

NEWSLETTER MAGAZINE • JAN - OCT • 2022 EDITION • VOL 4



QUALITY ASSURANCE FOR METAL PACKAGING

www.innosen.com | info@innosen.com

TABLE OF CONTENTS

- 02 Editor's note
- 03 Innosen in a nutshell
- 04 Article: Make sure your Hoverprobe is in its best shape



- 06 Forgot to fill your day tank with lacquer?
- 07 Article: A tiny tool with stellar performance
- 80 25th Anniversary: Transforming businesses by transforming your production line
- 09 New Products: Experience Maximum flexibility in enamel rating

- Article: Why coating problems happen 10
- 11 Missing tabs on ends? Don't let them damage your presses.



- 12 Article: 4 Ways that double sheets badly hurt your business
- Article: Produce 800,000 extra sheets with higher 13 line speed
- 14 Want to get rid of double sheets but got no time for adjustment calibration?
- 15 Company update
- 16 Where quality meets reliability



EDITOR'S NOTE

Hello everyone, this is Nina, Innosen's Editor-in-Chief and the marketing geek behind all our fun posts on Linkedin, newsletters and website. I hope you don't tire from reading our articles and blogs as I write my best to provide you with my personal insights and thoughts of my journey in the metal packaging industry. Please stay tuned and be informed.



THE STAFF

Jeniña Muñoz Editor-in-chief

Lois Abigail Ilo **Head Designer**

Jeni Rose Lazarte Editor



INNOSEN IN A NUTSHELL

Our company's mission is to help the metal packaging industry produce the best quality products with the least amount of effort, money and resources.

We make this happen by providing them innovative sensors that would minimize their production downtime and maximize efficiency.

Our history involves working closely with our partners to make sure we understand their needs before developing solutions for each specific problem. In fact, our sensors are products of our close and meaningful partnership with our clients. We always introduce our products with THEM and for THEM.

Innosen has been there to deliver solutions to production issues like the formation of double sheets, skewed sheets and missing tabs to name a few. With Innosen, no matter how big or small the problem is, it's always a CAN do.

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.

MAKE SURE YOUR HOVERPROBE IS IN ITS **BEST SHAPE**

HERE ARE SOME PROBE CARE SUGGESTIONS:

- If Using a Metal Test Table Ensure the table is electrically earthed. It has been found that unearthed metal tables can cause variability in the readings.
- **Parking the Probe** To keep the probe tip in its ideal condition, the Hoverprobe should be parked on a clean, hard surface. This keeps the probe tip fully compressed and ready for measurements.
- **After Fitting a New Probe Tip** After fitting a new probe tip, the Hoverprobe should be parked on a hard surface for at least 45 minutes before use. The reason for this is that when a new probe tip is fitted, it will slowly deform from the pressure. This deformation changes its measurement capability.

Spare packs of probe tips are available from Innosen.

Innosen highly recommends changing the probe tip every 4-6 weeks in order to obtain precise measurements.

Clean Air Supply

The Hoverprobe air bearing is susceptible to more rapid wear from contaminated air supplies. Fitting a filter/ regulator prior to the Hoverprobe can easily prevent undue deterioration.

The air supply should be a maximum of 5 bar (70 psi), free from oil and filtered to 5µm. Cleaning and regular replacement of the probe tip ensure maximum performance.





WHY IS PROBE TIP INTEGRITY IMPORTANT?

An essential part of maintaining the world-class performance of the Coating Thickness Gauge - whether you use it with the Hoverprobe or the Formed Can Probe - is regular checking and cleaning of the special probe tip and at least monthly renewal of the tip. If damage occurs, renewal may need to be brought forward.

Why is this? Gauges of this type measure the differences in electrical capacitance between a reference sample and sheets or cans to be tested. The probe tip forms an essential part of the gauge because its surface area forms a key part in the calculation of film weight.



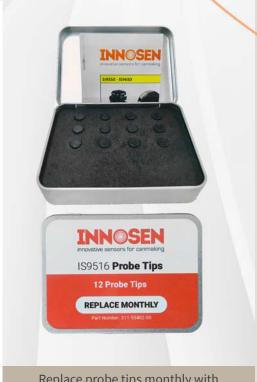
A damaged and deformed probe tip

PROBE TIP SETTLING TIME - IMPORTANT FOR NEW TIPS

Newly fitted probe tips should be left under pressure for 45 minutes before calibration.

The surface area of the probe tip plays a big part in the measurement process as its surface area is a key component in the thickness calculation. In use, the probe tip is compressed, then expands thus creating a larger contact surface area. Tests have shown that this expansion stops in 30-40 minutes after which calibrations and readings will be very consistent. Clearly, taking readings or calibrations while the tip is compressing will result in variable results.

The Hoverprobe and Formed Can Probe apply a constant force on the probe tips resulting in consistent probe tip surface area. It is important that the Hoverprobe is parked on a hard flat surface when not in use as this ensures the tip remains compressed.

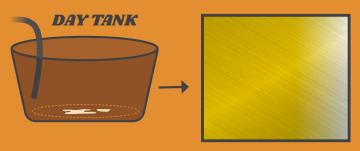


Replace probe tips monthly with IS9516 Probe Tips

FORGOT TO REFILL THE DAY TANK WITH LACQUER?



This will first lead to missing lacquer on the edges of the sheets and you would not know if the missing lacquer will manifest on the left or right side.





AREAS WITH MISSING CLEAR LACQUER ON SHEETS ARE EVEN **HARDER TO SPOT!**

The IS651 Missing Lacquer Detector

detects sheets that are not fully lacquered to prevent serious problems, such as corrosion and blunting of press tooling in a DRD press.

It works on all lacquers including clear/transparent coating.



A TINY TOOL WITH

STELLAR PERFORMANCE



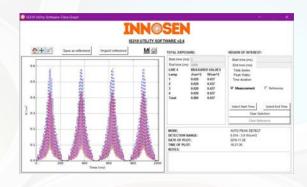
IS310 UV Logger

Uncured ink or print could lead to not just one, but a few problems in the production. Some of which are corrosion and ruined print labels, leading to higher production cost due to unplanned downtime and customer complaints. While many loggers have presented solutions to these problems, most of them were not offering maximum benefits to canmakers.





The IS310 UV logger's compact, credit-card sized design allows it to fit through even the smallest oven entry clearances making the reading more accurate as they are taken closer to the substrate. It can also be easily attached to metal sheets even when the curing process is ongoing because it is magnetic.



Another unique feature of this tool is that the performance of up to 9 individual lamps can be monitored with just ONE pass. Unlike other UV loggers, the IS310 is capable of providing readings for each individual lamp. By providing readings for the individual lamp, proper maintenance and timely adjustments of energy/reflectors is achieved.





The IS310 UV Logger is one of the most innovative loggers in the market as it is flexible enough to meet the demands of different suppliers. It is a tool that does not boast of its size but its stellar performance. It may be the smallest but remarkably, THE BEST -- that's Innosen's IS310 UV Logger.



Transforming businesses by transforming your production line

25 years ago, what was it like detecting double sheets? 25 years ago, how did you measure coating thickness? 25 years ago, how did you detect skewed sheets?

25 years ago, we developed products addressing these issues. Products that quickly revolutionized the market and through continuous improvements over the years, are still the market leaders today.

This year, we celebrate these three products' 25th year of service in the industry!

Cheers to continuous improvement and reliability!

Sheet Skew Measurement System



Hoverprobe



Double Sheet Detector



Sheet Skew Measurement System

Detects skewed, rotated or tilted sheets to avoid welder damage, leading to expensive downtime

Hoverprobe

Measures coating thickness on sheets to ensure lacquer quality and cost control

Double Sheet Detector

Detects double sheets, blanks and ends to avoid tooling breakage

EXPERIENCE

MAXIMUM FLEXIBILITY

IN ENAMEL RATING

Have you met our flexible family of enamel raters?

Whatever size you want to rate, Innosen's Enamel Rating family will be able to measure it! Our enamel raters are capable of measuring the coating porosity of whatever can, end and tube size, shape, or material.



IS9030 Foil Adapter

Specifically for aluminium thin & thick foils.



Can Stand IS9015 - For a wide variety of can shapes and sizes.



Tube Stand IS9017 - For a wide variety of aluminium collapsible tubes.

IS9018 Aluminium Capsule Stand

Specifically for aluminium capsules.



End Adapter IS9020TMR - For a wide variety of ends, caps, cones, domes & flat sheets.



WHY COATING **PROBLEMS** HAPPEN





Uncoated or partially coated sheets can cause blunting of tooling in a DRD press. Almost the same thing will happen if the coating is placed twice on the same side instead of one coating on each side. Undetected, these faults can also cause problems for the brand owners as uncoated cans corrode badly.

Sheets with missing lacquer, the quality of the cans is compromised. This results in a pile of metal spoilage at best, and COSTLY customer complaints at worst. All of these will amount to costs that could have been easily prevented.

Innosen's line of lacquer sensors are designed to prevent these costly problems, making it simple and easy to identify missing lacquer early on.

The IS631 Inverted Blank Detector identifies cans or blanks with lacquer applied on the wrong side. Sensor signals are used to inform the operator/ machine control of these missing lacquer defects so that they don't reach other parts of the process, or worse: the customers.

Meanwhile, the IS651 Missing Lacquer Detector inspects metal sheets on the coating line and generates a signal once it detects uncoated or partially coated sheets.

Both sensors are selfadjusting and self-calibrating so there is no need for operator intervention. When a changeover occurs, the sensor automatically learns the new lacquer characteristics. Both sensors can also be used to detect clear lacquer /varnishes.

Get Innosen's easy solution today.

Missing tabs on ends? Don't let them damage your presses.



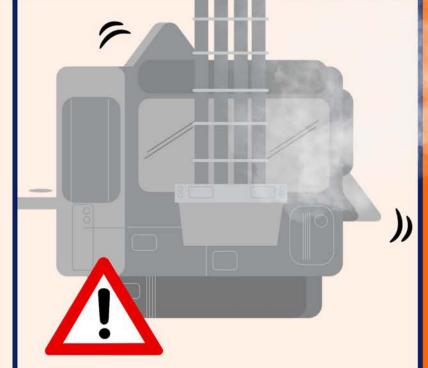
Don't let your easy open cans lose their tabs!

IS240 Tab Verifier is a compact system that detects missing tabs, which could go into conversion presses!





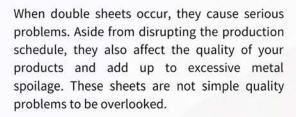
- 1. Small sensor dimensions for easy mounting
- 2. Quick calibration, no need to adjust detection tolerances
- 3. Calibration input for quick start after maintenance stops
- 4. Only one sensor type needed for both aluminium and steel ends/tabs no adjustments needed
- Economical drop-in replacement for your existing system
- 7. No need to re-calibrate after a cable change





4 WAYS THAT DOUBLE SHEETS

BADLY HURT YOUR BUSINESS



DOUBLE SHEETS DAMAGE YOUR TOOLING

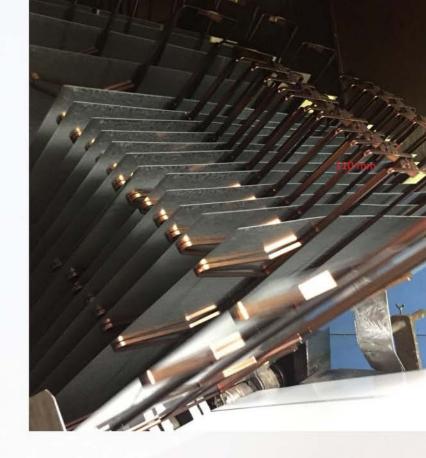
Double sheets could damage the press tooling. The repair of this machine could be very costly and causes downtime!

DELAYS COST A LOT OF MONEY

When double sheets damage a machine, there is downtime. This results in less YIELD, late deliveries, overtime pay for the employees, not to mention, irate customers and worse cancelled orders!

DOUBLE SHEETS RESULT IN POSSIBLE RUSTING OF CANS AND CONTAMINATION OF **CONTENTS DUE TO UNLACQUERED SHEETS**

Lacquer is applied onto the sheet that forms the inside of the cans that will come into contact with the filling. This lacquer protects the cans from corrosion, rusting, and contamination.



Double sheets prevent the proper application of lacquer on each one of them and you know what will happen next!

YOU RISK A BAD REPUTATION WITH YOUR CUSTOMERS

Imagine your customers receiving products with unacceptable quality, or worse, getting them into trouble due to contaminated products.

Prevent all these from happening by detecting double sheets, real-time all the time! The IS231 Double Sheet Detector detects double sheets, blanks, and ends at the unloader, coater infeed or outfeed, wicket oven outfeed, slitter infeed, sheet feed presses, and seamer. This ensures that no double sheet is left undetected, protecting your machinery from possible damage and customer complaints due to defective products.

PRODUCE 800,000 EXTRA SHEETS WITH HIGHER LINE SPEED

Increase your line speed by 3%, thanks to the IS416 Sheet Skew Measurement System!

The statistical data that the IS416 Sheet Skew Measurement provides allows users to increase their line speed by 3%.

HOW?

- 1. Start the line running at nominal speed and after a while, make a note of the skew average and standard deviation.
- 2. When running the same specification the next time, simply reset the counters on the IS416 controller and increase the line speed by, for example, 3%.
- 3. After the run, take note of the average and standard deviation. If nothing has changed, it means that there is no sheet control problem yet.
- 4. The line speed can then be increased again by 3%.
- 5. Continue with this process until an issue comes up. When this happens, the speed should be taken down a little.

Using this method, most manufacturers found they could increase speed by about 7%. On a yearly basis, that is a lot of extra sheets! It is also important to realize that there is no risk during the trial as the IS416 detects all skewed sheets, even at higher speeds!

EXTRA PROFIT ON LACQUERING LINE WHEN USING THE IS416:

| Less loss of good sheets by early detection of faulty | \$5000 |
|---|----------|
| sheets | |
| Less loss of good sheets by early detection of calamities | \$1000 |
| Extra production by faster changeover | \$6000 |
| Extra production by faster line speed | \$97200 |
| Total extra profit on lacquering line | \$109200 |

PRODUCE 810,000 MORE SHEETS PER YEAR THANKS TO HIGHER LINE SPEED!

Achieve this now! Contact us at info@innosen.com

Complete your sheet protection system. Check out:

Sheet Translation Measurement System IS430 MK II - to detect translated sheets or sheets that moved sideways to avoid leading cause of downtime.

Sheet Registration Measurement System IS450 - to count the timing of sheets' registration to avoid leading cause of downtime.

Sheet Positioning Measurement Switchbox IS228A - a switchbox for the Sheet Translation Measurement System, that allows the users to connect two different IS430 MK II heads to the same electronics unit.

YOU WANT TO GET RID OF DOUBLE SHEETS BUT GOT NO TIME FOR ADJUSTMENTS OR CALIBRATIONS?

WE GOT YOU!









When detecting double sheets, don't double the hassle! Use Innosen's **Double Sheet Detector IS231** and let it do all the work for you.

Once installed on your line, they automatically learn by themselves and constantly auto-adjust depending on the sheet thickness to provide optimal detection.

COMPANY UPDATES

UV LOGGER CALIBRATION NOW AVAILABLE IN THE U.S.A!





Meet Richard!

Innosen US General Manager

Background:

- 30 years of experience in Sales & Marketing
- Worked as a Sales & Marketing Vice President for Woodward
- · Graduate of Engineering from HTS Rotterdam
- Has an MBA from Colorado State University
- His expertise is in sales, quality control systems, innovation and marketing

He currently manage Innosen sales for North America.

About Richard:

Richard was born in the Netherlands but now lives in the US. He moved to the US and has chosen Colorado to be his home since then.

He is interested in a lot of things, including computers & technology, repairing and setting up equipment/machines and collecting unique vehicles! Richard is a licensed pilot and flies his own plane. He also loves diving and travelling to different places.

Come and visit our Colorado office and meet up with Richard! He'd be happy to show you around and tell you more amazing things about Colorado!

Contact Details:

richard.nelen@innosen.com Tel: +1970 305 8721 7691 N.Overland Trail 80524 Fort Collins Colorado, USA

WHERE QUALITY MEETS RELIABILITY

For over 20 years, Innosen has developed remarkable sensors that help can makers eliminate production problems, reduce costs and even increase production rates.

Our sensors have been synonymous with quality, reliability and innovation. From easily detecting double sheets, efficient UV logging, and reliable coating thickness measurement to effortless skew detection, it's proven how powerful our sensors are. The power to cut costs, save time, and secure the quality of products is within your reach.

> Choose Innosen Your Partner in Quality.