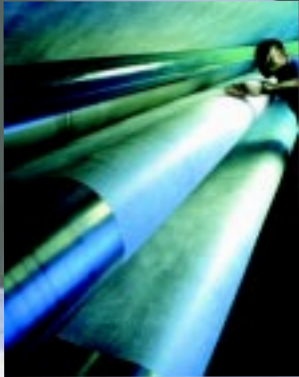




*On-Line Detection,
.....
Identification,
.....
and Visualization
.....
of Defects on
.....
Nonwoven Fabrics*



**SMART
VIEW™**
NONWOVENS



In today's highly competitive marketplace, increasing demands are being placed on manufacturers to improve quality, increase productivity, and certify defect-free product.

The SmartView® Nonwovens web inspection system helps you to meet these goals by providing comprehensive inspection with reliable defect detection, identification, and visualization.

Today this information about the quality of the product is essential in maximizing the yield on any line.





All segments of the nonwovens industry have been affected by the shift in today's global economy. Industry-wide consolidation dictates that you increase your efficiency, forcing you to run your lines at faster speeds with minimal scrap and better formation quality. Add to this the rise in the price of raw materials and even the smallest mistake can be costly. Although quality is essential in any economy, it has never been more vital than now. Manufacturers of nonwoven fabrics can't afford to make inferior products. And, if you ship material with undetected defects, you not only risk upsetting your customers - you risk losing them.

Cognex can help

Cognex web inspection offers nonwovens producers a clear competitive advantage to help increase sales and revenue in today's excess-capacity market. We have been successfully inspecting nonwovens for over a decade. In fact, Cognex created a new standard for visual inspection of nonwovens, and our systems inspect over 250,000,000 square meters of nonwoven fabrics every day. We have vast experience in applications ranging from spunbond, to spunlace, to carded. More companies guarantee their product quality with Cognex systems than with any other web inspection system. Our SmartView® Nonwovens web inspection system can help you to reduce overall operational costs and optimize processes. Additionally, the SmartView Nonwovens system helps you to



-▶ **Improve product quality**
-▶ **Maximize yield**
-▶ **Ensure more thorough grading of materials**
-▶ **Detect, identify, and visualize defects before value-added processes**
-▶ **Minimize the need for manual inspections**
-▶ **Generate inspection reports**
-▶ **Decrease the number of customer returns**
-▶ **Gain competitive advantage for increased sales and revenue**



Applications

- Spunbond (S, SS, SMS)
- Laminated Nonwovens
- Carded Nonwovens
- Spunlace (HEF)
- Airlaid
- Thermal Bond
- Needlepunch

Typical Defects

- Eyebrows
- Polymer Drips
- Broken Filaments
- Dirt
- Holes
- Wrinkle
- Bond Point Fusions
- Light Spots
- Dark Spots
- Thin Spots
- Thick Spots
- Calendar Cut
- Meltblown Filament Drop
- Scratch
- Streak
- Clumps
- Contamination

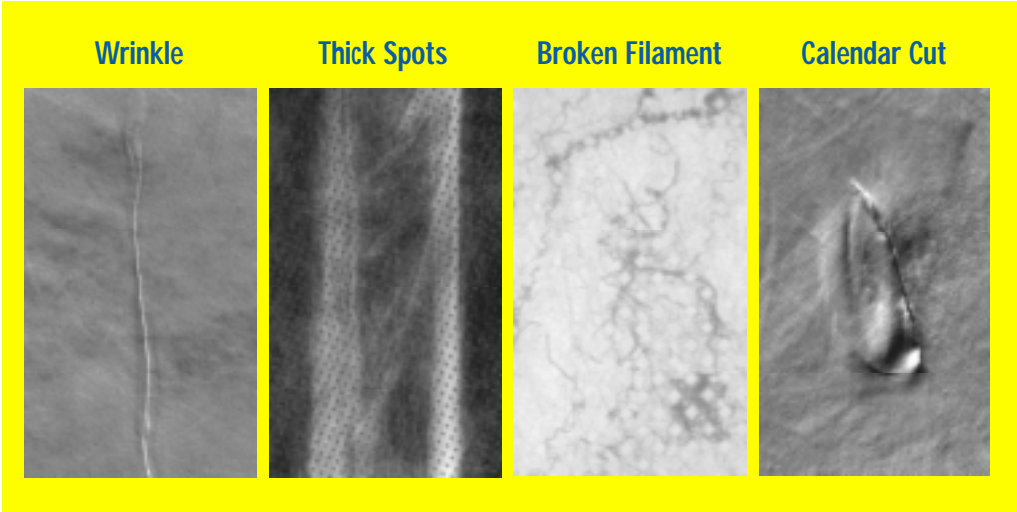


With over 20 years of experience in challenging machine vision applications, Cognex uses the right combination of lighting, image capture, and image-processing software. Only Cognex's advanced inspection technology ensures real-time detection of all defects on your web, while our special web inspection software can be easily configured to provide unparalleled, automatic identification and visualization of your defects.

When manufacturing nonwovens, it is crucial to detect defects early in the process. The sooner you find the problems, the sooner you can fix them. For example, early detection of eyebrows in spunbond allows you to fix the machine, and recycle the bad material. Additionally, it keeps you from passing bad material on to value-added processes, thus reducing scrap and increasing yield. Similarly, early detection of defects in SMS allows you to reject and recycle the material before passing it along to your customer. This also leads to less scrap, greater yield, fewer customer returns, and better efficiency in converting operations.

Just as it is critical for you to find defects in the first stages of manufacturing nonwoven fabrics, it is also critical that the front-end processing of a web inspection system is optimized to provide accurate and useful information, so that the backend processing, such as defect identification, visualization, and reporting, will provide you the most accurate, complete, and reliable information.

Cognex uses processing technology that is scalable and uniquely tailored to detecting defects on your product. We emphasize the quality of the defect images gathered by the SmartView Nonwovens system, and the speed in which we process those images. That's why Cognex uses cameras specially designed for web inspection and image capture.

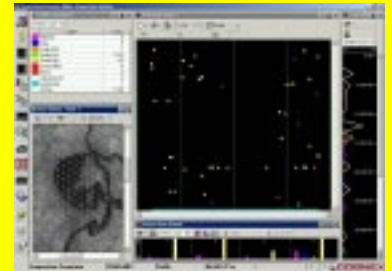


On-Line Users

Each user performs a different function within the mill and needs job-specific information. The SmartView Nonwovens user interface is easily configured so that operators, quality assurance and production managers, and process engineers have the information they need at their fingertips, when they need it, and in the format they want.

Information Systems

The Windows®-based SmartView Nonwovens system, connected to your plant network, provides information for mill-wide users, from the manufacturing floor to the front office. The SmartView Nonwovens system uses industry standards like OPC and ODBC to ensure easy integration with other plant business, production, and quality systems. A real-time operator interface shows current inspection results on-line all the time. The Open Network Inspection Viewer, distributed across the plant network, enables any user to view current or historical inspection results remotely.



View real-time or historical defect images and data

Application Focus

The SmartView Nonwovens system is highly modular, allowing the use of the appropriate technology for your application, using standard system components. While many web inspection systems are designed to be “one size fits all” systems, Cognex recognizes that each production line has unique needs, and provides best-in-class technology to build the right solution. Cognex offers the most comprehensive selection of lighting options in the industry, applying collimated, diffused, or side lighting, depending on your application. We build systems using optimal cameras, lenses, and lighting, as well as optimized software packages to provide superior detection, identification, and visualization of your defects.





Since 1981, Cognex Corporation has achieved industry leadership by focusing its expertise exclusively on vision inspection technology. The success of our surface inspection division is enhanced by Cognex's financial stability and continued commitment to Research & Development, with more than 300 vision engineers worldwide. Our network of service and support professionals has made us the world's leading supplier of machine vision systems. Our goal is to exceed our customer's expectations by providing real, lasting value through innovative surface inspection solutions. Let Cognex ensure your success and guide you through your next generation of quality improvements.

Cognex Corporation designs, develops, manufactures, and markets machine vision systems, or computers that can "see". Cognex is the world's leader in the machine vision industry, having shipped to date more than 150,000 machine vision systems, representing over \$1 billion in cumulative revenue, since the company's founding in 1981. Cognex's Surface Inspection Systems Division specializes in machine vision systems that are used for inspecting the surfaces of products that are manufactured in a continuous fashion, such as metals, paper, nonwovens, and plastics. Cognex's Modular Vision Systems Division specializes in machine vision systems that are used for automating the manufacture of a wide range of discrete items and for assuring their quality. In addition to its corporate headquarters in Natick, Massachusetts, Cognex also has regional offices located throughout North America, Japan, Europe, and Southeast Asia. Visit Cognex on-line at www.cognex.com. For more information on Cognex's Surface Inspection Systems Division products, email us at SmartView@Cognex.com.

COGNEX®

SURFACE INSPECTION SYSTEMS DIVISION

CORPORATE HEADQUARTERS:

One Vision Drive, Natick, MA 01760-2059 (508) 650-4141 fax: (508) 650-3344

www.cognex.com

Europe +49 721 66390 www.cognex.de

Japan +81 35977 5400 www.cognex.jp

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