



Double End Detection For Thicker Gauge Materials

Overlapping or nested ends that get through the seamer on 3-piece lines lead to spoilage and unplanned downtime as the seamer has to be cleared of wreckage. Sencon's SC230 series Double End Detectors successfully eliminate these problems on a wide variety of applications.

However until now, 0.5mm (0.02") has been the upper limit of material thickness with which they could be used. On lines that use material of a heavier gauge than this - making paint containers or oil drums, for example - double end incidents can be even more wasteful and time consuming.



SC235 detects overlapping or nested ends on lines that use sheet metal from 0.5mm (0.02") - 1.6mm (0.063")

One plant, producing 250 litre (55 gallon) oil drums, even reported spending up to 30 minutes with a hammer several times a day clearing twisted metal from the seamer due to heavy-weight double ends being sent through!

Sencon has now developed the SC235 Double End Detector for use with thicker gauge sheet metals - from 0.5mm (0.02") - 1.6mm (0.063"). Trial installations have immediately improved productivity and work

flow by picking up double ends before they create problems at the seamer. The SC235 works equally well detecting double sheets of heavier gauge metal on 3-piece lines, so it can be used to protect the coater or the welder too.

Attempts to use other sensors have been found to produce frequent false tripping, which means that the line must still be stopped for the sensor to be reset, sometimes several times an hour. With the SC235, false tripping incidents are extremely rare.

Installing the SC235 is just as easy as wiring up a standard proximity sensor and yet its functionality is far greater. Like all the 230 series, the SC235 is fully self-calibrating; simply sending one end through automatically adjusts the sensor to the right gauge setting.

No manual settings are required and no additional control box is needed, so batch changeovers become quicker and easier, with no possibility of operator error. Seamer wrecks from double ends or sheets on lines that use heavier gauge metal cost considerable time and money.

Sencon's latest "fit and forget" sensor provides a much needed answer, substantially reducing unplanned downtime and spoilage.

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

Double End Detector SC235

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In this issue

Page 1

New

Double End Detection For Thicker Gauge Materials

Page 2

Check Your Lacquer Usage At The Coater

Page 3

Handling Modified Electrolytes For Finding Smaller Defects.

Page 4

Energy Saving In The Dryer Oven? Use Your Logger!

In Brief

Subject Key

2pc canmaking

3pc canmaking

Beverage end making

Food can end making



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SENCON

CONTROL DOWN THE LINE



Check Your Lacquer Usage At The Coater

Cost effectiveness, waste reduction and process efficiency remain top of the list of canmakers concerns worldwide. In recent years there has also been growing pressure for the industry to become more environmentally friendly, especially by reducing materials usage such as coatings.

This ought to be a "win-win" scenario for both legislators and canmakers, as reducing coatings usage saves costs and increases profitability. However, without trustworthy data, it can be difficult to run equipment more efficiently and still stay within critical tolerances. Many canmakers err on the side of caution and run their coaters on the heavy side.

Sencon's Wet Film Weight Gauge gives a highly accurate reading of the coating applied - both clear and coloured lacquers - while sheets are still wet, right at the coater. There is no need to wait until sheets have been through the oven for readings to be taken.

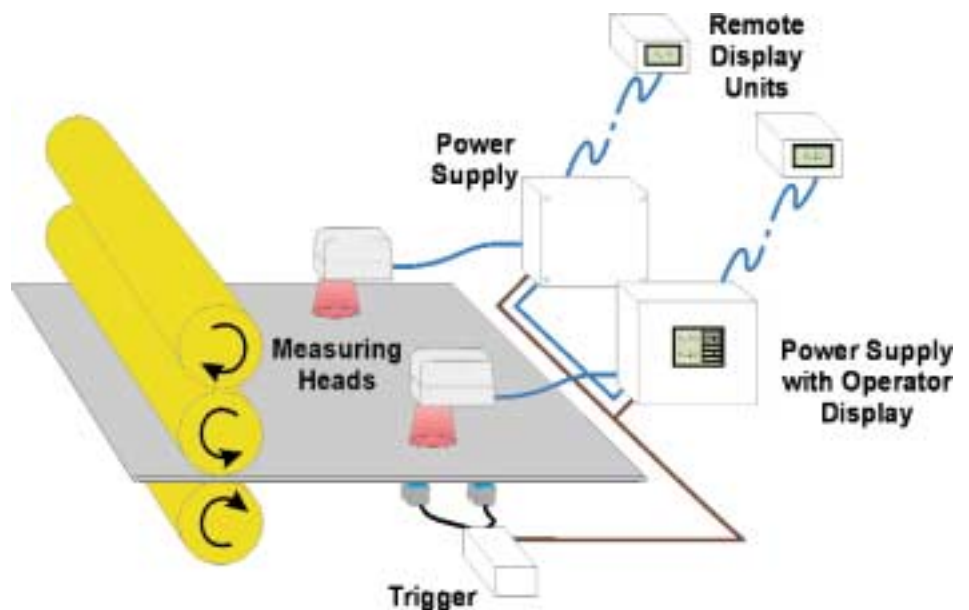
Using infra-red absorption analysis of the coating, the Wet Film Weight Gauge precisely assesses the expected dry film weight of sheets - to within 0.1 gm/m² - as they come through the rollers and warns immediately if too much or too little coating is being applied. This instant feedback allows quicker process adjustments to be made, significantly reducing make-ready and changeover times.

Operators have confidence to run much closer to a minimum specification, saving on material costs and spoilage while avoiding complaints. The SC8400 also eliminates the need for handling test sheets, further reducing spoilage. With its ability to output analogue data for chart recording and the option of connection to a remote PC for continuous process monitoring, the Wet Film Weight Gauge is rapidly becoming an essential tool in the drive to improve coatings efficiency across the industry.



SC8400 uses infra-red absorption analysis to assess the expected dry film weight of sheets to within 0.1gm/m²

The Wet Film Weight Gauge helps to achieve better coating control for lower costs and faster changeover times for higher productivity. With soaring lacquer prices, payback is typically less than a year.*



* Contact us for a sample payback calculation.

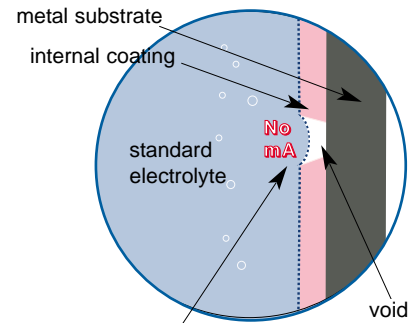
For more information on this product tick the box on the reply sheet
Wet Film Weight Gauge SC8400

Handling Modified Electrolytes For Finding Smaller Defects

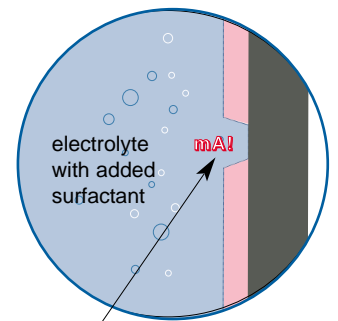


If tiny holes occur in the internal coating of beverage cans, particularly when steel is used, end users report that it causes a noticeable metallic taste. The standard electrolytes used for enamel rating can sometimes miss these small gaps, because the surface tension of the electrolyte bridges across the void in the coating. To overcome this problem and increase the sensitivity of the test, a soapy substance known as a "surfactant" is added to the electrolyte. This reduces surface tension so that the electrolyte flows into even minor defects. Some fillers and can makers now favour the routine use of surfactant in all enamel rating for the higher quality control it allows.

From the canmaker's point of view, the use of surfactant in electrolyte can have another effect: foaming at the top of the can when it is being filled for enamel rating. In Sencon's Automatic Enamel Rater we found that if foam touches the gauge's fill level probe, it may stop the fill cycle before the proper level is achieved, which means that the neck area of the can walls is not tested. In addition, bubbles may make contact with the cut edge of the can, creating a short circuit and giving rise to high mA readings. Sencon have responded to these developments by producing "Sure Fill".



Surface tension in electrolyte bridges small coating defect, leaving exposed metal undetected.



Lower surface tension in electrolyte with added surfactant increases ability to detect small defects.

Sure Fill keeps the widely used and highly popular Automatic Enamel Rater up to date with growing customer expectations.

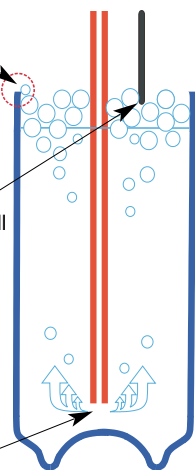
Sure Fill overcomes filling problems and high mA readings caused by foaming electrolyte

Problems caused by foaming electrolyte when added surfactant is used.

Bubbles touching cut edge short circuit the contacts causing high mA readings.

Foam touches filling probe and stops the fill cycle, underfilling the can.

Turbulent flow causes the surfactant to foam in the electrolyte.

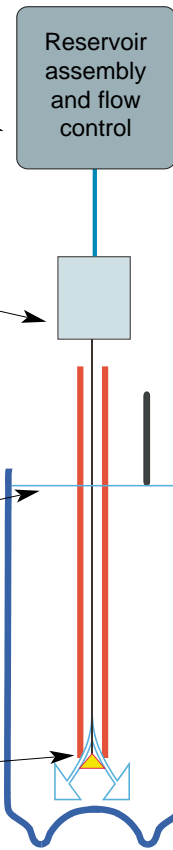


Pump-less electrolyte supply system with variable rate filling.

Solenoid for precise opening and closing of fill tube valve.

Accurate level filling with no foaming.

Wider tube with special valve for controlled filling and drainage.



Sure Fill is a dedicated delivery system for use with surfactant enhanced electrolytes. Designed as an upgrade to the Automatic Enamel Rater (QA2600), it consists of a special reservoir and a pumpless, variable rate flow control system that delivers electrolyte to the can very smoothly, to minimise turbulence. Foaming at the top of the can is therefore greatly reduced, which means that cans can still be filled accurately and high mA readings avoided when using surfactant in the electrolyte.

Sure Fill keeps the widely used and highly popular Automatic Enamel Rater up to date with growing customer expectations. Fitting Sure Fill will be a standard option for future production models, but the system can also be retro-fitted onto existing QA2600's with minimum disruption.

For more information on this system tick the box on the reply sheet
Automatic Enamel Rater/Sure Fill



Energy Saving in the Dryer Oven? Use Your Logger!

Precise temperature control inside curing ovens is another area where Sencon's experience and skill is helping the industry to cut costs and increase quality control.

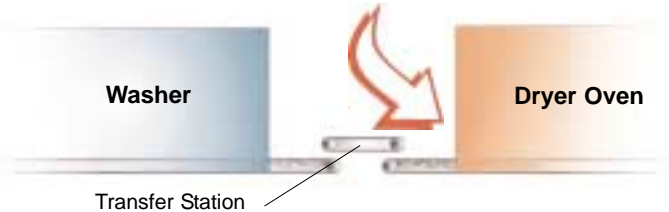
Sencon's versatile Smart Logger (SL2000) is adaptable for use in all kinds of curing ovens on both 2-piece and 3-piece lines; but there's more. Its ability to provide comprehensive data about temperature profiles over time in heat based applications also makes the smart logger ideal for checking the performance of the dryer at the end of the washer.

Gaining temperature control in the dryer not only saves energy costs, but also prevents discolouration of the can body if the dryer runs too hot. This could be a serious spoilage problem if unprinted metal is used as part of the label decoration - an increasing trend in brand designs. The Sencon smart logger can be grouped with cans and taped together into a single item, making it very easy to place into the dryer at the fallen can discharge area prior to the dryer section.



Logger in its thermal jacket

One of seven thermocouples



Sencon's highly versatile oven logger can also be used to profile the temperature in the dryer oven.

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

2pc Oven Loggers

In Brief

Ensuring Maximum Solenoid Performance

Driving high performance solenoids - used in a variety of canmaking applications such as bodymaker control, lacquer spray gun timing and sheet brake control - is a Sencon speciality. Sencon's solenoid drivers have been optimised so that they operate in a fast, controlled way to cope with the difficulties associated with switching solenoids at high speed. Sencon always try to supply a complete solution, which is why all the necessary protection is built into the electronics. So it's worth noting that where you might commonly add a flyback diode to protect high performance solenoids and their drivers, this is not recommended with Sencon drivers. In fact it can add a considerable delay to the operation of the solenoid. Installing additional components is not only unnecessary, therefore, it actually undoes the benefit of the Sencon system; the "Sencon" does the whole job already.

Global Popularity of Micro-Leak Tester

This year will see at least 54 end making lanes, worldwide, protected by Sencon's Micro-Leak Tester. MLT continues to prove a popular and successful solution for end makers who need to find very small defects that cannot be detected by light testing alone. Used in combination with Sencon's End Light Tester Package (ELTP), the MLT provides practical, economic and comprehensive protection against micro-leakers.

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