

News & Views

KEEPING YOU UP TO DATE WITH CONTROL AND QUALITY SOLUTIONS FOR CANMAKING LINES

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SENCON
CONTROL DOWN THE LINE



End Progression: The Cost of Operator Influence

Variable operator influence on end progression test data has considerable cost implications. Varying results between operators gives differing views of the press set-up and confusion about the optimum adjustment. Automated measurement is the answer.

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Why are Sencon Canline Sensors So Good?

Not all trackwork sensors are the same. If you want optimum efficiency and zero failures, it's attention to detail that counts. Sencon sensors are specially designed for canmaking applications ... and they are now even better.

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Upgrade



Find Uncoated Sheets At Line Speed

Detecting uncoated sheets on-line has been a long standing problem for canmakers. Sencon have addressed this process difficulty and used their wide-ranging sensor technology expertise to develop a solution.

▶ PAGE 4



Bottle Can Stand for SI9100

Industry standard enamel porosity testing is now possible for the new bottle can designs.

▶ PAGE 4

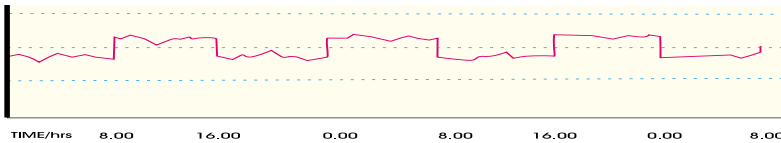




End Progression

The Cost of Operator Influence

VARIABLE DATA LEADS TO POOR QUALITY CONTROL



Do your SPC charts look something like this? This illustrates what can happen as a result of different approaches to the measurement process by operators from alternate shifts. Among other problems caused, this can mean that the press is unnecessarily adjusted, leading to more downtime and an increased risk of producing leakers during the extra start-up runs. In short, operator influence on test data costs money!

Manual measurement techniques can never be precise and repeatable and any process that relies on human judgment is bound to be variable. The fully automatic measurement system of Sencon's End Progression Gauge (EPG) eliminates operator bias, giving accurate data for consistent quality control, reliable process improvement and reduction in unnecessary downtime.



With its non-contact gauging mechanism, EPG has also been designed for maximum stability and reliability. Tested in extensive trials with leading ends manufacturers for over four years, the maintenance and service requirements of EPG have proved exceptionally low, even when running 24 hours a day.



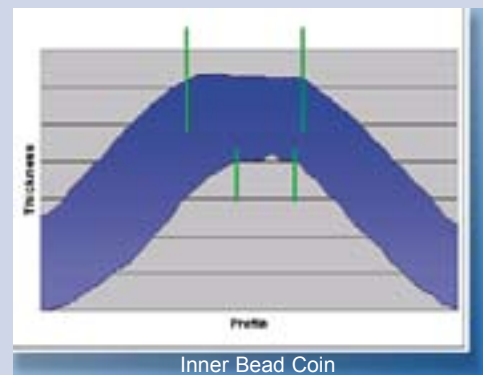
A CD-Rom video presentation about EPG is available on request



www.sencon.com/systems/epg.htm

HIDDEN PROBLEMS REVEALED

EPG is a non-destructive 3D co-ordinate measuring system for beverage can ends. This means that it not only measures the important features of all types of DRT and Stolle ends (SOT, LOE & RPT), including the crucial score residual, but operators can use the gauge to measure anywhere in the panel area. Currently beverage ends in any two curl diameter sizes can be measured without the need for change parts.



The image above clearly shows both tooling misalignment and tool damage. This degree of detail is revealed by EPG, but will easily be missed by other systems. Gauges that use any form of mechanical point contact inadvertently bypass important information by effectively bridging smaller yet potentially serious anomalies.

EPG's twin, high resolution optical sensors have a 0.1 micron resolution with an overlapping lateral precision of 2 microns. They simultaneously profile both the top and bottom surfaces of features such as the score or coin thickness. EPG's high quality data therefore allows more efficient monitoring of tool alignment, potential damage and tool life, resulting in better product consistency.

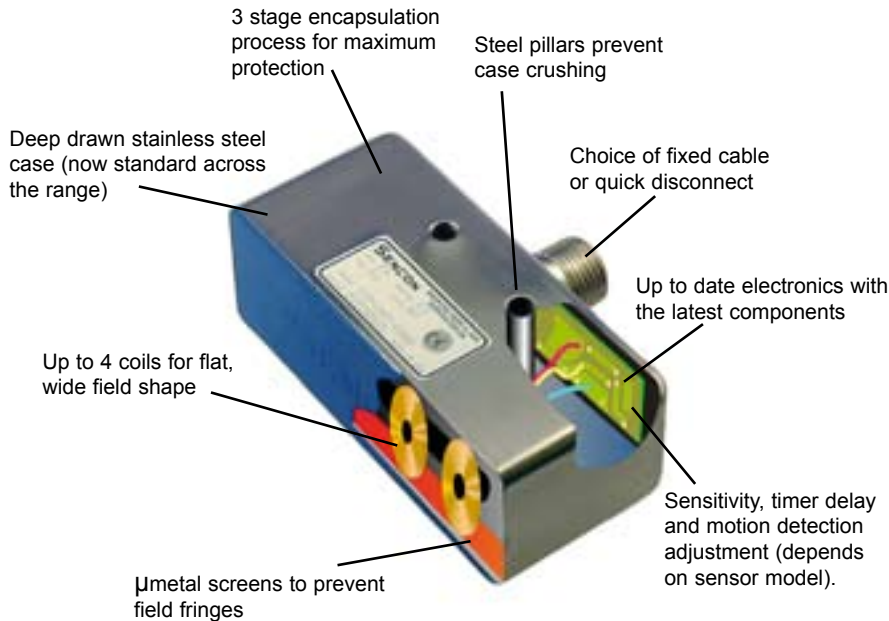
For more information on this product tick the box on the reply sheet

End Progression Gauge

Canline Sensors ...

Why are Sencon's so good?

Upgrade



There is a common misconception that all sensors have similarly shaped sensing fields, so it's often thought that any sensor is as good as any other on a can line. This may be true for low cost, general purpose sensors, but not Sencon sensors. They are specially designed for the practical demands unique to can lines.

For example, when a sensor is flush mounted on a steel deck or fitted between close side-guide bars, it can easily "lock on" or at least become pre-loaded by the adjacent metal unless it has a specially tailored field shape.

At Sencon we have worked hard over the years to create the correct field shape required for can track sensors, because we know the important difference this makes in practice.

Another problem is that many general purpose sensors have a field with twin lobes that leaves a surprising blind spot in the centre. This can lead to intermittent problems on many can making applications.

This is why some of Sencon's recent models have no less than four sensing coils, each with a custom ferrite core plus special soft iron field shapers to give optimum performance.

"Can track sensors are all the same, any one will do the job, right?" **WRONG!** Selecting the correct sensor is an essential factor in achieving efficient, reliable can line controls. The graphic above shows some of the important features of a well engineered can track sensor.

MAKING THE RIGHT CHOICE

Trackwork sensors may seem like they're just a small part of your line control system, but they can make a big difference to smooth can flow and consistent productivity.

If you want optimum efficiency and zero failures, then it's attention to detail that counts. Sencon sensors continue to offer the best in dedicated can line control.

The depth (or 'reach') required by a sensor's field is heavily dependent on the size and material of the target. Steel and aluminium cans behave differently in this regard, so at Sencon we optimise our sensors for both materials and always quote distances to steel and aluminium DWI cans.

It is this attention to detail that has made Sencon sensors the industry standard for canline installations for thirty years. New technologies and better production methods have now enabled us to improve the performance and capabilities of our sensors even further. The entire range has been upgraded to stainless steel cases, with redesigned electronics that make use of the latest components.

A selection guide CD covering all Sencon sensor models is available on request.



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

Canline Sensors

www.sencon.com/controls/can_line.html





Find Uncoated Sheets ...

At Line Speed

Sencon's new Lacquer Presence Detector (SC640) is a single head, non-contact barrel sensor that can distinguish between coated and uncoated metal at line speed.

Failure to spot an occasional sheet that goes through without its lacquer coating can cause two potentially serious problems. If a can is formed without its internal coating, it could lead to major can corrosion after filling. Lacquer coating also forms an essential lubricant during the drawing process and an uncoated sheet can blunt tooling within just one or two strokes.

PROBLEM SOLVED!

Detecting uncoated sheets at line speed has been a long standing problem for canmakers. Sencon have addressed this process difficulty and used their wide-ranging sensor technology expertise to develop a solution: the SC640 Lacquer Presence Detector.

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

SC640 Lacquer Presence Detector



There are therefore two critical points on the line where the SC640 can be installed. The first is at the coater outfeed. Double or overlapping sheets, tripping of the rolls or simple starvation of coating supply can result in sheets passing through uncoated. Detecting these problems at source allows quick intervention to prevent unnecessary scrap generation as well as time consuming product isolation and re-sorting, or worst of all, product recalls. The second location for using the Lacquer Presence Detector is at the infeed of the DRD press. Rapid detection of uncoated sheets is essential here to prevent unnecessary downtime due to damaged tooling.

The SC640 works with virtually all coatings, including white, gold and most clear lacquers, in either wet or dry states. Self-contained in an M30 barrel casing, its simple wiring makes it easy to install. The unique Sencon automatic learn function also means that the sensor maintains the ideal setting without operator adjustment, even accommodating variations in the coating or the substrate.

www.sencon.com/litho/lacquer-presence.htm



Bottle Can Stand



Sencon's durable, high performance SI9100 digital enamel rater can now be used with new bottle-can designs. The specially adapted SI9015 stand allows bottles up to 320mm high, with base rim diameter from 15mm to 145mm and neck diameter from 14.5mm, to be tested for coating porosity. Like all Sencon can stands, it combines maximum flexibility with ease of use. A fully height adjustable electrolyte level probe and teflon splash guard, plus built in self-testing and voltage compensation, ensure consistent, reliable results and simple maintenance for maximum return on your investment.

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

Bottle Can Stand

www.sencon.com/systems/enamel.html

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