organizations.

### **EARL CURL AWARD**

Recognizing the outstanding Division of ISWM. The Earl Curl Award was established in 1961 and is donated each year by Nicol Scales, LP, Dallas, Texas.

In Memory of Earl Curl, General Manager of the Western Weighing and Inspection Bureau, Chicago, Illinois, who served as President of National Scale Men’s Association in 1949-50.

### **Purpose**

Originally intended as a membership incentive award to be won by the local Division which had the largest percentage of increase in membership from one annual meeting to the next, the award has evolved into one which recognizes the outstanding division of ISWM.

### **Eligibility Requirements**

The Division must meet both eligibility requirements as listed below: 1. Increase in membership an average of 5% or more in the last (2) years. 2. Two or more meetings during each of the last (2) years.

### **Selection Considerations**

The committee will make the selection based on the following considerations: 1. Additional meetings have been held during the last (2) years. 2. Quality of special programs during meetings. 3. Quality of speakers at meetings. 4. Educational classes at meetings. 5. Programs to benefit other Divisions of ISWM.



## **Nominations**

Each eligible Division may submit to the selection committee a presentation showing why it should be awarded the Earl Curl Award. Only one division will be awarded the Earl Curl Award during the year.

## **WOODY WOODLAND MEMORIAL AWARD**

This award is intended to honor a person who, by his/her own efforts and services, has contributed in an outstanding manner to the scale and weighing industry.

### **In Memory of**

J.E. "Woody" Woodland, who dedicated his entire life to the weighing industry and to the people in it, and who passed away in 1948 on the day he was elected President of National Scale Men's Association.

### **Purpose**

The award is intended to honor a person who, by his/her own efforts and services, has contributed in an outstanding manner in the scale and weighing industry.

## **Nominations**

Each Division of the Society is asked to submit a nomination to the Chairperson of the nominations committee.

## **ISWM OUTSTANDING YOUNG PROFESSIONAL AWARD**

### **Purpose**

The purpose of this award is to recognize an ISWM member, 45 years or younger, who has contributed in a meaningful way to the ISWM and the weighing industry.

### **How to Nominate**

Nominations must be made for the award by an ISWM member in good standing. ISWM members wishing to make nominations for the ISWM Outstanding Young Professional Award should present in writing a brief biographical sketch of the nominee, along with a discussion of the

person's contributions to the ISWM and the weighing industry. Presentations should be limited to two (2) pages. Particular attention should be devoted to explaining why the nominee qualifies for the award and to making certain that the nominee meets the selection criteria. The award will be based entirely on merit and will not necessarily be presented each year. Nominations should be sent to ISWM Headquarters at least 60 days prior to the start of the ISWM Conference and Expo.

## **OUTSTANDING NEW PRODUCT AWARD (KARDUX CUP)**

Recognizing a company, group, or individual for the most outstanding new technical achievement of the past two years that positively impacts the weighing and measurement industry.

Established in 1996, the Outstanding New Product Award (Kardux Cup), is sponsored and funded by the International Society of Weighing and Measurement. Named for Ken Kardux, of Kg Systems, Inc. whose inspiration was instrumental in the implementation of the award, and who generously contributed funds towards the purchase of the original perpetual trophy.

### **Purpose**

To recognize a company, group or individual for the most outstanding new technical achievement of the past two years that positively impacts the weighing and measurement industry.

### **Award Process**

The Outstanding New Product Award selection committee shall consist of the First Vice President as Chairperson. The Chairperson will select (4) to (9) members for a total of (5) to (10) members. The members shall be selected from a cross section of the Weighing and Measurement industry, such as manufacturers of scales, load cells, indicators, printers, and components, wholesale distributors,

dealers, users, regulators, inspectors, and government officials. The committee will meet during the Society Conference and review all products and documents submitted. The committee will choose three finalists, and interview each of the finalists. The committee will inform the three finalists of the date and time the award will be presented and encourage them to attend the event. Once the interviews have been completed, the committee will meet and come to a majority decision on the winner.

### **Eligibility Requirements**

Product data, picture, and application is to be submitted 30 days before the Society Conference. This information will then be distributed to committee members. 2.Product is to be put on display in the New Product Showcase at the Society Conference. 3.Admission to the New Product Showcase will be granted only to current exhibitors. 4.The product must have been released for publication or use during the past (2) years. 5.The achievement must represent a significant technical advancement.

## **MOST OUTSTANDING EXHIBIT AWARD**

Recognizing a company that exhibits at the Society Conference for having the most outstanding exhibit.

### **Purpose**

To recognize a company that exhibits at the Society Conference for having the Most Outstanding Exhibit.

### **Eligibility Requirements**

The recipient must be exhibiting at the current Society Conference. The exhibit will be judged on overall quality, product presentation, booth staffing, personal appearance, helpfulness to attendees, and assistance with technical and application questions.



INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

# 2024 CONFERENCE & EXPO ATTENDEE REGISTRATION FORM

INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

ADDRESS: P.O. Box 148474, Nashville, TN 37214

PHONE: 715-651-9123 | EMAIL: staff@iswm.org

### Conference Registrant (please print – Only ONE Registrant Per Form)

Name: \_\_\_\_\_

Nickname or First Name (to appear on badge): \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Ctry: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

### Guest:

Name of Guest registering: \_\_\_\_\_

### Employee Classification:

Please check the category that best describes your business:

- W&M Industry Manufacturer
- W&M Industry Dealer/Distributor
- Retired
- Consumer
- Regulatory Official
- Importer/Exporter

### Registration Packages

- Full Conference: Registration \$225.00 – Includes admission to the Icebreaker Reception, Educational Program, Expo, and lunch on Wednesday and Thursday. (Proficiency testing is not included)
- One-Day Registration: \$ 175.00 – Includes admission to Icebreaker Reception on Tuesday evening, the Opening General Session, One-Day Expo, and lunch on Wednesday or Thursday. (Proficiency Testing is not included)
- Wednesday or  Thursday

### Registration Fees (Please Circle choice):

	Register by Jan 20		Register after Jan 20	
	Member	Non-Member	Member	Non-Member
Full Conference Registration	\$225	\$300	\$295	\$345
Proficiency Test	\$100	\$125	\$125	\$155
Certified Weighing Technician Test	\$ 50	\$ 75	\$ 75	\$100

One Day Registration:				
Wednesday	\$175	\$250	\$200	\$275
Thursday	\$175	\$250	\$200	\$275

**Payment: TOTAL AMOUNT DUE \$** \_\_\_\_\_

Check enclosed (payable to ISWM, US funds only)

Check # \_\_\_\_\_

Credit Card:  VISA  Master Card  American Express

Account No: \_\_\_\_\_ Exp Date: \_\_\_\_\_

Name on Card: \_\_\_\_\_

Signature: \_\_\_\_\_

I authorize ISWM to charge my credit card for the amount indicated above.

### Accommodations:

Room rates at Holiday Inn & Suites Virginia Beach – North Beach, 3900 Atlantic Avenue, Virginia Beach, VA., are \$120 per night Sunday through Thursday plus a mandatory \$2.00 fee and tax per standard room. The cut-off date for room reservations at the group rate at Holiday Inn & Suites is January 20, 2024. To make reservations guests can call: 757-428-1711 and use the code IWM to receive the special group rate. Here is the booking link to make reservations online: <https://tinyurl.com/v89cnmd4>

### Cancellation Policy:

A written cancellation notice is required and must be received in writing by January 20, 2024. A 25% service fee will be retained on all cancellations. No refunds will be given after Friday, January 20, 2024.

### Special Services:

The International Society of Weighing & Measurement supports the Americans with Disabilities Act, which promotes public accessibility for the disabled. If you require special equipment or services, please attach a written description of your needs. We will contact you in advance to ensure your needs are met.

### GOT QUESTIONS?

Contact Ann Crowley for answers:

Address: P.O. Box 148474, Nashville, TN 37214

Phone: 715-651-9123 • Email: ann@iswm.org





INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

# 2024 EXHIBIT/SPONSORSHIP APPLICATION AND CONTRACT

INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

ADDRESS: P.O. Box 148474, Nashville, TN 37214

PHONE: 715-651-9123 | EMAIL: ann@iswm.org

### Exhibitor:

Company Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Ctry: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

### Other Registrant or Attendees: (one with 10' x 10')

Name registering: \_\_\_\_\_

Extra Registration (use extra forms) - \$225 each.

### Fees:

The exhibit space will be rented according to the following fee structure (check one):

		Members	Non-Members
10' x 10'	Includes one (1) full Conference and Exposition registration & Sponsorship.	<input type="checkbox"/> \$1,000	<input type="checkbox"/> \$1,500
20' x 10'	Includes two (2) full Conference and Exposition registrations. & Sponsorship	<input type="checkbox"/> \$1,800	<input type="checkbox"/> \$2,400
After January 15, 2024		Members	Non-Members
10' x 10'	Includes one (1) full Conference and Exposition registration & Sponsorship.	<input type="checkbox"/> \$1,500	<input type="checkbox"/> \$1,900
20' x 10'	Includes two (2) full Conference and Exposition registrations & Sponsorship.	<input type="checkbox"/> \$2,400,	<input type="checkbox"/> \$2,800
TOTAL FEE \$ _____			

### Selection:

Select space as shown on the Expo Floor Plan (Contact Ann at ann@iswm.org for available space).

1st choice \_\_\_\_\_ 2nd choice \_\_\_\_\_

### Promotions:

Describe in 50 words or less (exactly as you want it to appear in the official promotions) the products, or the services you will be exhibiting. Attach a description to this application or email Ann Crowley at ann@iswm.org.

### Sponsorship: Please indicate your sponsorship level:

#### PREMIER

Platinum - \$2,000  Gold - \$1,500  Silver - \$1,000

#### COFFEE BREAK SPONSOR

One Day - \$400.00  Two Days - \$700

SPONSORSHIP TOTAL: \_\_\_\_\_

### Door Prize:

Will you donate a door prize or the ISWM All Expo Card drawings?

Yes  No

### Payment:

Booth Fees Total: \_\_\_\_\_

Sponsorship Total: \_\_\_\_\_

Extra Attendees: \$ \_\_\_\_\_

**TOTAL AMOUNT DUE \$** \_\_\_\_\_

Check enclosed (payable to ISWM, US funds only)

Check # \_\_\_\_\_

Credit Card:  VISA  Master Card  American Express

Account No: \_\_\_\_\_ Exp Date: \_\_\_\_\_

Name on Card: \_\_\_\_\_

Signature: \_\_\_\_\_

I authorize ISWM to charge my credit card for the amount indicated above.

### Authorization:

I am an authorized representative of the company with full power and authority to sign and deliver this application. The company listed on this application agrees to comply with all policies, rules, and regulations contained in the Exhibitor Prospectus and all policies, rules, and regulations adopted after publication of the prospects, which we accept as part of the agreement.

Company: \_\_\_\_\_

Authorized Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Accommodations:

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### GOT QUESTIONS?

Contact Ann Crowley for answers:

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Phone: 715-651-9123 • Email: ann@iswm.org



INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

# 2024 CONFERENCE & EXPO SCHEDULE OF EVENTS

INTERNATIONAL SOCIETY OF WEIGHING & MEASUREMENT

ADDRESS: P.O. Box 148474, Nashville, TN 37214

PHONE: 715-651-9123 | EMAIL: staff@iswm.org

## MONDAY, FEBRUARY 19

9:00 a.m.–2:00 p.m. . . . . Board of Director’s Meeting

## TUESDAY, FEBRUARY 20

1:00 p.m.–5:00 p.m. . . . . Registration  
10:00 a.m.–5:00 p.m. . . . . Exhibit area setup  
1:00 p.m.–2:00 p.m. . . . . A & PB Division Meeting  
2:00 p.m.–3:00 p.m. . . . . Woody Woodland  
Selection Meeting  
3:00 p.m.–5:00 p.m. . . . . International Division Meeting  
3:00 p.m.–5:00 p.m. . . . . Certified Weighing Technician Test.  
6:30 p.m.–8:30 p.m. . . . . Ice Breaker Reception

## WEDNESDAY, FEBRUARY 21

8:00 a.m.–9:30 a.m. . . . . Hospitality Area Open  
8:00 a.m.–12:00 p.m. . . . . Registration  
9:00 a.m.–5:00 p.m. . . . . Exhibition Open  
10:00 a.m.–10:15 a.m. . . . . Invocation and welcome  
10:15 a.m.–11:00 p.m. . . . . NCWM Presentation, Don Onwiler  
11:15 a.m.–12:00 p.m. . . . . ASTM E617 and Proficiency  
Testing, Mark Ruefenacht  
11:15–noon . . . . . Exhibits  
12:00–1:30 . . . . . Lunch  
1:30 p.m.–2:30 p.m. . . . . NIST Metric Program–  
Elizabeth Benham  
3:30 p.m.–5:00 p.m. . . . . Exhibit open  
3:00 p.m.–3:30 p.m. . . . . Proficiency Testing (Extra Charge)

## THURSDAY, FEBRUARY 22

8:00 a.m.–8:45 a.m. . . . . Hospitality Area Open  
8:00 a.m.–10:00 a.m. . . . . Registration  
8:30 a.m.–8:45 a.m. . . . . Invocation and welcome  
8:45 a.m.–9:45 a.m. . . . . ISWM Business Meeting  
and Association Awards  
9:00 a.m.–3:00 p.m. . . . . Exhibition Open  
10:00 a.m.–11:15 a.m. . . . . Dealer & Manufacturer  
Roundtable Discussion  
11:15 a.m.–12:00 a.m. . . . . Exhibits  
12:00 p.m.–1:30 p.m. . . . . Lunch  
1:30 P.M.–2:30 P.M. . . . . Dealer Business Survey (2023)  
2:30 p.m.–3:15 p.m. . . . . Sales for Scales Professionals–  
Jeff Canfield  
3:30 p.m.–4:00 p.m. . . . . 2024 Exhibition Awards  
(Exhibit Area)  
3:00 p.m.–4:00 P.m. . . . . Proficiency Testing (Extra Charge)  
4:00 p.m. . . . . Exhibition closed.  
4:00 p.m.–7:00 p.m. . . . . Exhibitor Teardown  
6:30 p.m.–8:00 p.m. . . . . Past President’s Dinner

## FRIDAY, FEBRUARY 23

8:00 a.m.–11:00 p.m. . . . . Exhibitor Teardown





# COMPANY NEWS

## Central NW Division Meeting

The Central NW Division meeting was held in Champaign, IL on November 1-3, 2023. The meeting kicked off with Handbook 44 training. This training had 19 attendees. It was the first training that was half weights and measures official and half scale technicians. We are happy to announce that the students who attended and took the Illinois General Test and Handbook 44 sections all passed. Not everyone passed the other tests, but we had great results!

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Tabletops were open throughout the day on Thursday. Thanks to RAVAS, Rice Lake Weighing, Belt Scale HQ and Minebea-Intec for their sponsorship through the tabletops. The presenters were Doug Rathbun, State of Illinois; John Keane, Minebea; Jerry Finnegan, Anyload; Tim Campbell, Rice Lake Weighing; and Curtis Craig, RAVAS.

During the meeting, the division sponsored the State of Illinois license testing throughout the day on Thursday.

## Greater New York Meeting

Greater New York held their meeting in October. They had forty-seven attendees. The mix of these attendees were seven vendors and seven dealers. Their meeting had a comedian who kept them entertained.

The meeting enabled everyone to catch up and discuss what was happening in the industry.



## Minebea Intec Expands its Portfolio with Stainless-steel Load cells for Demanding Applications

July 2023 – Minebea Intec, one of the world’s leading industrial weighing and inspection technology manufacturers, is expanding its existing load cell portfolio with the single point load cells PR 53, PR 54 and PR 57, and the bending beam load cell PR 77. These high-quality stainless-steel load cells provide a reliable solution for demanding weighing processes in industrial environments. These products and other selected weighing components are available with immediate effect from the online shop ([shop.minebea-intec.com](http://shop.minebea-intec.com)). Customers can quickly access product information and order the products directly from here.

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Single point and bending beam load cells are the best-selling load cells on the market. They play a crucial role in various applications, whether in bench and floor platforms or integrated into machines.

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Single point and bending beam load cells are the best-selling load cells on the market. They play a crucial role in various applications, whether in bench and floor

platforms or integrated into machines.

The new load cells PR 53, PR 54, PR 57, and PR 77 cover a wide load range from 7.5 kg to 750 kg, making it possible to realize any application, from small bench scales or floor scales to vessel weighing.

A key strength of the new load cells is the fact they are certified to international standards. The load cells PR 53, PR 54, PR 57, and PR 77 are certified to OIML, NTEP, ATEX and IECEx, which means that they can be used in a wide range of industrial environments worldwide.



## Load cells developed in collaboration with Minebea Mitsumi.

Minebea Intec worked closely with its parent company Minebea Mitsumi on the development and production of the PR 53, PR 54, PR 57, and PR 77 load cells. The Minebea Mitsumi Group is a publicly listed Japanese group with over 85,000 employees worldwide and its head office in Tokyo. The company operates in a range of industries and manufactures high-precision production parts such as ball bearings and engines. Working together on this project allowed the companies to make optimal use of their shared expertise and the partnership helps to guarantee the high quality and reliability of the load cells. “We are proud to join forces with Minebea Mitsumi to offer high-quality load cells that meet our clients’ requirements,” says Yannick Salzmann, Product Manager Process & Weighing Products.

The exceptional quality of the advice and service that customers receive from Minebea Intec allows them to take advantage of individual load cell applications, e.g., for vessels or silo weighing, or alternatively to order the load cells for integration into a

*Continued on page 29*

# NATIONAL CONFERENCE ON WEIGHTS AND MEASURES



## OUR MISSION

ENSURING EQUITY AND UNIFORM STANDARDS IN A  
CHANGING MARKETPLACE

## WHAT WE DO:

- PROMOTE COMMERCE AND FAIR COMPETITION BY LEVELING THE PLAYING FIELD
- ENSURE CONSUMERS "GET WHAT THEY PAY FOR"
- FOSTER CONFIDENCE IN MARKETPLACE TRANSACTIONS
- ADVANCE ECONOMIC GROWTH

# NCWM

## UPCOMING MEETINGS

2024 NCWM INTERIM MEETING  
NEW ORLEANS  
JANUARY 7 - 10

2024 NCWM ANNUAL MEETING  
CLEVELAND  
JULY 14 - 18

**NEW MEMBERS GET A  
COMPLIMENTARY  
BALLCAP!**

***PROMOCODE:  
NCWM-HAT***

**GET INVOLVED:  
NCWM.COM**



checkweigher or platform scale. “We support our customers throughout the entire process, from the moment goods arrive at customers’ premises to the moment they leave,” says Yannick Salzmann. “Introducing these new load cells helps us to widen our portfolio in order to meet the increasingly demanding requirements for weighing processes in industrial environments.”

Potential customers can find more information about the new single point load cells from Minebea Intec in the How-To Guide ‘Single point load cells: Key features, advantages and benefits’ from Minebea Intec.



#### NCWM Company News:

1. We are launching our Registered Service Agent (RSA) exams in the coming months. This is a major benefit for the states as well as the service agencies as we will act as the hub to streamline the processes of testing as well as providing accurate record keeping. The participating states will not need to develop or maintain tests, and will spend less time administering tests, all while retaining the administration of their service agent programs. As states join in recognizing the NCWM exams, service agencies will have the opportunity to test once for multi-state recognition, will spend less time testing which means more time serving their customers, and will have flexible testing options to fit their schedules. Interested states who are not already participating can contact NCWM for more details.

“  
NCWM is building  
a new headquarters!  
We are very excited to  
announce the building  
of new offices with an  
NTEP Laboratory.  
”

2. NCWM is building a new headquarters! We are very excited to announce the building of new offices with an NTEP Laboratory. We hope to officially move in next summer, but the mailing address is effective immediately: NCWM | 9011 South 83rd Street | Lincoln, NE 68516



#### Wingfield Scale & Measure: Innovating with Volume Load Scanner

In 1937 Jackson Wingfield established a distributorship in Chattanooga, TN providing mechanical scales to industries throughout the Southeast. Today, his grandsons offer a next generation load volume scanner that changes the way we measure. With the introduction of WingScan Advanced LiDAR Technology to their existing offerings, Wingfield Scale & Measure can track inventory no matter how it moves through an operation.

Tracking material as it moves is critical to understanding production rates and reconciling inventory to sales. Wingfield provides solutions at every step in the inventory life cycle. Businesses can:

- Gain confidence in their number’s pre-inventory using WingScan to establish the quantitative value of bulk material traveling from the source of production on conveyor belts.
- Use Wingfield’s aerial and ground-based LiDAR to measure stockpiles

of inventory.

- Use Wingfield’s industrial scales, and/or WingScan’s Truck and Rail LiDAR systems to instantly measure outbound materials.

WingScan is a volumetric load scanner utilizing advanced LiDAR technology developed in partnership with German software company LASE Industrielle Lasertechnik GmbH. The WingScan product line includes solutions for measuring in-motion bulk materials traveling via conveyor belts, open top trucks, and rail cars. “WingScan delivers real time, accurate information to your PLC with zero maintenance and one-touch calibration which frees up your maintenance team to focus on other issues,” says Dan Caine, Managing Director of Wingfield Measure.

“  
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”

“With WingScan, we are taking our expertise in the field of measurement to a whole new level. “We are making it possible to know the precise quantities of materials in the earliest stages of the supply chain,” said Joseph Wingfield, chief executive officer of Wingfield Scale and Measure.

Driven by a desire to give you clarity regarding your inventories, Wingfield Scale & Measure will continue to leverage technology for the benefit of its clients. If you would like more information about the WingScan product line, LiDAR based stockpile inventories, or industrial scales: contact them at [info@wingfieldscale.com](mailto:info@wingfieldscale.com) or 423-637-3287 or locate them online at [www.wingfieldscale.com](http://www.wingfieldscale.com).

# Coti Global Sensors



## Weighing Products Worldwide

### Weighing Equipment for the Past and Present



At Coti Global Sensors, we offer hard-to-find load cells from the past as well as top-selling models from today.

Contact us at 866-762-2684 or [sales@cotiglobal.com](mailto:sales@cotiglobal.com) to learn more.

 [sales@cotiglobal.com](mailto:sales@cotiglobal.com)  [www.cotiglobal.com](http://www.cotiglobal.com)  (866) 762-2684

Great Quality, Fast Delivery, Excellent Customer Service



# WOW! Specific online training for the Handbook 44 focused on the W&M Industry!



## Each Student will learn:

- The structure which HB44 operates under including the National Conference of W&M plus NIST
- How to evaluate weighing products for specific applications including lighter capacity scales like retail or general bench scales, mid-range scales like floor scales and heavy capacity scales including vehicle and livestock scales.
- Learn how to identify the exact class of scale and what certified test weights and loads are required to put them into commercial service.
- What performance tolerances are needed for new and previously installed equipment.
- To address the full customer requirements ensuring that they have the “right or correct” product for their application.
- Be tested throughout the course and take a final exam to validate the student’s comprehension.
- Records will be kept by Life and Safety for your reference if needed. The ISWM will also keep records on those who successfully pass the HB44 Course.

### Coupon

At this site you will be able to register yourself or your employees with a specific username and password for each. If you wish to sign up multiple employees there will be instructions for that on this site. Enter the discount code: ISWM25 for a 25% discount if you are a member of the ISWM. Course cost is \$225 for non-members.

Also included with the Handbook 44 Course are 7 L&S courses: Back Safety, Fire Extinguisher Use, Portable Power Tool Safety, Personal Protective Equipment (PPE), Basic First Aid, Basic Electrical Safety and Confined Space Awareness.



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Phone: 507.848.7103 • Web: [www.iswm.org](http://www.iswm.org)  
Email: [John@iswm.org](mailto:John@iswm.org)

For course registration go to: [www.compassrms.com/login/367/ISWM.aspx](http://www.compassrms.com/login/367/ISWM.aspx)



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