

## X-seam

### Look Into The Future ...

#### A Revolutionary New Tool

Three piece can makers and all can fillers have to check the can end seaming process by 'tearing down' or cutting sections into the can's double seam; a messy, destructive process, highly dependant upon operator skill and judgment. Distortions and burrs are introduced, mistakes easily made and there is always a risk of cuts and injuries.

This is now all set to change. Sencon have perfected a fully automatic, non-destructive seam measurement system that actually X-rays through the seam to measure all internal dimensions and features. Accuracy and repeatability is unmatched by any other system as all distortions are eliminated along with any operator judgements, influences or mistakes.

In fact, we are so confident in the perfection of the results that we provide no way to adjust or correct any reading! The operator loads the test batch onto an infeed conveyor, selects a test procedure, presses the start button and returns to other duties.

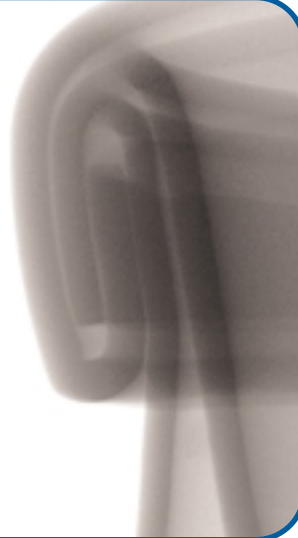
The X-seam will quietly get on



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

X-seam

X-seam automatically displays and measures the double seam without damage or distortion.



Accuracy and repeatability is unmatched by any other system.

with measuring the entire batch, warning of problems if readings stray outside limits. It runs at about one can per minute, is self calibrating and has very low running costs.

#### More Checks, Less Risk

X-seam's non-invasive approach allows quick and reliable measurement of cans from the first seaming operation (first ops), enabling rapid and accurate seamer set-up. As seam checks no longer cost money or take up anybody's time, check frequency can be increased, dramatically reducing the risk (and cost) of seam problems which cause spoilage, isolations or, worst of all, brand damage.

X-seam is set to revolutionise quality assurance in can filling. Both beverage and food can X-seams are being shipped. Three major brewers in the US and UK have already bought X-seams and two food can systems are also in use. We are in dialogue with other major food and beverage companies, particularly the brand conscious ones that want things done right. And this is all before X-seam's first public outing, which was at Salon Emballage show in Paris, November 2004.

VOLUME 31

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In Brief

#### Subject Key

2pc canmaking

3pc canmaking

Beverage end making

Food can end making



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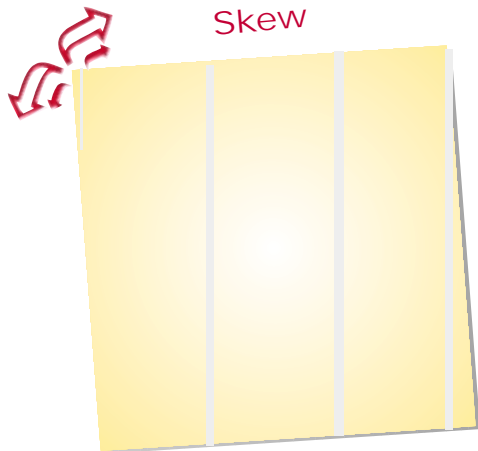
# SENCON

CONTROL DOWN THE LINE



# Sheet Coating: Prevent Problems At Source

Sheets that go through the coater at the wrong angle or improperly registered produce wrongly aligned margins or misplaced spot coating. Experience shows that even on a well set-up coater, one sheet will be misaligned every so often for some reason. If this random sheet is not detected, it will ultimately cause unnecessary downtime at the welder due to the misaligned weld margins or metal exposure on ends.

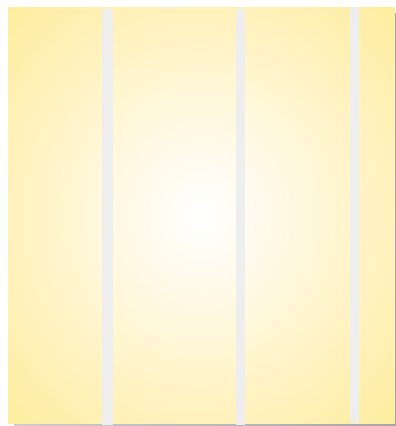


SC415 detects skew to within 0.2mm (0.008")

If a sheet fails to feed into the rollers at the right angle and goes through the coater twisted, it is said to be 'skewed'. The widely used Sencon **Sheet Skew Detector** is a highly effective system for monitoring and detecting sheet skew to within tolerances of as little as 0.2mm (0.008"). The Sheet Skew Detector now has a number of additional options. These additions allow the measurement and detection of sideways movement (translation) and timed registration to the coater roller, as well as skew.

## Translation

Sometimes a sheet will not sit against the side guide rail. The sheet will then go through the coater offset from the centre line or 'translated'. This causes misplaced margins, which if not detected will cause problems later on in the process. In response to customer demand, Sencon has developed the SC430

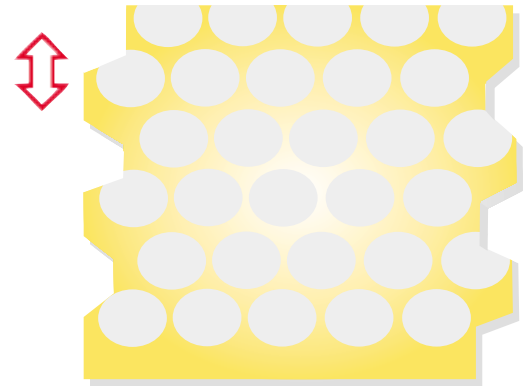


SC430 detects translation to within 0.2mm (0.008")

as an upgrade package to the SC415. It works in partnership with the smart technology of the SC415 and detects sheet translation problems with the same high degree of accuracy.

## Registration

Sheets which are presented too early or too late to the roller will also have the coating misplaced on the sheet - a 'registration' issue. This type of defect also results in welding problems or metal exposure. By monitoring the roller's rotary position and comparing it to the sheet's position, the SC450 system measures the accuracy of the registration and detects any instances of poor coating registration through sheet misfeed.



SC450 detects registration to within 0.2 mm (0.008")

All these sensors monitor sheets at the exact time they are going through the rollers. This means that they see a sheet exactly as the rollers 'see' it and give immediate warning of any problems.

## Benefits of the System

- Finds sheets that cause problems down stream. This could be weldwire breakage or metal exposure on spot coated sheets.  
**Cut out spoilage before it happens!**
- Helps in preventative maintenance by automatically calculating average and standard deviation for skew, translation and registration. The maintenance department can see when preventative maintenance is in order.  
**Plan repairs before downtime occurs!**
- Helps with set-up. After replacement of dogs or grippers, just feed one sheet through and look at the reading. The reading tells you how much you need to adjust. The second sheet should already be perfectly registered.  
**Take out the guesswork!**
- Incrementally increase the production speed under guidance of the numbers provided by the SC415 system to find the optimum running speed. Average increases of 5-7% are typical, but have been seen as high as 18%.  
**Increase speed, increase profit!**
- In short, the SC415 system stands for:  
**Less problems, more production, better quality!**

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

**SC415 Skew Detector, SC430, SC450**

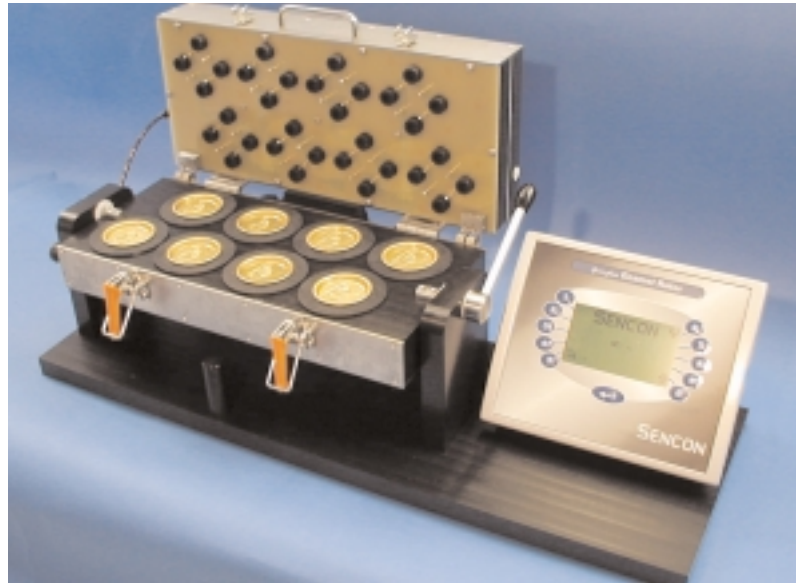


# New Gauge For Faster End Enamel Rating

## Fast, Safe, Clever

Checking the lacquer integrity of ends is an essential safeguard, but it can be a time consuming manual process. Sencon's new Multi-End Enamel Rater enables you to check the lacquer integrity of 8 or 12 ends at once, cutting the time and effort required for individual tests. Testing ends of different sizes (from 202 to 206) is a simple matter of swapping quick-change rubber seals.

As a semi-automatic gauge, the **Multi End Enamel Rater** allows the operator to work quickly and efficiently through a batch without having to press any buttons. The test chamber is simply filled with ends then inverted, causing the gauge to start the test cycle automatically. An internal timer freezes the readings when a pre-set time (default 4 seconds) has elapsed, giving consistent, reliable results.



## Flexible, Foolproof, Self-Checking

The status of each test pocket is displayed on the gauge's screen with results automatically saved and sent to a printer or direct to a PC. The integral user interface is designed with simple, language independent icons.

High resolution electronics and advanced test monitoring features mean that the **Multi End Enamel Rater** has its own built-in failsafe mechanisms. Problems with electrolyte levels or with end contact and voltage could create a pass result even if the lacquer integrity was

faulty. But the gauge checks these for each test pocket before, during and after every test. Specially recessed connectors also protect the unit from damage during use.

Everything about the **Multi End Enamel Rater** is designed for speed, accuracy and flexibility as well as for ease of use and durability. The whole unit is neatly housed in a rugged, waterproof casing to withstand the harsh factory environment.

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

**Multi End Enamel Rater**

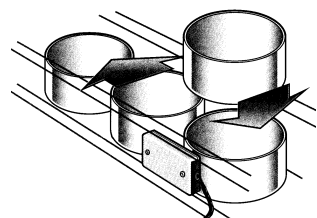


# False Economy?

## Problems With Proximity Sensors

**When comparing sensor performance, the raw specification in the catalogues can be deceiving. All of Sencon's sensors are designed for specific can making applications. While the operating specifications may be equalled by generic proximity sensors, the fact that the Sencon sensor was designed for the job makes it a better long term choice.**

A good example of this is the use of proximity switches on cupping presses to detect a successful cup drop and protect the die from damage. A generic proximity switch may fit this application, but creates a false economy due to the increased risk of malfunction and additional line downtime caused by their shorter life.



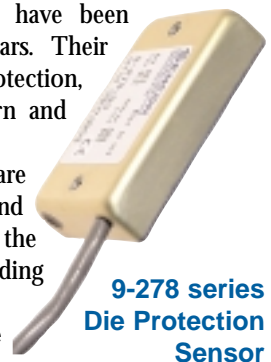
Common failures are caused by vibration, shock, face wear, static discharge, cable breakage, unsuitable field shape and inability to cope with short duration signals associated with high speed running.

## Sencon's Solution

Sencon's **Die Protection Sensors** are specifically designed for the cupping press application and have been evolved and optimised over the last 25 years. Their particular shape provides mechanical protection, especially when operators 'hook out' torn and damaged cups.

Correct field shape is vital and they are especially tuned for can grade aluminium and steel. The result is maximum sensitivity to the cup, but relative insensitivity to surrounding metals.

The whole design of our **Die Protection Sensors** assures perfect performance and long life. Yes, you can buy cheaper sensors, but you will end up paying much more in machine downtime and increase your risk of tooling damage.



**9-278 series Die Protection Sensor**

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

**9-278 Die Protection Sensors**



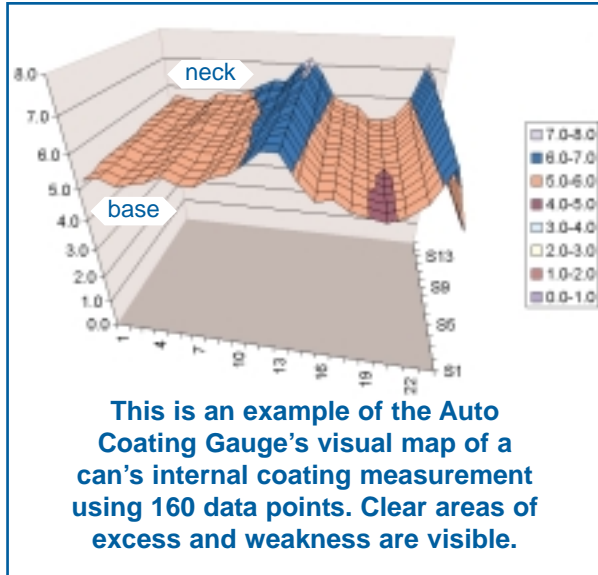
# Visible Progress In Beverage Can Coating Control

**A number of plants have recently been discovering the full potential of the Sencon Auto Coating Gauge.**

It's not just the accuracy in measuring both inside and outside coatings of the can, which effectively doubles its value as a coating gauge.

What makes the **Auto Coating Gauge** into a really powerful tool is the comprehensive data it provides about your coating process and the ground-breaking way it displays those results.

The **Auto Coating Gauge** allows managers to visualise exactly what the inner and outer coating distributions look like. It offers 5 times more resolution than the previous model, with the potential to produce 20 measurements from around the circumference at each of



For more information on this product tick the box on the reply sheet  
**QA4400 Auto Coating Gauge**

the 8 user defined data points along the side wall.

Readings are displayed both numerically and graphically, giving operators and process engineers a concise and easily absorbed view of how the coating is distributed.

Armed with this knowledge, it is easier to refine and optimise the set up of coating equipment and reduce coating costs while maintaining commercial viability. The data from the **Auto Coating Gauge** can also be automatically exported and analysed using software tools like Microsoft Excel.

When you think how much a typical beverage can plant spends on internal and external coatings, it makes you wonder how they survive without the right tool for measuring its usage.

## In Brief

### Reducing Spoilage

**Reducing the amount of spoilage created in the manufacturing process has an immediate effect on profits. More saleable product can be made and less raw material is needed.**

By measuring and monitoring the production process, not only are random failures detected, but also more serious endemic production errors can be recognised and corrective actions quickly taken. This reduces the amount of product held for inspection, reduces the volume of spoilage generated and saves raw materials.

Analysing spoilage rates from each stage of the process allows managers to prioritise efforts in key areas in order to reduce unnecessary losses. Sencon's innovative sensors, controllers and quality assurance gauges are the ideal way to cut down on wasted time, energy and material and so minimise your running costs.



**FREE CD** For a **FREE** interactive CD-Rom detailing spoilage reduction opportunities on 2pc, 3pc and end making lines, tick the box on the reply sheet.

### 2005 Mouse Mat Calendars

**By the time you read this, the 2005 Sencon mouse mats should be available. This year's background image was taken by Kamila Stachera of Ball Packaging, Europe, who was holidaying in Croatia when she took the picture.**

Thank you to all those people, both Sencon employees and customers, who sent in photographs. This format of mouse mat is likely to continue, so if you have a photograph you would like to see on a future Sencon mouse mat please send a copy to Andrew Hinks ideally via email [AHinks@sencon.co.uk](mailto:AHinks@sencon.co.uk)

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