

SPRING 2024

ISWM NEWS

International Society of Weighing & Measurement



SPRING TRAINING AND ANNUAL WRAP-UP

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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 XXXXX



COMING EVENTS

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

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

April 27, 2024

Potomac Division

Hampton Inn Bayview,
6571 Eastern Ave, Baltimore MD

Scales on Saturday

Orioles Baseball game

May 4, 2024

South Atlantic Division

Holiday Inn & Suites, Virginia Beach, VA

October 4, 2024

South Atlantic Division

Beach Cove Resort
N. Myrtle Beach, SC

Magazine Submittal Deadlines:

Summer: Editorial

July 1, 2024

Ads:

July 1, 2024

The circle denotes the next available issue open for submissions.

**Get Your Dealer
Business Survey
Today!**



The **Dealer Business Survey 2024** is based on the business year of 2023 and is available free to all participants. If you participated and have not received your copy, please contact ann@iswm.org.

The **survey** is available for purchase for \$100.00. Order your electronic copy today by contacting Ann at the above email.

ISWM 2023 Board of Directors

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Executive Director

Ann Crowley
ISWM

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NBS Calibration

Vice President

Lloyd Holleman
Anyload, LLC

Past President

George Williamson
Greenville Scale
Company, Inc.

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Coti Global Sensors, Inc.

Jerry Finnegan
Anyload, LLC

Tom Boughter
Maine Scale

Administrative Assistance/Controller

Jennifer Fox

Governors

Steve Hofius Analytical and Precision Balance

Jim Perry Central Northwest

Alison Weiss Greater New York

Carlos Lares Ponce International

Jim O'Brien New England

Steve Dishon Potomac

Bert Baxter South Atlantic

John Hallak Western

Rob Woodward Manufacturing Division

International Society of Weighing & Measurement

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To contact Ann Crowley, call 715-651-9123 or email Ann@iswm.org.



PRESIDENT'S LETTER

By Tammy Schmitz

ISWM President

April 1, 2024

Dear ISWM Members,

I am looking forward to this year. I work at NBS Calibrations as a senior accountant. This background will help me in my new duties as President. Ann, Jennifer, and I worked on the 2024 Annual Conference, and we are proud to say that the accounts were totaled, and we made a profit from the conference.

If you were not present, it was a busy time. The Exhibit room was packed with Exhibitors. The room was smaller than before, but we had been here before. The food served was excellent. The best thing was the dealers! Everyone was mingling and sharing stories.

I welcome Lloyd this year as Vice President. We plan to work together to continue to grow the organization. Please do not hesitate to share any ideas or suggestions with me as we learn about this new path in leading the organization.

Thanks for the honor of being your President!



NEW MEMBERS

Chuck Crowley

Rice Lake Weighing Systems
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Honeybrook, Pennsylvania
19344

Angela Robley

Indianapolis Scale Company
arobley@indyscale.com

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Highlights of the 2024 ISWM Conference & Expo

By Communication Committee

The conference was held at the Holiday Inn Hotel & Suites in Virginia Beach. This facility met the needs of the ISWM with the perfect space in the atrium for our meals and a gathering spot, the exhibit hall full with our exhibitors, the speaker room with adequate seating and viewing of the presentations and a place for the Certified Weighing Technician's exam to take place, and the boardroom where meetings and proficiency testing were held.

The meet and great kickoff was a success with our country-style fixing buffet and two-drink tickets. The room was full of people happy to be back together. Door prizes were drawn, and prizes provided.

The exhibit hall was transformed from a simple room to booths full of weighing products. Each attendee was encouraged to visit each booth with the Exhibit Stamp Card.



Meet and Great Kickoff



Virginia Beach

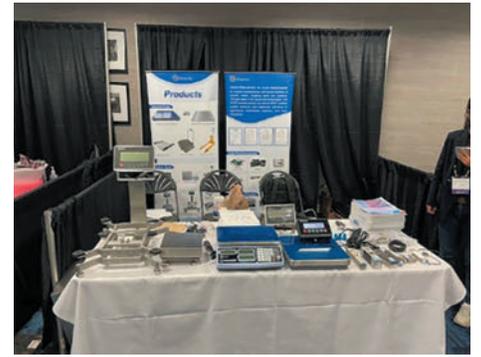


Certified Weighing Technician testing was held. Congratulations to Jim Perry, Phillips Scales, Matthew Beard, Phillips Scales, Nathan Davis, Precision Solutions, Trent Bradford, Precision Solutions, Brandyn Wismer, Precision Solutions, and Jason Fitzgerald, Left Coast Scales for successfully completing the exam!

Don Onwiler, National Conference of Weights and Measures took the platform first. The NCWM

is moving to a new facility and building an NTEP lab. The Registered Service Agent (RSA) testing program is available now.

Mark Ruefenacht spoke on the new ASTM E617. This specification originally stated that weight classes were A, B, and C. This was changed to J, M, S, S-1, P, Q and T and expanded from metric and avoirdupois weights to include apothecary, troy ounce, grain, carat, and assay ton. In 1954 there was a split and the lab industry used ASTM weights and the Legal for Trade industry used NIST weights. In 1969, 105-1 introduced Class F weights. In the recent years, hydrogen fuel, cannabis and jewelry balances used in legal-for-trade applications demanded more



Don Onwiler



Mark Rufenacht



Elizabeth Benham



Proficiency Testing



NEW ISWM President, Tammy Schmitz and George Williamson



George Williamson presenting the Woody Woodland award to J. Bert Baxter.



Dealer Roundtable



Manufacturer panel



George Williamson



Jeff Canfield



2024 Exhibition Awards



Best New Product (Laumas)



accurate weights than Class F. The result was a change in ASTM E617-2023 to expand the classes. Changes were made to the tolerance tables and Class F weights are no longer available for purchase after 2020.

Elizabeth Benham updated us on the Metric System. The United States adopted the Metric System in 1866. In 1975 the US Metric Conversion Law was put in place. In 1991 the President stated that legal systems should use the preferred metric system in measurement for trade and commerce. The US Metric Program provides technical guidance and education materials. For more information on programs please visit nist.org/education.

Proficient Testing took place. Thanks to A&D Weighing and Rice Lake Weighing for providing balances. We had four participants for our test.



The annual meeting was held. Financial review, introduction of candidates and division and committee updates. New business discussion included adopting the NCWM Registered Service Agency testing and adding a Retail division/group. Introduction of the NEW ISWM President, Tammy Schmitz, and Vice President, Lloyd Holleman. Awards for anniversary membership were presented (Not present certificates were mailed). The Woody Woodland award was presented

by George Williamson and Mark Pickel to J. Bert Baxter.

The Dealer Roundtable consisted of Todd Fowler (Greenville Scale), David Barnett (Michelli), Jonathan Meisner (Cross), and Stacy Moore (Scale South). Moderators were Rob Woodward (retired) and Joe Hance (Laumas).

The Manufacturer panel consisted of Jim O'Brien (Rice Lake Weighing), Jerry Finnegan (AnyLoad), Duan Cappel (Minebea), and Bill Ramey (Coti Global). The moderator was Bert Baxter.

George Williamson presented the 2023 Dealer Survey.

Jeff Canfield presented on Sales Growth through Value Selling.

The 2024 Exhibition Awards for Best New Product (Laumas) and Best Booth (Coti Global) were presented. The Exhibit Stamp Card prize was drawn. Minebea donated a scale and Steve Mizerak was the winner!

The Past-President Dinner wrapped by the meeting.

THANKS to our sponsors of the 2024 Annual Conference:

- Platinum Sponsor – Coti Global Sensors
- Breakfast Sponsor – Anyload
- Break Sponsor – Laumas/ Load Cell Systems
- Division Sponsor – International Division



GREAT CONFERENCE WITH GOOD ATTENDANCE AND GREAT EXHIBITORS. THANKS TO EVERYONE FOR MAKING THE EVENT SUCCESSFUL!

Minebea Intec USA Inc
 Michelli Weighing & Measurement
 Anyload, LLC

LAUMAS-US/Load Cell Systems
 Totalcomp Scales & Components
 Mobile Demand
 Coti Global Sensors, Inc.

Gravity Measurement, Inc.
 Rice Lake Weighing Systems
 Nexent Innovations Inc
 Intercomp Company Inc

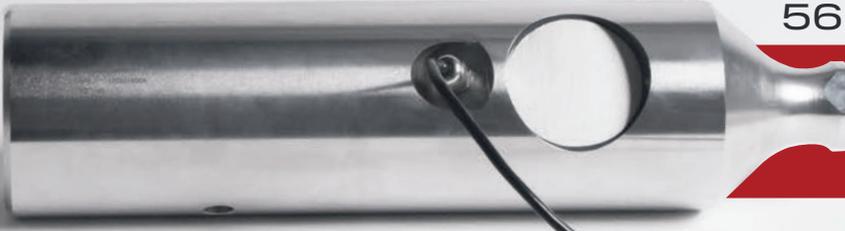
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IP67



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Rodent Protection



Stainless Steel



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Eileen Membership.



Food Line.



Michelli Group.



Ruefenacht Original Balance.



Tammy & Ann.



Todd, Chuck, and George.



Don and Jim.



Dealer Panel.



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Best New Product – Kardux Cup

The Kardux Cup Winner...

was selected at the annual ISWM Convention. This year the winner is LAUMAS with their AIHD 3A Single-Cell Hygienic Platform.

Features of the product:

- AISI 304 Stainless Steel tubular structure
- AISI 316 Stainless Steel loading plate
- AISI 17-4 PH Stainless Steel IP68 load cell
- Hygienic adjustable feet in AISI 304 Stainless Steel

- Capacities: 60 kg, 150 kg, 300kg
- Accuracy Class: C3

Options:

AISI 304 Stainless Steel columns: 170 mm or 470 mm



Minebea intec

The true measure



**Become
a selected
Partner**



The brand you can trust High performance weighing products and solutions

As a Minebea Intec Partner you'll have access to a varied portfolio of high performance weighing products and software that enables you to improve the accuracy, reliability, profitability and efficiency of your customer's production processes. With dedicated personnel to take your call and support you throughout your Partner journey, we're committed to making the partnership a great success.



For more detailed information,
please contact us directly by mail
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Suite 1 // 1180 Lincoln Ave.
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Phone 866.963.8587 ext. 8623 Office
Mobile 631.921.9344

Intercomp Weigh-in-Motion Strip Sensors increase service productivity and transportation safety at large power utility

Background

Relied upon by millions of customers, one of the country's largest electric delivery and gas service utilities employs Intercomp's Weigh-In-Motion (WIM) systems to keep its service fleet moving. Rapid response to power outages, along with routine maintenance and repairs of the power grid is a critical, and continuous aspect of providing the electrical needs to one of the largest metropolitan areas in the United States.

Challenges

The urgent nature of servicing the power grid creates a number of challenges not only for utility field workers, but those responsible for operations and safety. Virtually every day, the company's large fleet of service vehicles, ranging from utility

and bucket trucks to large service vehicles, are dispatched from numerous sites across the company's large service area. Depending on vehicle type, configuration and payloads, the gross vehicle weight and gross axle weights of these trucks can vary widely on every deployment, potentially creating employee and road safety issues, roadway access restrictions, or overweight conditions that violate local, state or federal transportation laws.

With routine demands for nearly continuous operations, including critical emergency services during power outages, as well as goals for productivity, weight compliance and worker safety, the company's lack of accurate vehicle weighing systems at their facilities was compromising numerous aspects of their operations. The solution to this vehicle weighing challenge

was further complicated by a mandated deadline and lengthy requirements for civil works approval and permits across the company's satellite service locations.

Solution

With the rapid deployment of Intercomp WIM strip sensors, the company was able to overcome a number of obstacles to their vehicle weighing challenges.

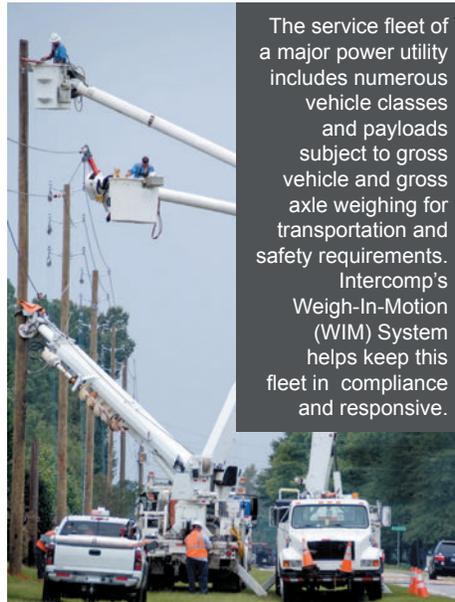
Foremost, accuracy and dependability is essential in any system investment. The Intercomp WIM is a strain gauge-based load cell sensor technology that delivers robust performance and exceptional accuracy while eliminating the operational downtime required for many conventional truck scales. The solid-state load cell requires only minimal maintenance and calibration, and its long-term sensor stability and internal temperature compensation delivers improved accuracy and consistency of output across a wide range of seasonal environmental conditions when compared to other technologies.

With the company's Midwest U.S. operational geography, seasonal temperature extremes can vary up to a 150°F. To meet requirements for sensor calibration and operational accuracy in these rugged environments, Intercomp delivered cus-



Installation is simple, flush-mounting the Strip Sensors into shallow cuts, reducing costs and operational disruptions.





- Enhanced operation response times and productivity
- Low acquisition, implementation and ownership costs

Intercomp Technology Overview

Designed from NTEP/OIML approved scale technology, Intercomp Strip Sensors measure the magnitude of mechanical quantities such as force, torque, load and pressure to provide the system requirements specified with precision scale technology. This turnkey solution enables compliance with accepted metrology, standardization, testing, certification and accreditation used by legal metrology authorities and industries worldwide. Intercomp Strip Sensors are capable of meeting or exceeding ASTM E1318-09 Type III and COST 323 A(5) performance requirements, and certified to the OIML R134 WEIGH-IN-MOTION standard.

WIM systems driven by Intercomp Strip Sensors can automatically record and display wheel-load weights, axle weights, gross vehicle weights and other parameters as needed, at a wide range of speeds. Violation codes and definitions can be customized by the user, enabling streamlined screening of traffic. The system is well suited for weight verification, weight enforcement screening, direct enforcement, monitoring bridge loads, traffic data collection and conducting road research.

Intercomp Strip Sensors are available in three standard lengths of 59", 69" and 79" (1.5m, 1.75m, and 2m). Custom lengths are also available. Installation consists of 1-4 pairs (2-8 strips) per lane.

Learn more about Intercomp WIM Strip Sensors

Used for weight verification, tolling and various other Low- and High-Speed WIM applications, Intercomp WIM Strip Sensors combine the best attributes of a precision strain gauge-based scale and the robust form factor of an in-road strip sensor.

More information is available at intercompcompany.com, or contact Intercomp directly for application assistance.

tomized software and a ruggedized PC to ensure reliable operation under any conditions.

From an installation standpoint, the Intercomp WIM System also checked numerous boxes in the company's requirements. Their commitment to rapidly deploy weighing systems at 22 sites within a period of months presented many significant obstacles for in-ground scale systems, including the need for costly and extensive excavation for frames and drains, likely delays and construction permitting at each site – not to mention the unrealized costs of time-consuming installation that disrupts operations.

A major advantage of the Intercomp WIM Strip Sensor system is the simplicity, ease and speed of system installation. Flush-mount WIM strip sensors are easily installed into pavement surfaces with a shallow 4-inch surface cut. WIM installation can be performed in a single day versus weeks of costly site excavation, construction and installation required by frame-based scale systems.

Results

To serve its fleet of utility service trucks, Intercomp WIM strip sensors are in the process of being installed at 22 remote sites across the company's wide service area. With the WIM System, drivers are able to quickly verify gross vehicle weight and gross axle weight while in motion,

through a simple "green light / red light" indicator enabled by real-time weight data acquisition driven by the Intercomp WIM sensors. This simple validation ensures GVWR (gross vehicle weight rating) and GAWR (gross axle weight rating) compliance before vehicles leave the yard. This visual and data logged verification helps ensure worker and road safety, eliminates the potential for costly overload violations, and helps deliver higher levels of productivity, accessibility and critical service response.

The Intercomp solution has proven to be an extremely attractive solution to this customer, addressing many of their goals including:

- Weighing accuracy and verification with changing payloads
- Robust operation and uptime in demanding environment
- Low maintenance and calibration requirements
- Simple installation with greatly reduced costs
- Rapid system installation and deployment
- Minimized operational disruptions and infrastructure requirements
- Simple, intuitive and in-motion operation for drivers
- Reduced overloads and violations
- Improved safety and worker satisfaction

THE SOLUTION TO MEASURE WHAT COULDN'T BE MEASURED BEFORE



LTR788™ DUAL PLATFORM SCALES

- Identify Unequal Weight Distribution in a Dual Wheel
- Improve Vehicle Safety, Efficiency & Tire Life
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Digital Inputs and Outputs

By Ann Crowley

Scale Features

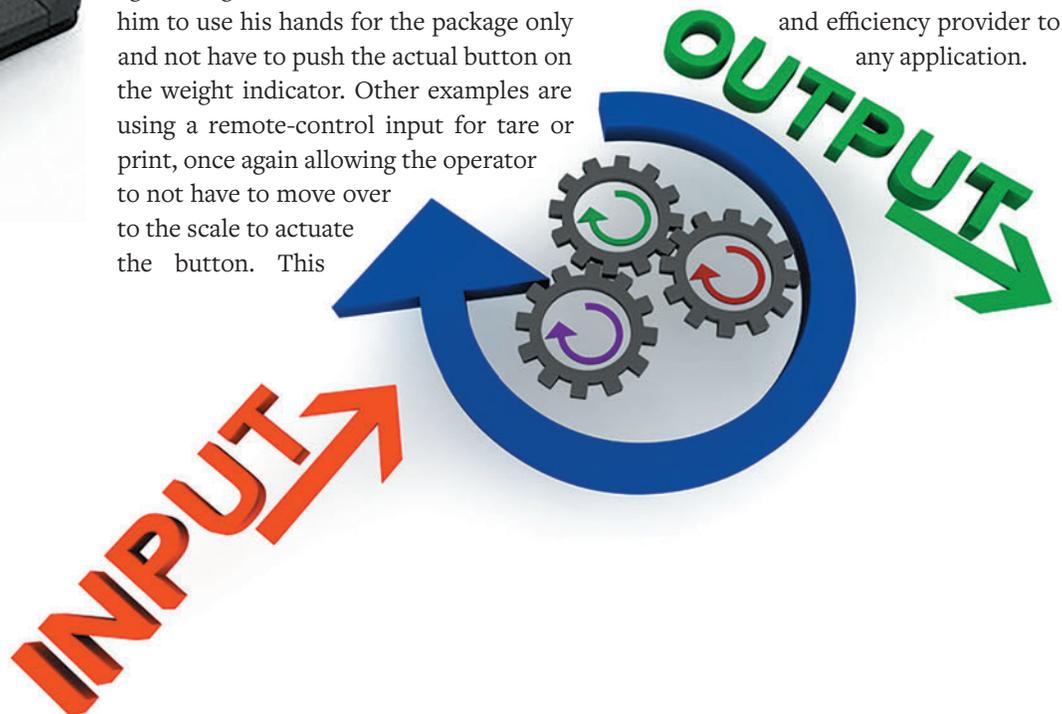
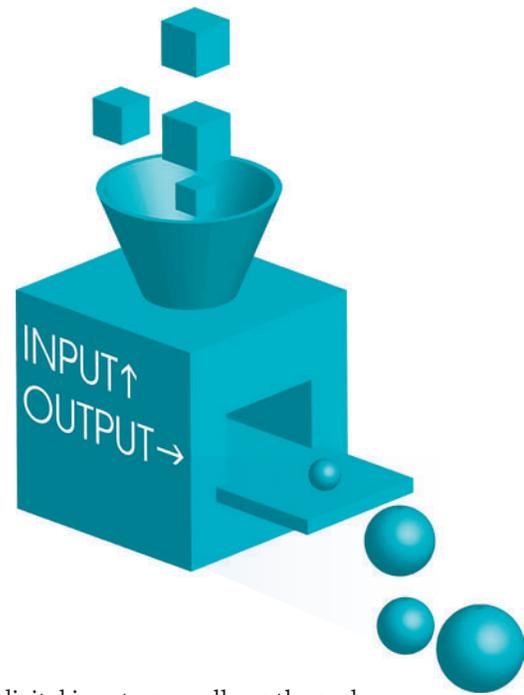
AI is the word of the day. Artificial Intelligence in simple terms is science that can simulate human intelligence. Scale indicators use AI to make decisions for the operator. One feature used is Digital inputs and outputs.

A digital input is any input that acts like a pushbutton, switch, or sensor input into the scale. Different weight indicators may have several selections. Common digital inputs are zero, tare, print or batch start. By utilizing an input, the scale operator may be able to operate the scale operation more efficiently. An example of an efficient input would be a foot peddle that the operator would press with his foot. The input would digitize the zero button. Now the operation for the scale would be. The operator pushes the foot peddle, places the package on the scale, the package is weighed and removed. This allowed him to use his hands for the package only and not have to push the actual button on the weight indicator. Other examples are using a remote-control input for tare or print, once again allowing the operator to not have to move over to the scale to actuate the button. This

digital input usage allows the scale operation to be more efficient and leaner.

A digital output allows other equipment to be turned on or off. A relay is either closed or opened. By utilizing digital outputs, the weight indicator becomes a process controller by turning on gates, fill points, lights, sounds, or any other equipment necessary for the application. A standard example would be weighing a product to a certain weight. Once the threshold is reached, the output is turned off.

By utilizing these features, the weight indicator can become a solution and efficiency provider to any application.





Flexible Dimensioning Systems

The iDimension® Flex Series static parcel and pallet dimensioning system brings advanced technology to shipping and logistics operations. Ensure accurate dimensions on your bill of lading and protect against costly invoice corrections from LTL carriers by integrating automatic dimensioning systems.

- *Reliable Chargeback Prevention*
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- *Certified Legal for Trade Measurements*
- *Streamlined Operations*

Install iDimension Flex above a scale, conveyor or pallet stretch wrapper to further increase efficiency in material handling!

Rice Lake Weighing Systems offers a complete line of parcel and pallet dimensioning systems. Learn more about the entire iDimension Series at www.ricelake.com/idimension



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RAPP/MANTES EDUCATION FUND

SCHOLARSHIP APPLICATION FORM - 2024 (All applications must be received by June 1, 2024)

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.

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

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:

Name of Institution: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Address of Bursar's Office (if different): _____

City: _____ State: _____ Zip: _____

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

Name of Institution: _____

Street Address: _____

City: _____ State: _____ Zip: _____

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

Your extra-curricular activities. _____

Your occupational or career goals: _____

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.



COMPANY NEWS



ANTIBUS SCALES AND SYSTEMS

Antibus Scales and Systems, Inc. announces the retirement of Sales Manager, John Wassell after 36 years of employment and Operations Manager, John Case after 19 years of service. Both were instrumental in the growth and success of Antibus over the last 20 plus years serving two generations of ownership. We wish them well in their retirements.

Robbie Sage will take on responsibilities for the Operations and Sales Management of the Antibus Team as Vice President, effective April 1st, 2024.



MINEBEA

THE NEXT GENERATION OF WEIGHING PLATFORMS

New MiNexx® 3000 bench scale impresses with outstanding price/performance ratio.

March 2024 - Minebea Intec, a leading global manufacturer of industrial weighing and inspection technologies, presents the new weighing platform MiNexx® 3000 - the new generation of bench scales. With innovative design and outstanding functionality, MiNexx® 3000 sets new standards in precision, efficiency and integration capability. This new solution was developed to meet the ever-increasing demands of purchasing managers, quality managers, process managers and product and technology managers.

Weighing platforms such as the MiNexx® 3000 are set up on benches or work surfaces and are used wherever small quanti-

ties need to be weighed with high accuracy. Whether in the factory floor production area or in the laboratory, the MiNexx® 3000 can be used to carry out basic weighing, checkweighing and completeness checks or to perform dosing, classifying, sorting and counting processes with high precision. Minebea Intec has been manufacturing high-quality weighing solutions for more than 150 years and always incorporates valuable feedback from the market into its product innovations. This is also the case with the weighing platform MiNexx® 3000.

Weighing platform MiNexx® 3000:

What is special about this bench scale?

The MiNexx® 3000 weighing platform is characterised by its V-shaped substructure, which not only enables optimum force distribution but also ensures excellent protection of the high-precision load cell. The easy-to-clean design makes it ideal for demanding production environments, while its high configurability enables customised adaptation to various industrial applications. For example, resolutions from 15,000d up to 75,000d can be selected depending on requirements. In addition, a readability of 0.05g to 100g steps is possible and it can be varied between different surface treatments and load ranges from 3lb (1.5kg) to 660lb (300kg) are available..

Customer wishes fulfilled - maximum precision at a fair price

MiNexx® 3000 not only sets new standards in terms of quality, but also in terms of cost efficiency. Purchasing managers can rely on MiNexx® 3000 to fulfil their budget requirements. "During development, we also focussed on ease of maintenance and durability," says Eren Sagdas. "With its seamless integration capability into existing production and OEM systems, MiNexx® 3000

also increases production efficiency." The integration of MiNexx® 3000 into existing production processes promotes a smooth and coherent production chain.

High-precision weighing indicators for weighing platforms

In order to utilise the weight values determined by the bench scales efficiently in the production processes, the signals must be recorded and forwarded to the production control system. Minebea Intec offers a broad portfolio of weighing indicators for bench and floor scales for this purpose. Whether customers are looking for a terminal for simple weighing tasks or for multiple applications such as piece counting, filling or checkweighing, all weighing indicators are characterised by user-friendly operation and a robust design. All terminals can be flexibly positioned near the scale or mounted on the wall or on a stand. Minebea Intec offers sophisticated software products such as SPC@Enterprise and ProRecipe XT for the reliable integration of bench scales into production lines.

Weighing technologies including accessories: everything from a single source from Minebea Intec

The competent and experienced Minebea Intec team is on hand to advise its customers throughout the entire project planning process. From the selection of the right technologies to commissioning and maintenance.





COMPANY NEWS

With the MiNexx® 3000 weighing platform, you can ensure reliable and high-precision weighing results in industry.

With the market launch of the innovative weighing platform MiNexx® 3000, Minebea Intec remains true to its brand promise “the true measure” and presents a solution that not only sets new standards in precision, but also raises efficiency in industrial processes to a new level.

About Minebea Intec

Minebea Intec is a leading global manufacturer of industrial weighing and inspection technologies. Headquartered in Hamburg, Germany, the company offers products and services that have stood for innovation, performance and reliability for more than 150 years. The product portfolio includes high-resolution platform scales, load cells, hopper and silo scales, checkweighers, metal detectors, X-ray and visual inspection systems as well as intuitive software solutions. Over 1,000 employees at 18 locations increase the precision and efficiency of industrial customers’ weighing and production processes. A network of over 200 partners in 71 countries complements the global player’s sales and service locations. The high performance and distinctive German quality are reflected in the brand promise “the true measure”. Minebea Intec is part of the MinebeaMitsumi Group, a leading supplier of high-precision production parts such as ball bearings and motors as well as high-quality electronic components such as sensors, antennas and IoT solutions. Headquartered in Tokyo and with over 92,000 employees worldwide, the Group reported consolidated net sales of 1,292,203 million yen (approx. 9.17 billion euros) for the 2023 financial year.



RICE LAKE

Rice Lake’s Healthweigh® Receives EN ISO 13485:2016 Certification

Rice Lake, Wis.—The Rice Lake Weighing



Systems’ Healthweigh® medical scale facility has received the ISO 13485 certification.

The EN ISO 13485:2016 certification is used by organizations that are involved in the installation, production and design of a medical device that relates to a service. This could be any product, machine or more that can help with a medical diagnosis or treatment.

“We are very proud to have the production of our Healthweigh line EN ISO 13485:2016 certified. At Rice Lake, we ensure that our customers only get the highest quality products that best suits their needs,” says Brandi Harder, Quality Manager at Rice Lake.

Designed for patient comfort and weighing accuracy, Rice Lake’s complete line of Healthweigh scales includes everything from pediatric to in-floor wheelchair scales to ensure quality patient care. This new facility in Rice Lake, Wisconsin will be dedicated to producing Healthweigh health scales.

To view the EN ISO 13485:2016 certification, visit www.ricelake.com/resources/certifications

Rice Lake Weighing Systems is a global leader in weighing and measurement solutions. With a focus on innovative, quality products and legendary customer service, Rice Lake provides solutions for your business. From the industry’s largest selection to an infinite array of customized systems, Rice Lake can meet any requirement.



LOGIWEIGH

Slide&Weigh: Weighing on the Go for Forklifts

For businesses that rely on forklifts, the need to weigh cargo often creates a logistical hurdle. Traditional methods involve moving pallets to a separate weighing station, adding time and disrupting workflow. The US-patented Slide&Weigh attachment offers a solution: effortless weight measurement directly on the forklift.

Easy On, Easy Off: Slide&Weigh boasts quick installation, attaching to your forklift in seconds without complex procedures. This allows for on-demand weighing, eliminating trips to dedicated stations and keeping your operations flowing smoothly.

Versatility is Key: Unlike permanent weighing attachments, Slide&Weigh maintains your forklift’s full functionality. Simply detach the unit when regular lifting tasks are required. This ensures maximum versatility for your machine.

Reduced Wear and Tear: Unlike permanently mounted weighing forks, Slide&Weigh’s detachable design mini-



COMPANY NEWS



mizes wear and tear. You can easily remove the attachment when not in use, protecting it from everyday wear and tear. This can potentially extend the lifespan of your forklift scale and reduce maintenance costs.

Interchangeable Indicators for Multi-Forklift Use: Slide&Weigh offers additional cost-saving benefits with its interchangeable indicators. By purchasing just one pair of Slide&Weigh fork shoes and additional indicator sets, you can equip multiple forklifts for weighing capabilities. This allows any forklift with a compatible indicator to utilize the Slide&Weigh attachment, maximizing its usage across your fleet.

Boosting Efficiency: Streamline your warehouse operations with Slide&Weigh. By enabling on-the-spot weight measurement, you can improve productivity and make better-informed decisions regarding cargo handling.

How It Works: Slide&Weigh integrates with the forks of your forklift. The attach-

ment itself contains weighing scales that measure the weight of the cargo placed on the forks. The weight data is then transmitted wirelessly to a display unit in the forklift cabin, allowing the operator to see the weight in real-time.

The Slide&Weigh advantage comes in convenience, versatility, and efficiency. It's a simple solution for businesses that need to weigh cargo while keeping their forklifts in action.

Slide&Weigh was invented and manufactured by LOGIWEIGH, a 40-year-old family-owned weighing company from ISRAEL.

Our Sympathies to the family's:

Carl Heinzen, deceased (long-time member and past President)

Gwen Achilles, wife of Anthony Achilles, deceased

Cheryl Perron, wife of Bob Perron, deceased



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Training Corner

Q: My scale is not weighing right. What could be wrong?

A: The first step should be a visual inspection. The visual inspection can detect defects in equipment. By completing this step first, you can ensure the equipment is functioning properly and meets necessary requirements. The goals of your visual inspection are to determine any defects, damage, or other issues.

Here are some things to consider:

- Installed incorrectly?
- Damaged?
- Moved?
- Change in weather?
- Cables or components are damaged.
- Operator Error?
- Compliant with standards and regulations.

The visual inspection of the scale is one of the most important aspects of any calibration or repair. If something is visibly wrong, how can you expect reliable results? This inspection conducted before calibration will determine that there are no other conditions affecting the scale operation.

This is one of the topics covered in our Mechanics of Weighing training at iswm.org

Effective Training Creates Great Employees

The International Society of Weighing & Measurement (ISWM) has created a Training Tab for members. This training section of the member website provides topics intended to develop interest and knowledge in the weighing measurement industry.

Employee turnover is a challenge in every industry. Lost expertise and the need for training inexperienced staff impacts the quality of work performed and productivity. Solutions are available to manage this training at the iswm.org website.

In all jobs, experienced workers ensure that the exacting standards required for calibration work are maintained. When employees who hold this knowledge leave, it is difficult to maintain the same level and quality of work. Plus, the cost of training new employees is expensive and time-consuming.

The ISWM training presentations go beyond mere skill development. By training old and new employees with the same materials, consistent knowledge growth will assist in providing the best employees possible. Training can also be a retention tool. The sense that the employee is valued, and your company has an interest in growing the employee professionally can reduce the likelihood of leaving.

The ISWM training introduces employees to terms in the industry, how to calibrate a scale, and how to use equipment properly. To ensure that each employee reviews the training, there is a check-off list available for downloading and printing.

The training that we have available for members will assist in gaining the appropriate knowledge base to prepare for the National Conference of Weights and Mea-

sure's Registered Service Agency test, the ISWM Certified Weighing Technician Test, or your state test.



CONGRATULATIONS TO NEW CERTIFIED WEIGHING TECHNICIANS:

Jim Perry *Phillips Scales*

Matthew Beard *Phillips Scales*

Nathan Davis *Precision Solutions*

Trent Bradford *Precision Solutions*

Brandyn Wismer *Precision Solutions*

ISWM Training Materials

Introduction to Weighing:

- General overview
- Tools for the job.
- Terminology for the Weighing Industry
- Terms and type of products
- Traceability

Precision Weights & Balances

Difference between Mass & Weight?

- **Precision Training** - math, units of Measure Environment, Terminology, References, Laboratory practices, Types of Weighing, or features in balances, DQ, IQ, OQ, PQ, uncertainty
- **Precision Training II** - ASTM 898, calibration report requirements, selecting a balance, balance calibration, accuracy classes of weights, measurement assurance
- **Precision Training III** - care, handling, and calibration of standards, understanding and using balances, balance calibration, selecting a balance, good weighing techniques, HB44 references, measurement flow chart, balances SOP

Communications:

- 3-types of communication
- Serial communications
- What is a null modem cable
- Identifying serial wire and pin assignments
- Ethernet
- Identifying patch vs crossover ethernet cables
- DHCP vs static ip addresses
- Label printers - thermal vs thermal transfer paper

Calibration and repair of weighing systems:

- Using calibration weights
- Using an object from a calibrated scale
- Using material to substitute for weights
- Calibrating with a simulator
- EPO 1 - Retail
- EPO 7 - Medium capacity
- EPO 12 - Livestock
- EPO 13 Vehicle, Axle Scales

Advanced topics:

- What are hazardous areas?
- Batching: What is a Setpoint?
- What is Peak Hold?
- Dry Contact vs Solid State Relays
- Free-running vs batching setpoints
- What is a start/stop box (and how to wire it correctly)
- Benefits of a start/stop box (and how to use one)
- Remote/local scale

Mechanics of Weighing:

- Types of load cells
- Components of weighing systems and installation and maintenance
- Load receiving tips
- What is the difference between scale capacity and scale build
- What is a junction box?
- How to check load cell signals?
- How to use a Multimeter -Part 1 - Types of Meters
- Measuring Voltage - Part 2
- Measuring Resistance - Part 3
- Measuring Current - Part 4
- Measuring Batteries - Part 5
- What is digital filtering?

Professional development:

- Communication Skills for Professionals
- Time Management & Organization

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 ANNUAL MEETING
CLEVELAND, OH
JULY 14 - 18

2025 INTERIM MEETING
CHARLESTON, SC
JANUARY 12 - 15

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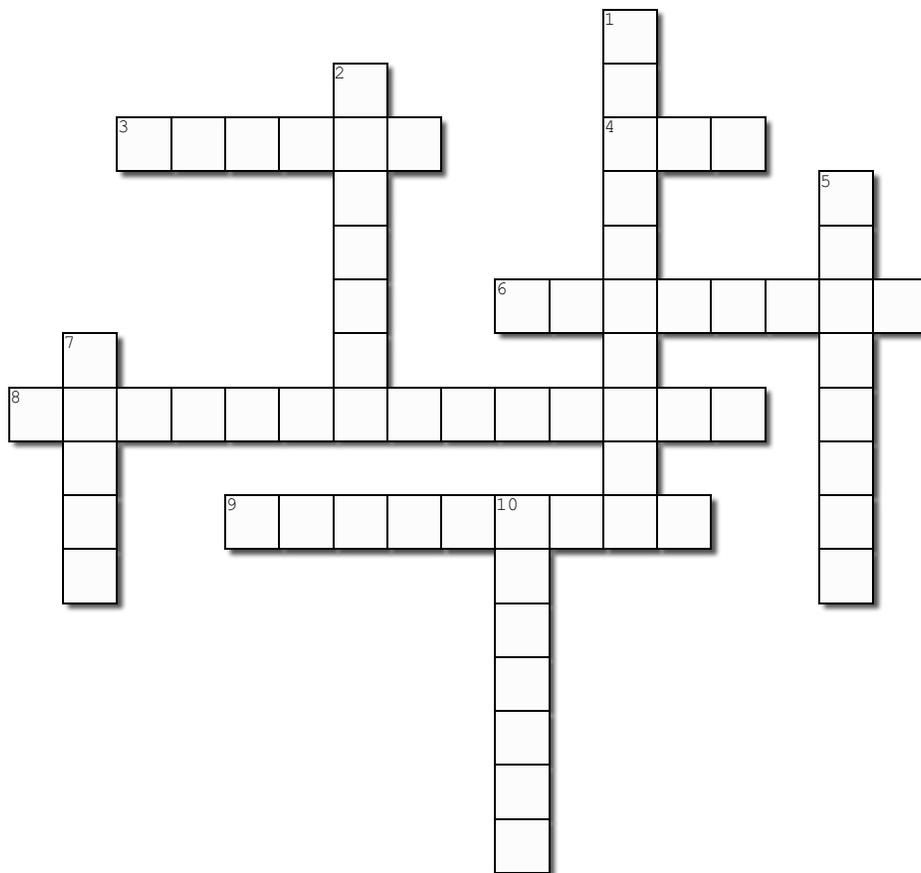
***PROMOCODE:
EQUITY***

**GET INVOLVED:
NCWM.COM**

Name: _____

Handbook 44 Definitions

Complete the crossword puzzle below



Created using the Crossword Maker on TheTeachersCorner.net

Across

3. Scale designed for weighing bulk commodities whose load-receiving element is a tank, box or device mounted on a weighing element
4. Abbreviation for Automatic means to maintain zero-balance indication
6. device that produces a signal (change in output) proportional to the load applied
8. Requirements that are enforceable after the effective date
9. Value of the smallest change in value that can be indicated or recorded by a digital device

Down

1. Defining line or one of the lines defining the subdivisions of a graduated series
2. Scale adapted to weighing gems and precious metals
5. The result obtained by multiplying a whole number
7. Movable weight mounted upon or suspended from a weighbeam bar to indicate weight values
10. The largest load that may be accurately displayed (___ capacity)

HANDBOOK 44 QUESTION:

You are working on a 100 lb bench scale. This bench scale is marked Class III. The division size is 0.01.

What is the maintenance tolerance when you put a 50 lb weight on the scale?

What table do you use to find the tolerance?

Answer is below. If you miss the solution, consider the on-line Handbook 44 course.

The maintenance tolerance will be 0.05 lb. You calculate this by finding the how many divisions is the 50 lb weight (50/0.01=5000). Look in Table 6. Find 5000 divisions in the row for Class III. Look up and see 5. Multiply 5 times 0.01 division size.

**HANDBOOK 44
APPLYING TABLES**

AUROLORA

REMOTE DISPLAYS



8 models to suit any weighing application.

*Aurora MINI not pictured



Aurora 45



Aurora 10

Aurora 20



Aurora ALPHA 12



Aurora ALPHA 8



Aurora 45 SL



Aurora 65

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- 3.** Scale designed for weighing bulk commodities whose load-receiving element is a tank, box or device mounted on a weighing elem (hopper)
- 4.** Abbreviation for Automatic means to maintain zero-balance indication (azt)
- 6.** device that produces a signal (change in output) proportional to the load applied (loadcell)
- 8.** Requirements tat are enforceable after the effective date (nonretroactive)
- 9.** Value of the smallest change in value that can be indicated or recorded by a digital device (increment)

- 1.** Defining line or one of the lines defining the subdivisions of a graduated series (graduation)
- 2.** Scale adapted to weighing gems and precious metals (jeweler)
- 5.** The result obtained by multiplying a whole number (multiple)
- 7.** Movable weight mounted upon or suspended from a weighbeam bar to indicate weight values (poise)
- 10.** The largest load that may be accurately displayed (capacity) (maximum)

Across

Down

Handbook 44 Definitions

Complete the crossword puzzle below

Name: _____

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.



PO Box 507, Fairmont, MN 56031
Phone: 507.848.7103 • Web: www.iswm.org
Email: ann@iswm.org

For course registration go to: <https://lms.lifeandsafety.com/login/367/ISWM.aspx>

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