




Maximize Profitability

Increasing customer demands require comprehensive quality management and control. Sheet fed printing and packaging processes require higher end product of specialty coated and non-coated material that is demanding in terms of quality and delivery.

Production efficiency standards that facilitate continuous quality control initiatives and machine runnability are essential key components to ensure a competitive edge in this very demanding segment of the market. The Model 3600 OPTOMIZER® FCS Sheeter Inspection™ Technology will provide comprehensive quality management to ensure defective material is detected, classified and diverted from one to multiple successive sheets prior to stacking.

Detect and Index All Defects

Dual sensing with flexible lighting techniques developed by us provides the capabilities to detect and index all defects common in any web material manufacturing process. Using high speed digital linear and patented streak sensing technologies allow our Model 3600 OPTOMIZER® FCS Sheeter Inspection™ Technology to see more clearer, perform more accurately and provide consistent results unattainable with older technologies or single source sensor matrix solutions. This blend of both sensing technologies, patented defect signal and noise reduction processes, and our built in data mining algorithms provide precise and comprehensive web quality assessment and unprecedented performance.

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|---|-----------------------------------|-----------|-------------|
|  | 3600™ | | |
| TECHNICAL SPECIFICATIONS | | | |
| Defects Types Detected: | Blisters | Creases | Dirt |
| | Pinholes | Scale | Holes |
| | Spots | Oil | Scores |
| | Linting | Lumps | Knots |
| | Edge Cracks | Air knife | Wrinkle |
| | Grit Lines | Tearouts | Bugs |
| | Scratches | Streaks | Blade Lines |
| | Minimum Detectable Defect: | | |
| Streaks and Scratches: | 0.0001" (0.0025 mm) | | |
| All Other Defect Types: | 0.00001 sq. mm | | |
| Maximum Detectable Defect: | | | |
| Streaks and Scratches: | Unlimited | | |
| All Other Defect Types: | Unlimited | | |
| Maximum Web Speed: | 10,000 ft/min. (3,048 m/min.) | | |
| Basis Weight Range: | Subject to Tests | | |
| Material Color Range: | Subject to Tests | | |
| Line Scan Cameras: | | | |
| Type: | 1024/2048 | | |
| Lens Focal Length: | 25/50 mm | | |
| Field Of View (FOV): | 0.1" (2.54 mm) Min. | | |
| Maximum Data Rate: | up to 40 MHz | | |
| Pixel Resolution: | 0.0001" (0.0025 mm) in CD | | |
| Streak Scan Cameras: | | | |
| Type: | Proprietary | | |
| Lens Focal Length: | 25 mm | | |
| Field Of View (FOV): | up to 10" CD (0.1" (25.4 cm) | | |
| Pixel Resolution: | 0.0002" (0.005 mm) | | |
| Material Color Range: | Unlimited | | |
| Illumination: | Proprietary | | |
| Ambient Temperature: | 40 to 160° F (4 to 70° C) | | |
| Power: | 120/220/240 VAC | | |
| | 50/60 Hz | | |
| | Single Phase | | |
| | 3 -10 KW Dependent On Width | | |
| Specifications are subject to change without notice. | | | |



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Location, Location...Location

The inspection technology is mounted prior to the cutter in-feed. Upon detection of critical defects, a reject gate will be activated momentarily altering the flow of the sheeted material allowing the "BAD" sheets to divert into a reject bin. This ensures the skids of sheeted stock remain free of critical defective product at the source and not at your customers' process. These quality initiatives will prevent and reduce smash blankets, press downtime, damage to sensitive components or coating equipment and delivery delays costing you customers and market position.



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|--|--|
| <p>COATING SCRATCH</p> <p>For this sample our patented coating scratch sensor was utilized with our proprietary data processing circuitry. A transmissive light source was used to maximize the defect to the material background. The sensor used a 25mm lens and was placed with a 2" (50.8mm) field of view in the cross machine direction.</p> <p>As seen in the accompanying oscilloscope photo, the results achieved were excellent. The signal to noise ratio, as shown, was 7:1. This indicates the scratch defect shown here is highly detectable.</p> | <p>COATING STREAKS</p> <p>This sample consists of several streaks on a coated paper. Once again, our patented coating streak sensor with proprietary circuitry was used. A transmissive lighting technique was utilized to enhance the defects of interest. A 25mm lens was used and the sensor was placed with a 2" (50.8mm) field of view in the cross direction.</p> <p>As seen in the accompanying oscilloscope photo, the results achieved were very good. The signal to noise ratio was 4:1. This shows that the coating streaks are highly detectable.</p> |
| Coating Scratches | Coating Streaks |

| | |
|---|---|
| <p>DIRT (Black Spots)</p> <p>This sample consists of a light black spot (dirt) on a coated paper supplied by International Paper. Our Opto-TEK sensing technology was utilized with a reflective lighting technique. The sensor was positioned with a specific field of view and at a slight angle to the material to facilitate a maximum contrast of the defect to the material general background (signal to noise).</p> <p>As seen in the accompanying oscilloscope photo, the results achieved were excellent. The top 10-amp trace is the output of the defect in raw form. The bottom trace depicts the signal in digital format. The overall signal to noise ratio achieved was approximately 20:1 which indicates that the defect is highly detectable. (Please note the two visible signals on the top trace used when the customer circled the defect for purposes of indicating location).</p> | <p>HOLES</p> <p>This sample shows a large hole. The RKB OPTO-TEK sensing technology was used with a transmissive lighting technique. The sensor implemented a 25mm lens and was placed with a 10 inch (254mm) field of view in the cross machine direction. The sample was placed perpendicular to the sensor to maximize the contrast of the defect to the material background (signal to noise).</p> <p>As seen in the accompanying oscilloscope photo, the results achieved were excellent. The signal to noise ratio, as shown, was 20:1. This indicates that the hole defect shown here is highly detectable.</p> |
| Dirt Type Defects | Hole Type Defects |

100% Inspection Coverage

Each Model 3600 OPTOMIZER® FCS Sheeter Inspection™ Technology is designed to span the entire web width for 100 percent inspection of the web material. Now you can guarantee that your products are fully qualified prior to subsequent processing or shipment to customers.

Our QAMS (Quality Assurance Management) Toolpack™ will ensure the most important defects are data mined for time-sensitive verification processes. Complete defect data collection, analysis, reporting, setup, and diagnostic capabilities provide accurate and consistent process control initiatives and production recipes that give operational staff user friendly setup parameters from run to run. Our QAMS is quick and efficient to ensure all future slit and cut references are met delivering a continuous flow of good material to the stacker. From unwind to stacking, you can be rest assured production will be maintained efficiently, quality will increase, customer satisfaction and loyalty will increase and your products will be defect free.

Call RKB

Call us to discuss your applications and to learn more about the industry's most complete line of web inspection related products.

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