

Easy Upgrades For Better Budgets

Everyone wants to save money by cutting running costs. Upgrading outdated equipment for more efficient models can make a significant contribution to this. But replacing a whole system at once could be expensive and disruptive. Fortunately many Sencon products can be upgraded in flexible ways, so improvements can be planned incrementally for sound budgeting and minimum disruption. This edition of News&Views highlights some of these developments and the upgrade paths you can follow to ensure you are achieving optimum production performance.

Have You Got The Right Drivers?

A top range BMW won't hold the road if it has bald treads and even an old Ford gives a safer ride if you fit new tyres. In the same way, a spray gun system is only as good as its solenoid drivers and better drivers can considerably improve an ageing system.

Applying a fixed voltage to drive a spray gun is not the most efficient approach. The electro-mechanics of opening and closing a spray nozzle make activation and shutdown slow to respond. Sencon have developed improved DV and DI drivers to deliver a high initial voltage and a stepped power-down for more positive on-off switching. This sharpens up the guns response times, improving coating distribution and reducing usage.

WORLDWIDE COATING PRICES RISE

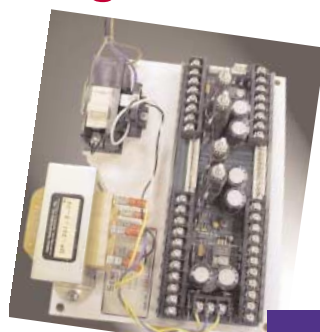
"The rise in oil prices has forced epoxy resin and solvent prices to increase rapidly in the last year ... Violent price increases have hit Asia ... and now the global market is starting to experience similar rises and tight supply... For an industry that has accepted stable and even declining prices with a focus on working with canmakers to reduce coating consumption and improve efficiencies, it has come as a shock to discuss the need for monthly double digit increases."

Tony Greensall

reprinted with permission from
The Canmaker, January 2005

For advice on the options for your installation, tick the box on the reply sheet

LST Spray Gun Drivers



Old A500-115 power unit

Direct replacement Sencon DV driver module



This also solves a common mis-spray problem. If a gun has not been fired for a few minutes, coating dries in the nozzle. Older drivers use a lower power rating, so cannot deliver the energy needed to clear the nozzle quickly. The delay harms coating delivery, thus producing a mis-spray after a line stop. Sencon DV drivers are designed for the higher power rating of modern guns (40 watts), so they deliver the extra power needed to overcome 'sticky nozzle syndrome' and eliminate first can mis-sprays.

Installing new Sencon DV drivers yields performance benefits even on an old back plane, improving the performance of older generation voltage guns and helping to overcome mis-spray problems.

Some of our drivers can also be reprogrammed to work with modern, current operated guns, so you can future-proof your system by installing Sencon drivers now and investing in newer guns when the maintenance budget allows.

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In Brief

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2pc canmaking

3pc canmaking

Beverage end making

Food can end making



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SENCON
CONTROL DOWN THE LINE



No Process Control Without Quality Data

Rising lacquer and solvent prices are prompting manufacturers to pay closer attention to coating process efficiency. However, to make improvements within critical tolerances you need precise data about your coating process and this requires an accurate, reliable measuring system. At Sencon we are constantly working to further improve the excellence of our quality assurance gauges.

A Formed Can Probe is used together with Sencon's Coatings Thickness Gauge (SI9600) to test both inner and outer coatings on straight walled or necked beverage can bodies. For consistent results, the tip needs to be uniformly pressed against the can wall.

In the process the tip gradually deforms as pressure is applied and released, so the surface area of contact could be different for each spot test, adversely affecting measurement results. Sencon therefore upgraded the SI9507 Formed Can Probe to the newer SI9507+ model which keeps the tip under a constant spring pressure when the jaws are at rest. Manual scissor action now opens the jaws, then the tip is automatically clamped onto the can wall by the force of the spring.



SI9507+
Formed Can Probe

Design improvements to the Formed Can Probe represent an important increase in the repeatability of the system.

A known, consistent pressure is therefore applied and the tip area is held in constant deformation, so the same surface area is used for every measurement. For good measure, Sencon also added indicator guides along the probe arms to help the operator take tests from similar positions along the can wall.

These design improvements represent an important increase in the repeatability of the system, yet this is a very easy upgrade to make. The SI9507+ Formed Can

Probe is used in the same way as the previous model - in fact it is easier to use in accord with best practice* - but results are even more consistent and useful for process analysis, leading to all important savings in material costs.

* A Best Practice Guide for coatings measurement is available from Sencon.

For more information on this product tick the box on the reply sheet

SI9507+ Formed Can Probe



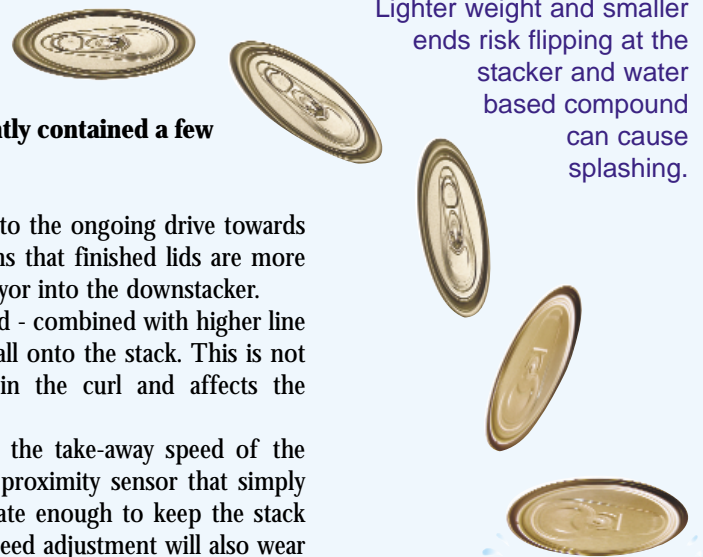
Stacking Lids ...

It's been a bad day. You are called to the phone. It's the irate plant manager of one of your best customers. They've just experienced two seamer wrecks in a row. He's not happy and he's blaming you. It turns out that the sticks you delivered recently contained a few inverted lids. It shouldn't be happening.

Unfortunately such incidents are on the increase due to the ongoing drive towards lighter weight and smaller diameter ends, which means that finished lids are more prone to flipping over as they come off the flat conveyor into the downstacker.

At the same time, the use of water based compound - combined with higher line speeds - can cause the compound to splash as ends fall onto the stack. This is not just messy, it reduces the amount of compound in the curl and affects the distribution.

The key to both these problems lies in matching the take-away speed of the downstacker to that of the delivery. Using a regular proximity sensor that simply sends stop and start signals to the drive is not accurate enough to keep the stack height stable and trouble free. The constant on-off speed adjustment will also wear out your drive system more quickly.



Lighter weight and smaller ends risk flipping at the stacker and water based compound can cause splashing.

Inside-out Cans : Big Problem, Simple Solution!

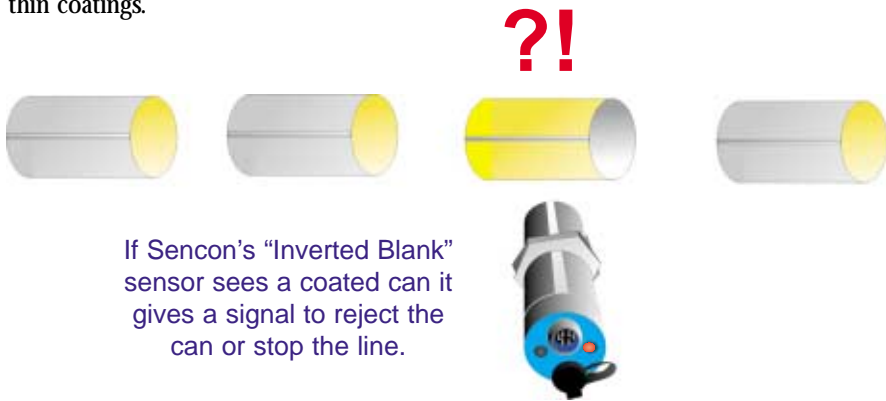


It only takes one "bad" can that swells, corrodes and leaks in storage - or worse still, on the shelf - and potentially a whole pallet of product is ruined, which could even lead to an entire batch being rejected. It's a canmaker's nightmare! The financial penalties are high and the damage to customer relations could be severe.

When making internally coated cans, they occasionally get formed inside out with uncoated metal on the inside and coating on the outside. Such cans are a retail disaster waiting to happen.

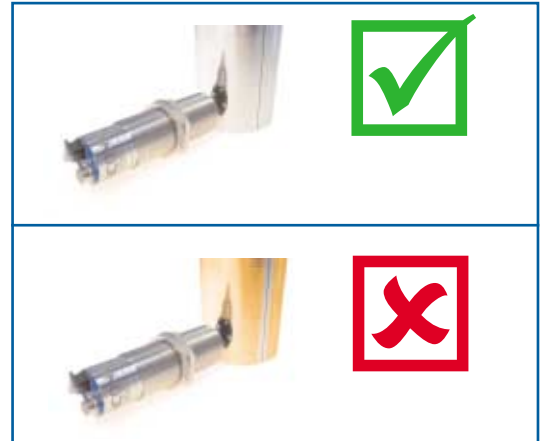
What can you do about it? Inside-out cans occur when a sheet or blank gets inverted, perhaps after visual inspection. If you could automatically detect when this happens, you could prevent any inside-out cans from being produced.

Sencon's Inverted Blank Detector (SC620) detects the presence of the most commonly used coatings on 3pc lines, both gold and clear lacquers, even in very thin coatings.



If Sencon's "Inverted Blank" sensor sees a coated can it gives a signal to reject the can or stop the line.

A self-calibrating sensor that starts protecting you as soon as it is fitted.



As a self-calibrating sensor it starts protecting you as soon as it is fitted on the outfeed of the welder. Most of the time it sends a reassuring "heartbeat" signal to indicate that each passing can is correct.

However, if it sees a coated can, it outputs a signal that is used to reject the can or stop the line. It's a simple solution to a potentially big problem ... and it only takes one!

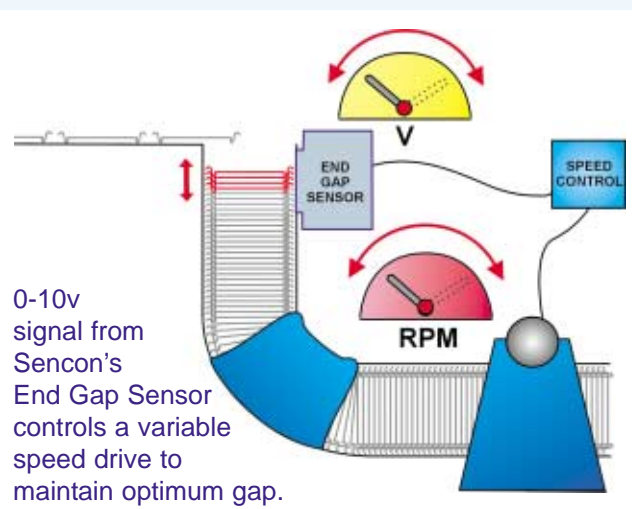
For more information on this product tick the box on the reply sheet

SC620 Inverted Blank Detector

... The Smooth Way



Sencon's End Gap Control system is used to replace inefficient stop-start pusher control with smooth, modulated speed control.



Sencon's End Gap Control system replaces inefficient stop-start control with modulated, analogue speed control. A low cost variable speed drive can then be used to adjust motor speed evenly in response to the 0 to 10v output from the Sencon End Gap Sensor.

Simply set max and min gap sizes on the pushbuttons provided on the sensor's controller and the whole system becomes self-balancing, quickly settling the gap to a tightly regulated optimum.

With the top of the stack now moving as little as one or two end thicknesses, lids are stacked smoothly with no risk of flipping and no splashing of compound.

For more technical information on this system tick the box on the reply sheet

End Gap Control



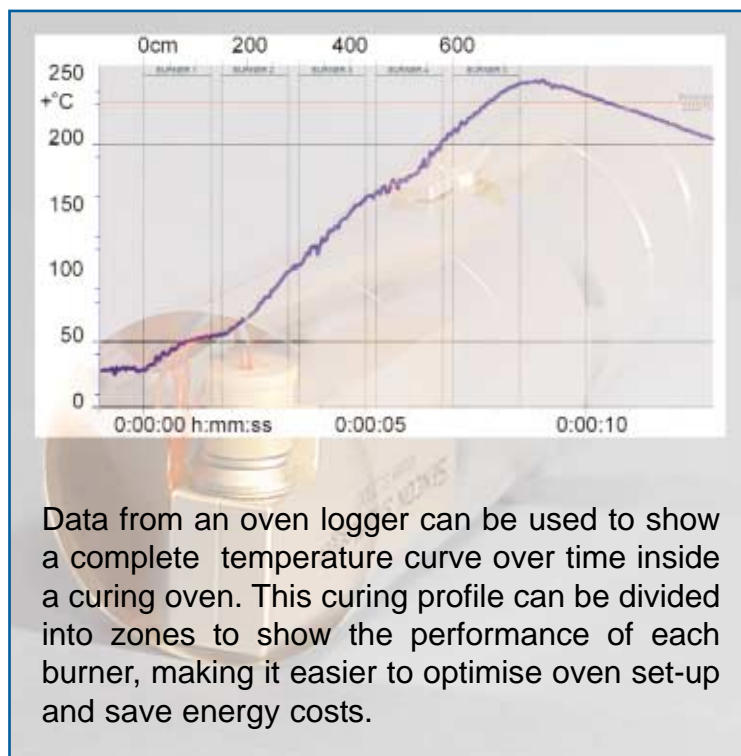
One Logger, Twice The Benefit

A poorly set up sidestripe oven risks insufficient curing if it runs too cold, or lacquer damage if there are hot spots. Yet setting up a sidestripe oven is still more of an "art" than a science. Rubbing the can and visual inspection are often the only quality assurance methods available for checking the sidestripe curing process.

Thermal strips give some basic feedback about peak temperatures, but they cannot tell you how quickly the can wall comes up to temperature and for how long it is held there. A dedicated oven logger gives much fuller information [see side box], allowing better process control and energy efficiency.

Until now loggers have proved too heavy and cumbersome for practical use in a sidestripe oven, requiring complicated arrangements that interfere with the usefulness of data obtained. Sencon already make a compact, lightweight logger for easy attachment inside the wicket oven. The same logger can also be adapted for the sidestripe oven. A clip and probes attach the logger to three can bodies in an articulated assembly that is sent through the oven at normal line speed.

Sencon's flexible logger design is used by both 3-piece and 2-piece canmakers to monitor all varieties of curing ovens. On a 3pc line you don't need separate loggers for wicket and sidestripe ovens. For the price of a single Sencon system, you can now bring all your curing processes under control.



Data from an oven logger can be used to show a complete temperature curve over time inside a curing oven. This curing profile can be divided into zones to show the performance of each burner, making it easier to optimise oven set-up and save energy costs.

For more information on this product tick the box on the reply sheet

3pc Oven Loggers

In Brief

Sencon at Metpack

Hall 3 Stand 3-128

Sencon will be exhibiting again this year at Metpack. As previously mentioned in NewsViews, we will be launching our latest, low cost vision system, the Label Verifier. It is a mixed or "rogue" can detector with a small footprint and self contained design that allows it to be installed neatly at the end of a can making line or after the pasteuriser on a beverage filling line for final inspection. We hope to see you there.



You can also ask for more information about any product in this newsletter by visiting www.sencon.com/contact/reply.htm

Do You Have The Image?

Our smart looking 2005 mousemat, incorporating a photograph taken by Kamila Stachera of Ball Packaging Europe, has proved very popular. We are already planning ahead to next year's mousemat. So if you have your own image you would like us to consider using, please email it to Andrew Hinks:

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