Maximize Profitability

Undetected defects often result in excessive costs, customer returns, repairs to sensitive equipment, and machine downtime in today’s high end high web based material manufacturing. This is ever more apparent in specialized products like magnetic media, solar and fuel cell technologies. The Model 9001 MicroSpec® Web Inspection Technology provides real time detection and categorization of minute holes, microscopic pit-form (block spot), cracks, dirt, blemishes, cyclical embossments, hard bands, streaks, scratches and any other type impurities or defects. The Model 9001 MicroSpec® Web Inspection Technology helps maximize the profitability of your web manufacturing operations by providing production, maintenance, and setup personnel with immediate notification of defects and the information they need to quickly locate and correct defect producing conditions.

Reduce Production Costs

Defects such as skips, voids and streaks & scratches often result in excessive production costs in today’s high-speed coating processes. Our systems provide production, maintenance, and managerial personnel with immediate notification of defect events, size, type (i.e., streak or scratch), location and probable cause. Information can then be utilized to quickly locate the defect and take corrective action to eliminate the fault from continuing. Our defect fault imaging technology will help to significantly reduce your company’s costs for producing, sorting, and disposing of substandard coated products. Our systems can also help to reduce costs for customer returns, repairs to sensitive production equipment, and machine downtime.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Defects Detected:</th>
<th>Cyclical Embossments</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Cracks</td>
</tr>
<tr>
<td></td>
<td>Holes</td>
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<tr>
<td></td>
<td>Dirt</td>
</tr>
<tr>
<td></td>
<td>Hard Bands</td>
</tr>
<tr>
<td></td>
<td>Streaks</td>
</tr>
<tr>
<td></td>
<td>Scratches</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Min Detectable Defect:</th>
<th>1 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Web Speed:</td>
<td>3,048 m/min</td>
</tr>
<tr>
<td></td>
<td>No Limit Streaks</td>
</tr>
<tr>
<td>Basis Weight Range:</td>
<td>Subject to Tests</td>
</tr>
<tr>
<td>Material Range:</td>
<td>Subject to Tests</td>
</tr>
</tbody>
</table>

**Line Scan Cameras:**
- **Type:**
- **Lens Focal Length:**
- **Field Of View (FOV):**
- **Maximum Data Rate:**
  - Depending on Lens Used
- **Pixel Resolution:**
  - 1024/2048
  - 0.25" or larger up to 40 MHz

**Streak Scan Cameras:**
- **Type:**
- **Lens Focal Length:**
- **Field Of View (FOV):**
- **Pixel Resolution:**
  - Depending on Lens Used

**Material Color Range:**
- Proprietary
  - Depending on Lens Used
- Unlimited

**Illumination:**
- Unlimited

**Ambient Temperature:**
- 40 to 160° F (4 to 70° C)

**Power:**
- Proprietary

Specifications are subject to change without notice.
Detect and Categorize All Defects
The Model 9001 MicroSpec® Web Inspection Technology uses an array of high speed CCD Line and Streak Scan cameras. The sensors are outfitted with custom designed lenses emulating laboratory class microscopic equipment to facilitate online, high speed analysis. The sensors are usually positioned with small field of views, approximately 6.35 mm, cross direction. Each sensor has a proprietary light enhancement module designed to illuminate and enhance the area of inspection so that the defects pop with significantly higher signal to noise rations than conventional systems like laser or photocell can provided. The electronic signal is then processed in patented RKB noise reduction circuitry providing unprecedented performance in a single web inspection system.

Span The Entire Web
Each Model 9001 MicroSpec® Web Inspection Technology is designed to span the entire web width for 100% inspection of the web material. Now products can be fully qualified prior to shipment to customers. Our QAMS® Quality Assurance Management System software is also included with each system to provide complete data collection, analysis, reporting, setup, and diagnostic capabilities.

Call RKB
Call us to discuss your inspection requirements and to learn more about the industry’s most cost effective and reliable online microscopic detector in the world.