RYECO has been providing services and manufacturing specialty paper industry products since 1989.

RYECO began in 1989 when Tim Rye, Founder and Sales Manager, started the business as a consulting company offering third party maintenance to users of web inspection systems. In 1991, **RYECO** Incorporated was formed and produced its first product, a stand-alone edge crack detection and marking system. Since then, **RYECO** has developed three product lines which are offered to every web-based manufacturer.

RYECO holds several patents on its products and offers many features not found on similar products. **RYECO** systems are designed to reduce waste, improve product quality and to create a safer work environment. With **RYECO's** Product Performance Guarantees and 24/7 technical support, it is undeniable that **RYECO** has earned an industry reputation for quality products and unparalleled customer service.

RYECO currently offers the following:

- Marking Technologies
- Break Detection Technologies
- Sensing and Control Technologies

RYECO has grown beyond the paper industry, creating top quality products for all global manufacturers in the plastics, films and tissue industries as it continues to pursue new markets.

Since the first patent, **RYECO** has developed and installed over 2000 systems worldwide and now has authorised agents in Europe, Asia, South America and Australia.

EDGE CRACK DETECTION
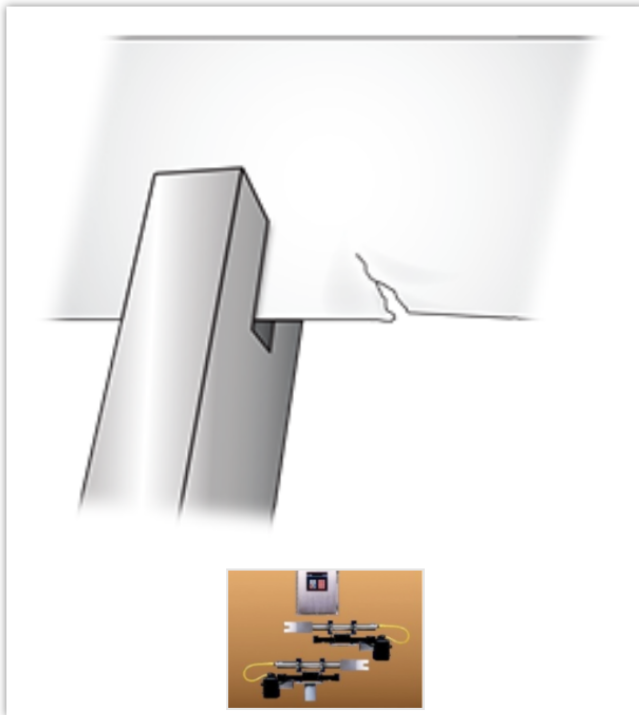
Cracks along the edges of a moving web can cause lengthy downtime on subsequent processes such as a coater, re-winder or re-reeler in a paper mill. An edge crack or fold-over can hangup on a slitter knife causing a blow-up which results in time consuming, costly clean-ups. When the location of every edge crack in a jumbo roll of paper is known then corrective actions can be taken by downstream operators to prevent the blow-up. Knowing when cracks are occurring on the paper machine can also provide machine operator with valuable information that will help them eliminate the source of the cracks. A **RYECO** Edge Crack Detection System will eliminate all downtime in a paper line caused by edge cracks.

## The Ryeco Edge Crack Detection:

- Will provide information to eliminate edge cracks at their source.

- Can reduce paper machine and winder downtime due to undetected edge cracks.

- Allows you to immediately address edge cracks that are forming instead of waiting for a winder backlog.

- When used with a **RYECO** Marking System can mark front and back cracks different colours.

- Can see separated and non-separated edge cracks.

- Provides a sensor response time of 50 microseconds for small crack detection at high speeds.

- Automatic edge tracking and sheet break retraction are standard.

- Sensors can be placed at the midpoint of the machine to narrow down the source of cracks.

Applications**:**

- Paper
- Packaging
- Tissue
- Converting

EDGE MARKING SYSTEMS
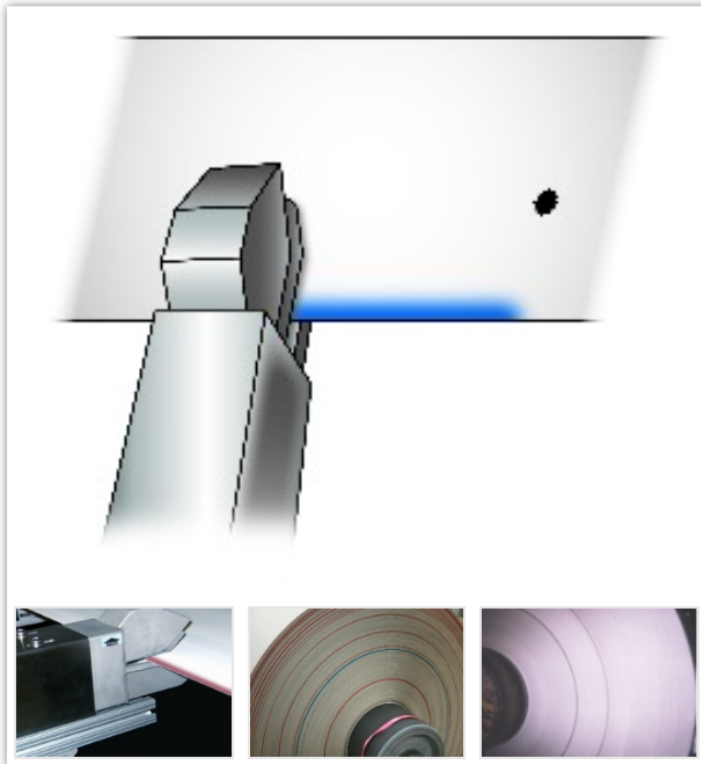
An undetected break, crack or defect in a roll of paper, tissue or any continuous web product will cause major problems in downstream processes. It is necessary to mark so downstream operations can take proper corrective actions. The practice of hand marking is unreliable and unsafe. **RYECO's** Marking Systems offer a safe and reliable method to mark web breaks automatically.

The Ryeco Edge Marking System:

- Sprays up to 3 colours of defect marks on any web material at any speed.

- Marks can be continuous or pulsed for the length of the defect or as short as 0.5 milliseconds.

- Marks can be visible to the human eye or detected with a Mark Detection System.

- Marks can be invisible and only detectable with a Mark Detection System.

- Mark defects automatically from a Web Inspection System or with process control equipment.

- Operators can manually mark defects via the system's control cabinet, as they occur.

Applications:

Defect Marking
The system places marks on a web at a position relative to a defect or process upset.

Code Marking
The system encodes values onto a moving web.

Break Marking
The system places a mark on the web after a sheet break is restored.

End of Roll Marking
The system places a mark on a roll to indicate that the end of the roll is approaching downstream operators and users.

Registration Marking
The system places marks on a web at precise distance intervals to be used as a registration mark for downstream processes.

Stripe Marking
The system places continuous or dashed stripes on a web to indicate web orientation or product type.

Sheet Count Marking
The system counts sheets as they are stacked and places a mark at a specified number of sheets.

Distortion Monitoring
This system is used to track instantaneous stretch and shrinkage in a flexible web.

Converting Management:

Length and Position Control
Identify your current position consistently.

Auto-Stop on Defects
Eliminate wasted time searching and improve quality.

End of Roll Auto-Stopping
Never run-off or leave good product on the core.

Waste Tracking
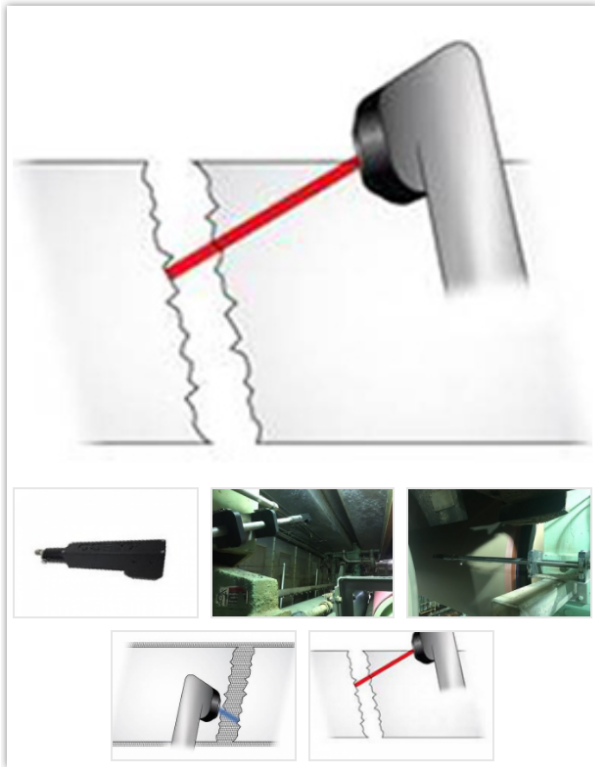Track ALL waste or scrap down to the inch (25mm).

Set-Length Control
Control the precise length of all daughter rolls.

Stretch and Shrink Monitoring
Identify real-time distortion of flexible webs

SHEET BREAK DETECTION

The ONE-9010 is a high intensity white LED sensor that memorises and calibrates to the colour of the web. The ONE-9010 utilises proprietary technology that simultaneously measures colour, contrast and texture of the moving web.

The ONE-9010 detects breaks at distances of up to 15ft. Longer mounting distances help keep sensors out of the way and unaffected by collateral damage from the web path. This is the ONE sensor for all locations and applications on your machine.

The Smart-Box is equipped with a smart controller that allows one-touch calibration, temperature monitoring, and break recording. Paired with the ONE-9010 the Smart-Box logs performance data charts every second of every day to know exactly how your system is performing. The HMI Touchscreen provides quick access for sensor calibration and performance monitoring.

Applications

- Open Draw
- Sheet on Cylinder
- Sheet on Felt

Benefits

- 15 ft. Detection

- Patented Air Purge

- Performance Data

- Maintenance Alarm

- Auto Calibrate

- Temperature Monitoring

Interval
Automatic Calibrate based on Signal Drop or Time
Full Trending of Sensor Values/Breaks/Sensor

Temperature
Flexible Setup Via Password Locked Screens

For all enquiries within Australia & NZ, please contact our local representative:

Gary Ramsay
+61 412 588 663

gary@milllink.com.au

Mill Link Services