INNOSEN

NEWSLETTER MAGAZINE • JAN - SEPT • 2025 EDITION • VOL 7

QUALITY ASSURANCE FOR METAL PACKAGING

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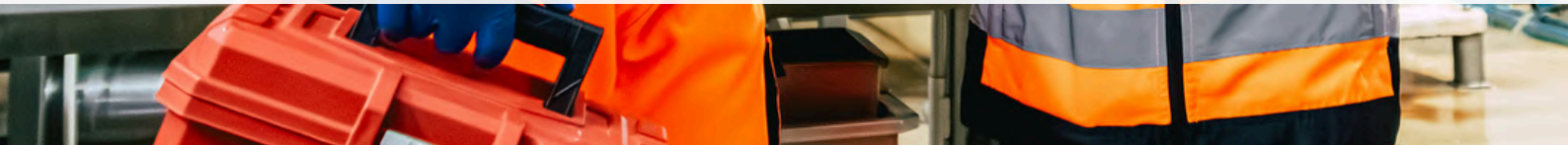

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INNOSEN

Innovative Sensors for Metal Packaging.

Quality-Driven. Results-Focused.
Quality assurance experts in every detail.

At Innosen, we're passionate about helping the metal packaging industry make the best products possible—efficiently and reliably.

With decades of experience in every step of metal packaging , we understand the challenges you face on the production line. That's why we've developed smart sensors and solutions that catch problems early—from double sheets, contaminated margins to coating defects—so you can avoid costly downtime and keep things running smoothly.

We're proud to lead the way in enamel rating, offering unmatched expertise and capability. And now, our own software to help you monitor and improve quality like never before.

Working closely with our customers in over 70 countries, **we don't just sell products—we build partnerships**. We listen, learn, and create solutions that match your specific needs because your success is our success.

Innosen has been there to deliver solutions to production issues. No matter how big or small the problem is, we're always pushing to make your production lines and processes in metal packaging better, smarter, and more efficient.

What better way to help the metal packaging industry become more efficient than providing Innovative Sensors for their production needs?

Avoid downtime. Choose Innosen.
Your Partner in Quality.

SMARTER MONITORING. SEAMLESS CONTROL. ONE POWERFUL PLATFORM.

Redefine Gauge Monitoring with IS1100 Innolytix

Innosen, a leader in inspection and quality assurance sensors for the metal packaging industry, proudly announces the launch of the Innolytix™ IS1100, an advanced data visualization and gauge monitoring platform designed to simplify factory data and empower smarter decision-making.

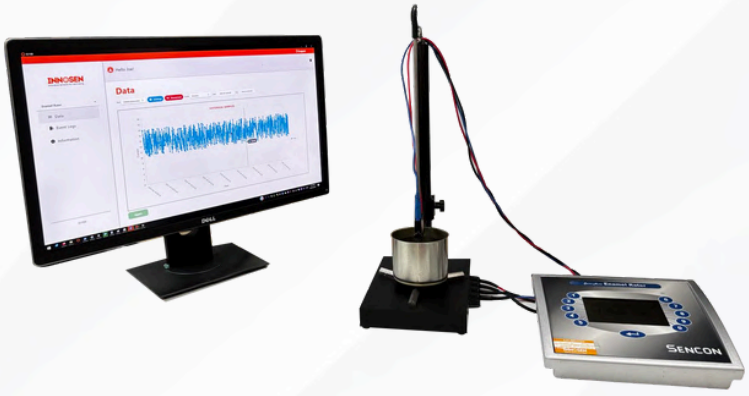
Built to Empower. Designed for Insight. Engineered for Control.

Innosen Innolytix™ IS1100 is an advanced data collection platform engineered for canmakers, integrating seamlessly with Sencon's SI9100 Semi-Automatic Enamel Rater and SI9600 Coating Thickness Gauge to capture real-time production metrics.

It collects, organizes, and presents production data in one unified, easy-to-read interface. With built-in automation and data processing capabilities, Innolytix™ empowers manufacturers to enhance operational efficiency, reduce variability, and optimize production workflows through data-driven decision-making.

"Innolytix isn't just a data collector — it's the brain behind better decisions," stated Luc Nelen, President at Innosen.

"It helps canmakers understand their production like never before, enabling clarity, traceability, and performance-driven insights in every batch tested."



Defining Features of the Innolytix™ IS1100:

✅ **Automated Data Collection**
Eliminates manual entry, reduces human error, and seamlessly gathers data from multiple gauges in real-time.

✅ **Smarter Decision-Making**
Enables managers to visualize trends and take faster, data-driven actions with confidence.

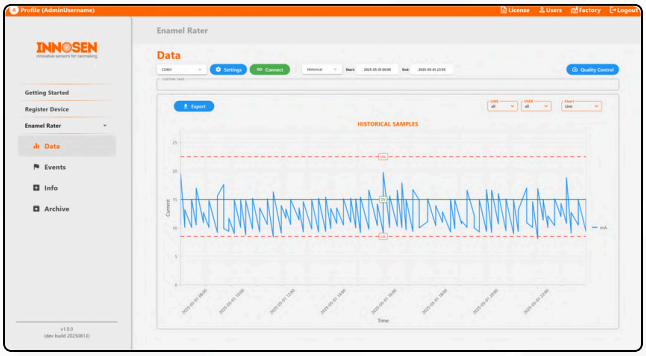
✅ **Improved Quality Control**
Monitors key production parameters like material consistency and defect rates to ensure top-tier standards.

✅ **Full Traceability**
Links production data to job orders, batch tests, and line performance for easy tracking and compliance.

✅ **Remote Accessibility**
Provides access to live production data — enabling quick responses.

✅ **Customizable Data Tags**
Allows users to mark and categorize data with flexible tags, making it easy to filter, sort, and quickly locate the information that matters most.

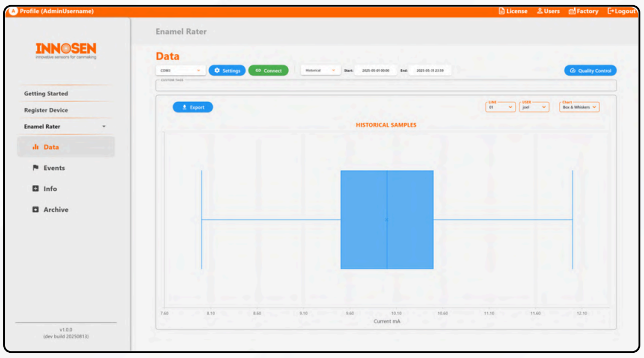
The IS1100 Supports both Ethernet and Serial (RS485) Protocol, ensuring flexible compatibility across modern and legacy gauges. It also provides users with the ability to configure how data is displayed — offering an insightful perspective on production events and overall impact.



Connect.

Visualize.

Understand.



Whether you're a quality assurance manager, production lead, or plant engineer, the IS1100 Innolytix brings clarity and control back to the shop floor.

While current support is focused on two industry-standard gauges (SI9100 and SI9600), expanded compatibility with additional devices is already in development — making Innolytix™ IS1100 a future-ready platform for evolving production needs.

"SMARTER PRODUCTION BEGINS WITH SMARTER TOOLS."

WELCOME TO THE INNOLYTIX EXPERIENCE —

WHERE DATA DRIVES PERFORMANCE.

Meet the Star of Tube Coating Precision

Our newest tool for accurate lacquer thickness—built with you in mind.

Getting your aluminium collapsible tube's coating thickness just right isn't optional —it's critical.

👉 **Spray it too thinly –**
Contents may corrode the metal
👉 **Spray it too thickly –**
Coating can debond from the metal

You deserve a tool that works as precisely as you need it to.

That's why we've launched the newest star in our lineup:

🌟 Say hello to our IS9561 Tube Probe

A breakthrough in accurate lacquer thickness measurement specifically for aluminium tubes — engineered for those who understand that in coating, consistency matters most.

The IS9561 Tube Probe:
Built for simplicity. Crafted for precision.

💧 Dual-Surface Measurement – Measures both internal and external coatings

🌎 Universal Compatibility – Works with a wide range of aluminium tube styles and diameters

⚡ Stiction-Free Accuracy – Eliminates friction and noise for ultra-clean readings

⚖️ Lightweight, Balanced Design – Built with flexure engineering for effortless consistency

Innosen Develops Coating Thickness Gauge to Test Narrow Diameter of Aerosol Cans

Written by: Canmaker Magazine
Original Link: Canmaker Digital Magazine
Published: April 2025

The Tube Probe can test lacquer thicknesses for formed impact-extruded aerosol cans of up to 67mm, as well as aluminum tubes.
The equipment consists of a probe tip that has been narrowed and lengthened from the company's existing equipment to accommodate the deeper curvature of smaller containers.

A regular probe tip is too large to make a satisfactory connection with the internal can surface, rendering readings unsafe, said Innosen President Luc Nelen, explaining that the new product fills a gap in the market.

"This has never been done before," Nelen told The Canmaker at Cannex Fillex de las Américas.

Another innovation is the ability to adjust the distance between the probe and electrode to accommodate the deep neck of formed impact-extruded can.

Lacquer thickness is crucial to the safety and integrity of cans. Spray it too thinly and the can's contents could damage the metal; layer it too thick and the coating could debond from the body.

The probe is also long enough for customers to check the coating thickness at different distances along the can body and to rotate to check lateral application.

Struggling with your Printed labels?

Here's the ultimate solution to printed label issues.

Have you ever experienced getting batches of cans with printed labels that are:

a) upside - down
b) missing colors
c) inside - out

Whether they are missing or grossly incorrect…

WE HAVE COME UP WITH A SOLUTION

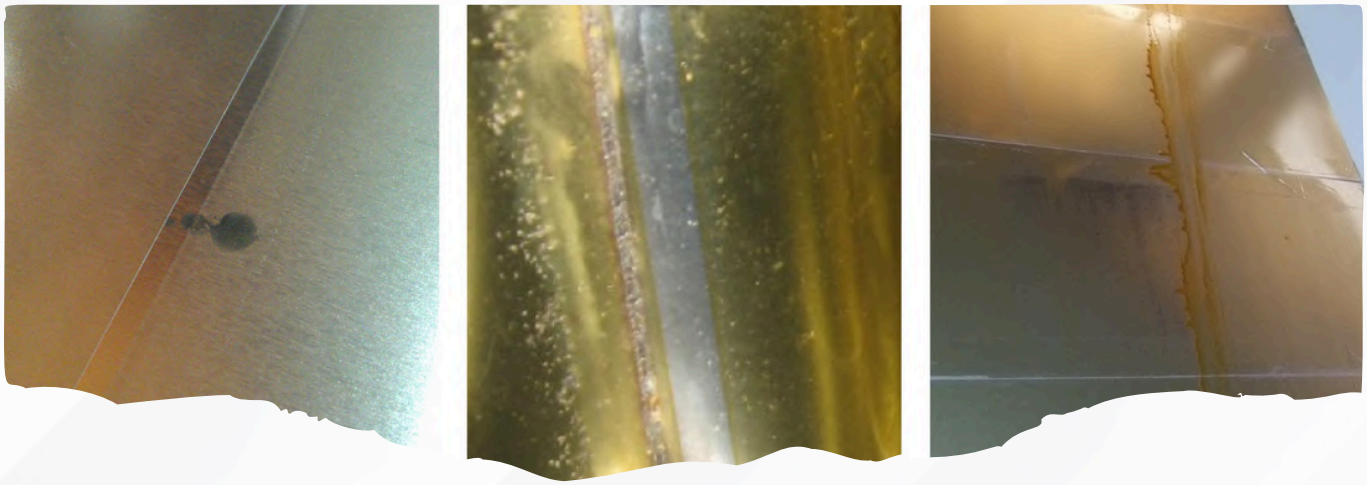
The IS625 Inverted Can Label Detector

Prevent quality issues by detecting printed formed cans with upside-down, inside-out, or missing labels.

BONUS: This sensor works with all metal types & recalibrates automatically.

Reduce spoilage and HFI (Hold for Inspection) to save costs and boost profits.

The earlier, the better.



Why margin inspection is important & how it affects production

Margins or stencils are important to get right on coated sheets. This is where the can is welded. In the welding process, several factors are taken into consideration in order to produce the best quality cans with the least possible unplanned downtime.

These factors are: correct positioning of the margin being welded, the margin being clean and free from any contamination and the status of the welder itself (must be in sync and in perfect condition).

Margin contamination is one of the leading reasons for unplanned downtime.
A contaminated margin can either break your tooling or cause leaks in your welded cans due to a bad weld.

What are the usual contaminants?

Lacquer splashes

Water splashes

Oily Fingerprints

Dust

Aside from contaminants, you could also get defects when margins are not inspected.

Below are examples of defects that could be present in your margins:

Margin defects and issues

1 Misaligned Margins

Sheets that have moved sideways or skewed either in the coater or in the slitter.

1.0 Result

Lacquer will be present on the margins.

: Sheet moved sideways. Lacquer or print is on the margin.

2 Dirty Margins

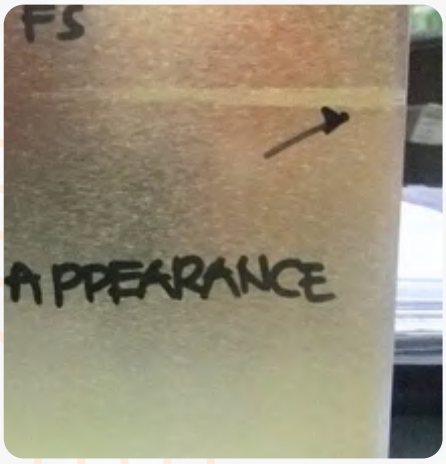
Margins get dirty when contaminants get onto them. Examples of contaminants are grease, rust, watermarks or fingerprints. Grease on margins come very often from the equipment since all bearings are greased. Grease can drip/spill into a machine and get onto plates. Although this is rare, it should always be avoided.

More frequently we see "grease" or tar from the ovens. As the sheets pass through the ovens, volatile organic substances evaporate from the lacquer. These substances can condensate in colder places of the oven where they slowly burn into a sticky kind of tar. When there is enough of it, it can drop back onto the sheets. It falls anywhere but could also fall right on the margin.

Margins can also rust if the tinplate has been exposed to adverse atmospheric conditions.

2.0 Result

These type of contaminants can cause weld wire breakage and bad weld quality.



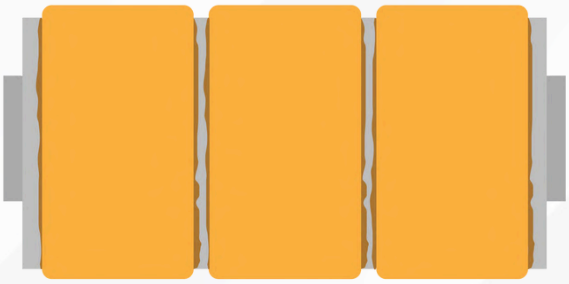
: Rusty appearance on the margin

: Grease/Tar droplet on the margin

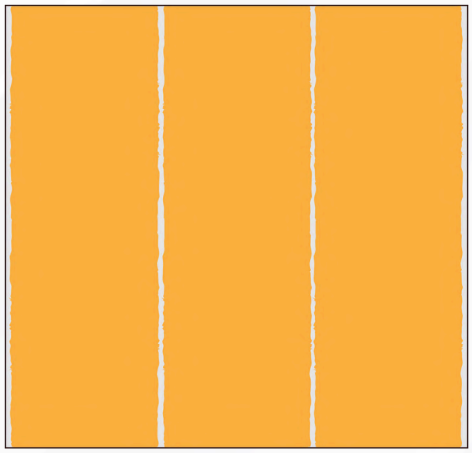
: Burnt welding roll

3 Lacquer on Margins

If grooves in the rollers have not been cleaned, there is a possibility of lacquer getting on the margins. This causes feathering on the sheet margins which looks like this:



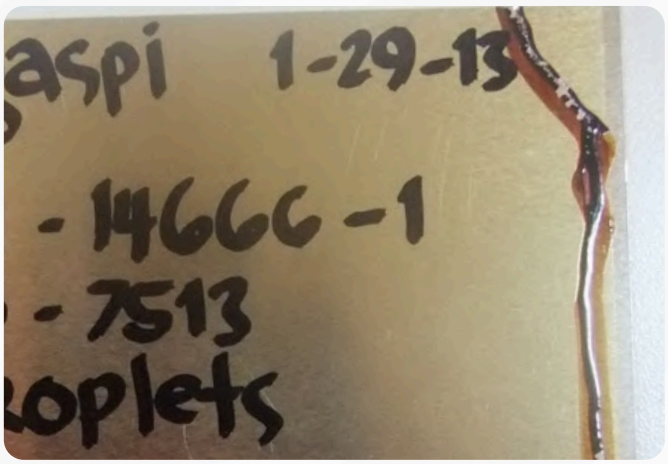
: Unclean grooves in the roller



: Feathering on the margin

Another reason is the low viscosity of lacquer. Viscosity decreases as temperature rises. If adjusted at a low temperature, it may become too low once the press heats up. Thus, preventing the formation of the required wet thickness for proper adhesion. It creates the following problem:

- **Poor roller adhesion**: Too-thin lacquer won't stick well to the lacquering roll, detaching easily.
- **Droplet formation:** Thin lacquer flies off the roller as small drops, spreading randomly onto sheets.



: Lacquer spill on margin

: Lacquer spill across sheet

3.0 Result

If lacquer is present on one of the margins, it's likely that it will also be present on the other margins. Lacquer on margins could result in burnt weld rolls and weld wire breakage.

Enter the IS610 Plain Margin Inspector:
The Margin Problem Solver.

For canmakers, adding a sensor to every sheet margin guarantees protection—but it's also the most expensive option.

The IS610 Plain Margin Inspector offers the best return on investment. It's simple, affordable, and highly effective at preventing margin-related problems, such as costly downtime from broken weld wires.

Key benefits:

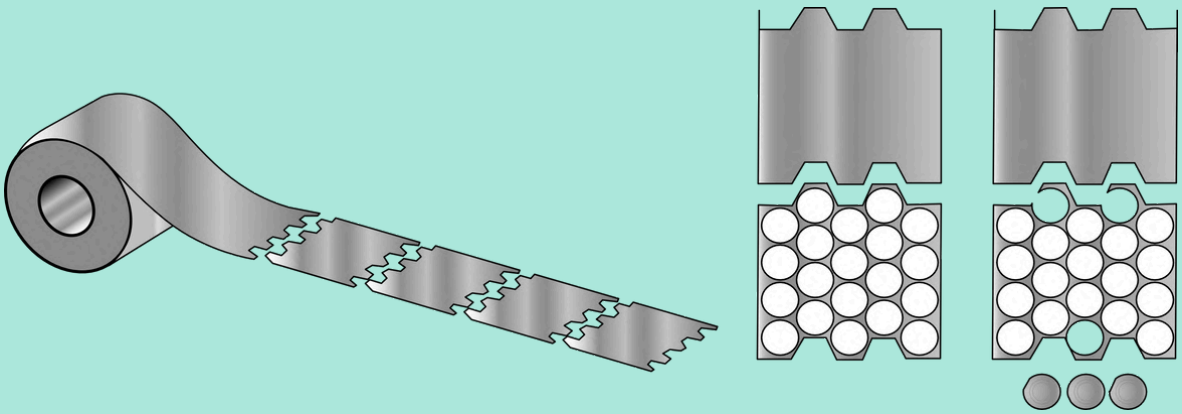
- **Smart & reliable:** Auto-learning, self-calibrating, with a heartbeat signal to confirm it's always working.
- **Easy to use:** Intuitive alignment software and easy-fit housing near cutter blades.
- **Versatile:** Detects clear lacquer and contaminants, syncs with slitter machine timing.
- **Flexible setup:** Includes a mounting kit for quick installation and multiple sensors.

👉 Bottom line: The IS610 delivers maximum protection at minimum cost.

Your coil width is shifting mid-run? That's a problem.

Did you know?
That even a slight scroll misalignment can cause huge problems! End manufacturers use as little extra metal as possible around the intended lid area to reduce the amount of scrap material left over.

What happens when your coil shifts sideways mid-run?
Uneven cuts on scrolled sheets—leading to clipped curls.



Stop clipped curls at the source with the

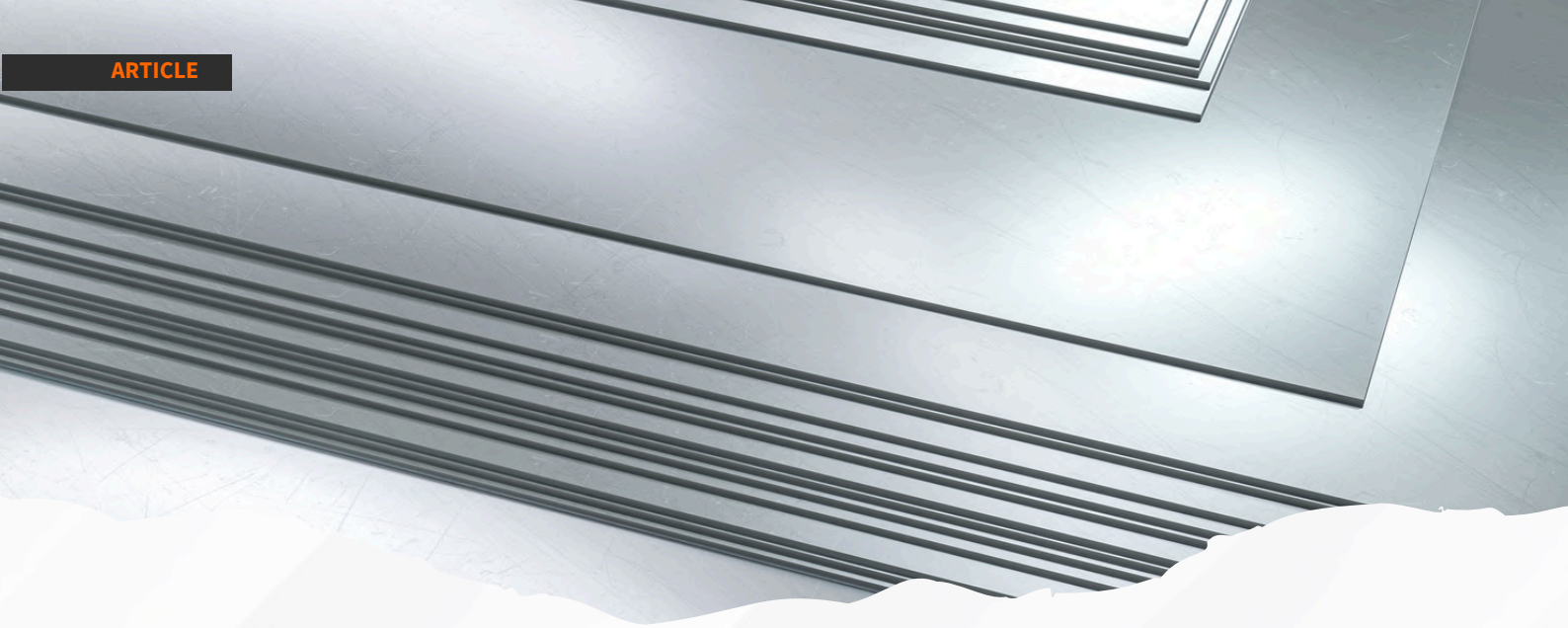
IS1270 MK II Coil Translation Measurement System.

The IS1270 MK II Coil Translation Measurement System continuously monitors and measures the coil's edge position as it moves through the cutting line, ensuring precision every step of the way.

Why it's a game changer:

- Eliminates clipped curls and reduces waste by precisely measuring coil translation
- Boosts efficiency with instant warnings on coil misalignment, minimizing downtime and costly defects
- Optimizes guide calibration and setup for consistent accuracy, even as gauging rolls wear down

Don't lose your profit due to coil misalignment.
We got the fix.



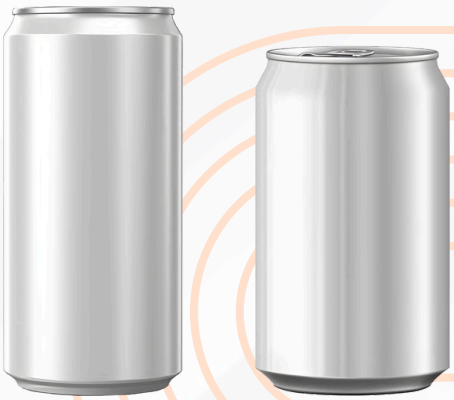
Aluminium vs. Tin-Plated Steel: What's the Difference in Packaging?

In packaging, aluminium and steel offer distinct advantages:
aluminium is lightweight and recyclable, making it suitable for applications like food and beverage cans, while steel provides superior strength and barrier protection for heavier or more durable packaging needs.

Aluminium Packaging:

- **Lightweight and Recyclable:** Aluminium is known for its low weight and excellent recyclability, making it a popular choice for applications where weight is a factor and environmental impact is a concern.

- **Barrier Protection:** Aluminium effectively blocks light, oxygen, and moisture, making it suitable for packaging sensitive items like pharmaceuticals, cosmetics, and certain food products.



- **Corrosion Resistance:** Aluminium resists corrosion, which is a significant advantage in packaging applications where exposure to moisture or other corrosive elements is a concern.

- **Versatility:** Its malleability allows for diverse packaging forms, including foils, cans, and bottles, catering to various product requirements.

Examples: soda cans, food trays, cosmetic tubes and foil are common examples of aluminium packaging.

Tin-plated Steel Packaging:

- **Strength and Durability:** Offers strength and good corrosion resistance, combining the structural durability of steel with a thin tin coating to protect against rust and enhance longevity.
- **Barrier Protection:** It offers a complete barrier against light, water, and air, preserving the nutritional value and flavor of food products without the need for refrigeration.
- **Recyclability:** Tin-plated steel is also 100% recyclable and can be recycled endlessly without losing its quality.
- **Cost-Effectiveness:** Generally, tin-plated steel packaging is more economical, especially for bulk packaging solutions.

Examples:
for food and beverages, drums for industrial products, paint and chemical containers, etc.

In summary, aluminium excels in applications requiring lightweight, corrosion-resistant, and versatile packaging, particularly for consumer goods sensitive to environmental factors. Tin-plated steel, on the other hand, offers unmatched durability, superior barrier properties, and cost-effectiveness, making it ideal for bulk food storage and industrial applications.

References:
World Steel Association - Steel Packaging; Advantages of Aluminum Packaging
The Advantages of Aluminum in Packaging Industry; Pros and Cons of Aluminum Packaging

Flat Sheets:

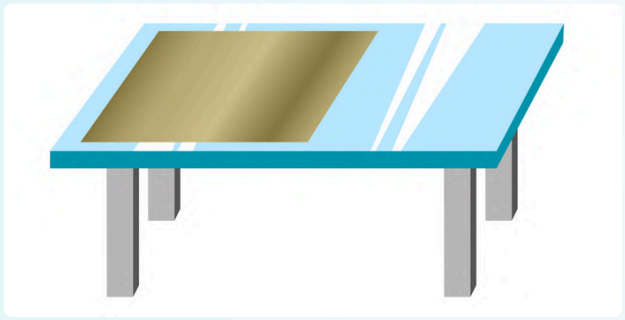
Get accurate coating thickness measurement in 3 steps!

Coating thickness checks, simplified.

Getting coating thickness measurements on flat sheets shouldn't be a hassle. With the IS9651 Hoverprobe™ II, you can do it in just 3 easy steps.

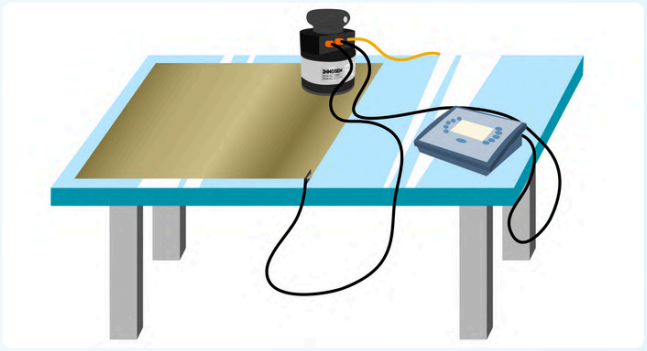
Step 1:

Lay your metal sheet on a smooth, flat surface.



Step 2:

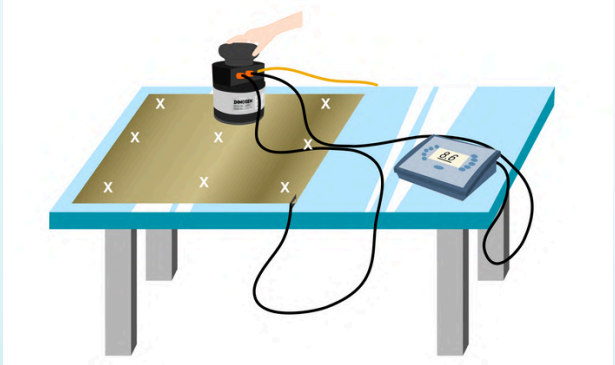
Connect the Hoverprobe™ II to the gauge.
Then gently place it on the corner of the sheet.



📸: *Place Hoverprobe™ II at the sheet's corner*

Step 3:

Press the button to hover and measure 9 spots across the sheet. Just release the button to take the reading.



📸: *Place the Hoverprobe™ II on each spot. Release button to measure.*

And you're done! 🙌
Your gauge will instantly show individual readings — and highlight anything out of range.

Bonus:
The Hoverprobe™ II can even measure without alligator clips.*

THREE STEPS. ZERO HASSLE.
SEE IT IN ACTION!

How To Maximize Your Machine Line Speed

GAIN EXTRA PROFIT WITH IS416 SHEET SKEW MEASUREMENT SYSTEM!

One of the most reliable ways to increase manufacturing productivity and profitability is to increase line speed. It is imperative, nevertheless, to reduce the possibility of alignment discrepancies that may result from speed increases.

It can be difficult to make such adjustments in the absence of reliable statistical data.

Thankfully, the IS416 Sheet Skew Measurement System offers a fix. Improve your line speed in an easy, data-driven way.

The IS416 system provides a simplified, data-driven method for maximizing line speed and reducing risks.

It offers invaluable insight into the viability of raising machine speed without running into problems by continually monitoring and evaluating sheet data every batch run.

Estimated Profits* on a Lacquering Line with IS416:

Less loss of good sheets by early detection of faulty sheets	USD 5000
Less loss of good sheets by early detection of calamities	USD 1000
Extra production by faster change over	USD 6000
Extra production by faster change over	USD 97200
Total extra profit on lacquering line	USD 109200

**computation based on a production line running 5000 sheets/hour with a 3% line speed increase using the IS416 statistical data*

The IS416 Sheet Skew Measurement System offers a reliable and easy-to-implement solution for maximizing machine line speed while gaining extra profit. By leveraging data-driven insights, you can unlock the full potential of your manufacturing process and stay ahead of the competition.

It's not just a speed boost; it's a strategic investment in your profitability and efficiency.
What is the maximum speed at which my production line can run?

Line Speed Increase Process

The simple process to increase line speed using IS416 Shet Skew Measurement System:

Initial Assessment

1. Start by operating your line at its usual speed during the first batch run.
2. Use the IS416 system to gather statistical data, including averages and standard deviation for this batch.

Speed Adjustment:

1. For the next batch run, reset the IS416 counter.
2. Maintain the same sheet specification but increase the line speed by approximately 3%.
3. Take note of the new averages and standard deviation observed with this adjustment.

Progressive Optimization:

1. If no sheet control issues arise with the speed increase, continue ramping up the speed by 3% for subsequent runs.
2. Keep incrementally increasing speed until a problem occurs.
3. In case of any issues, dial down the speed slightly to address them.

Continuous Monitoring and Adjustment:

1. Throughout the process, rely on the IS416 system to monitor sheet data and identify any deviations or challenges promptly.
2. Make necessary adjustments based on real-time insights provided by the IS416 system.

Achieve Maximum Efficiency:

By following this method, many manufacturers have successfully increased line speed by approximately 7%.

This translates to a significant boost in productivity, allowing for the production of approximately 800,000 extra sheets without encountering major issues.

Conclusion:

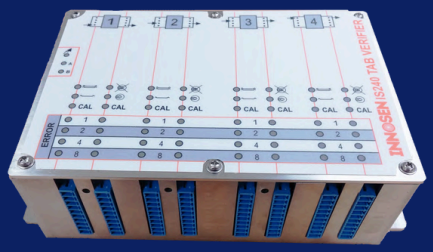
The IS416 system streamlines line speed optimization, enabling higher productivity and profitability with minimal risk through data-driven adjustments.

Meet your 2 in 1 Can End Inspector

Lost Tabs are Lost Customers
When ends with missing tabs get through your production, you will lose your customers due to quality issues!

Double Shells are Double the Problem
When double shells keep entering your conversion press undetected, they will easily damage your machine & cause quality issues as well.

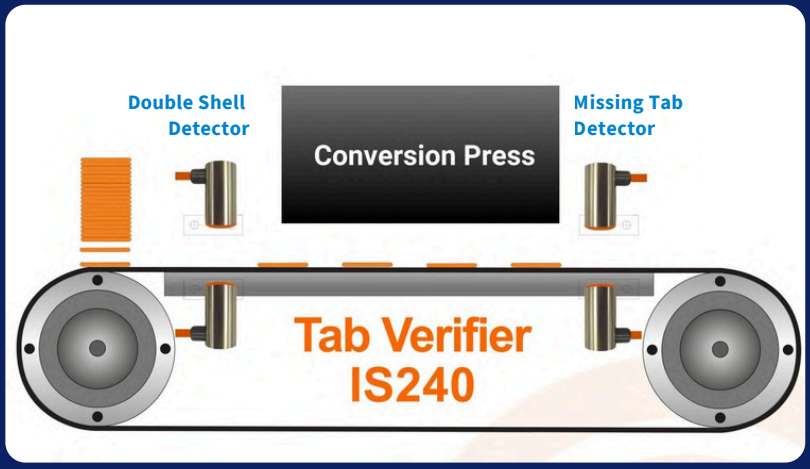
Make sure these problems don't affect your profit and reputation!



Let this 2-in-1 can end inspector from Innosen alert your production line before it's too late.

The **Tab Verifier IS240** can:

- Easily find incomplete ends in just 2 milliseconds!
- Handle up to 1,000 ends per minute
- Inspect up to 4 lanes at a time with just 1 controller



Install at the outfeed of the press for Missing Tabs
Install at the infeed of the press to detect Double Shells

3PC Welded Canmaking

Process Problems & Solutions

Problems per line:

1. Coil and Shearing Lines: Translated coil, sheet length variations (shorter/longer sheets)
2. Depalletizer/Destacker/Unloader: Double sheets
3. Coater: Double sheets, misaligned margins, contaminated margins, sheets with missing lacquer, increase cost due to lacquer overconsumption, unlacquered side-seam

4. Curing (Wicket Oven): Double sheets, margin contamination
5. Printing: Double sheets, misaligned prints
6. Curing (UV Oven): Uncured printed sheets
7. Slitter: Blunting of slitter blades because of double sheets, skewed sheets
8. Welding: Weld wire breakage, lacquer presence, downtime, inside-out cans, poor weld quality, inverted can labels

Recommended sensors for each line:

1. Coil & Shearing Lines
Coil Translation Measurement IS1270 MK II
On-line Sheet Length Measurement IS1261

2. Depalletizer/Destacker/Unloader
Double Sheet Detector IS231

3. Coater
Double Sheet Detector IS231
Sheet Skew Measurement System IS416
Sheet Translation Measurement System IS430 MK II
Sheet Registration Measurement System IS450
Missing Lacquer Detector IS651
Missing Side Seam Lacquer Detector IS670

4. Curing (Wicket Oven)
Double Sheet Detector IS231

5. Printing
Double Sheet Detector IS231

6. Curing (UV Oven)
Double Sheet Detector IS231
UV Logger IS310

7. Slitter
Double Sheet Detector IS231
Sheet Skew Measurement System IS416
Sheet Translation Measurement System IS430 MK II
Sheet Registration Measurement System IS450
Plain Margin Inspector IS610

8. Welding
Inverted Blank Detector IS631
Inverted Can Label Detector IS625

Tumbang Preso:

When a Can Becomes the King of Play

Image Source: reddit.com by Takashi_Sapida

Forget video games—Filipino kids have been turning an old tin can and a pair of flip-flops into hours of action-packed fun for generations. The game? **Tumbang Preso, which means "knock down the prisoner."**

🎯 **The Setup:** A lone can stands in the middle. One player guards it like treasure.

🥿 **The Attackers:** Everyone else aims their flip-flops (or tsinelas) at the can.

💥 **The Action:** Knock the can down, grab your slipper, and run before the guard tags you! Get caught? You're the next guard.

What makes it thrilling is the can itself—clattering, rolling, and causing chaos as kids race and laugh. From junk to centerpiece, the can transforms into the star of the game.

✨ **Why it's special: Tumbang Preso shows the Filipino magic of making fun out of almost nothing. And the best part? You don't need to be in the Philippines to enjoy it. Grab a can, call your friends or family, and see who can keep the "prisoner" standing the longest.**

All it takes is a can to kickstart the fun.

Curing issues stealing your shine? We've got the fix.

When you're aiming for top-tier results, half-baked or uncured prints just won't cut it.

If your metal sheets come out less than perfect, your UV curing setup might be holding you back.

Here are some common culprits behind undercured UV inks:

A. Worn-out lamps

B. Dusty reflectors

C. Misaligned focal points

D. Unmet ink system cure requirement

You put in the work —
make sure your UV prints shine
like they should.

The IS310 UV Logger is your behind-the-scenes star, helping you stay in control of your curing performance.

Bonus: Monitor up to 9 UV lamps in one pass—no missed spots, no second-guessing.

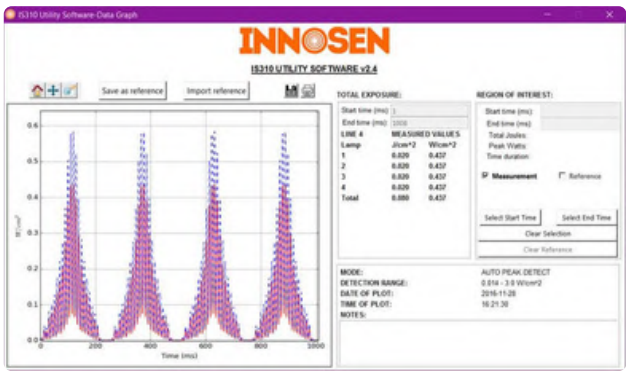
Because your work deserves a flawless finish—every time.

With this tool, you'll know when to:

✓ Replace or realign your lamps or reflectors

✓ Clean or swap out reflectors

✓ Adjust the lamp current



Quality Assurance and Inspection Sensors

These sensors can be used in the different sectors of the metal packaging industry, such as: Food and Beverage, Pharmaceutical and Healthcare, Cosmetics and Personal Care, Household, Chemical and Industrial, Recreational and Others.

Sheet Alignment Inspection
Sheet Skew Measurement System IS416
Sheet Translation Measurement System IS430 MK II
Sheet Registration Measurement System IS450

Margin Inspection
Plain Margin Inspector IS610

Sheet & End Inspection
Double Sheet Detector IS231
Double End Detector IS231
Tab Verifier IS240

Missing Lacquer Inspection
Missing Lacquer Detector IS651
Missing Side Seam Lacquer Detector IS670 **[NEW!]**
Inverted Blank Detector IS631

Label Inspection
Inverted Can Label Detector IS625 **[NEW!]**

Coil Lines
On-line Sheet Length Measurement System IS1261
Coil Translation Measurement System IS1270 MK II

UV Curing
UV Logger IS310

Software
Innolytix™ IS1100 **[NEW!]**

Coating Thickness Measurement
Hoverprobe™ II IS9651 **[UPGRADE!]**
Tube Probe IS9561 **[NEW!]**
Formed Can Probe SI9507+
Coating Thickness Gauge SI9600

Enamel Rating
Can Stand for Enamel Rating IS9015
Crown Adapter Stand IS9015-CRW
Large Can Stand IS9015XXL
Electrolyte Management System IS9024
Tube Stand for Enamel Rating IS9017
Light Probe IS9029
Aluminium Capsule Stand IS9018
End Adapter IS9020TMR
Vacuum Generator IS9021AV
Automatic Vacuum Control Unit IS9023
Top Plate Rack IS9031
EOE Rivet Adapter IS9025
Foil Adapter for Enamel Rater IS9030
Semi-automatic Enamel Rater SI9100

INNOSEN
SEPTEMBER 2025

QUALITY MAKES *Quality*

The quality of the product you make is greatly dependent on the quality of the tools/sensors you use. Producing a can is easy but producing one with quality your customers will accept needs quality sensors.

Innovative sensors not only make quality sensors but help create an efficient process and positive production yield.

The core characteristic of Innosen sensors is quality. This is reflected in the ingenious versatility of each system that makes sure you get the value you deserve and paid for.

These sensors were designed from partnerships with can makers. You can now say that these sensors know exactly how to solve production issues whilst ensuring an uninterrupted process.