
Release: No. 833, 16.08.2021

Contact: Raimar Kuhnen

E-Mail: rkuhnen@isravis.com

Phone: +49 / 2366 / 9300-241

100% inspection of nonwoven web material for medical protection and hygiene products

The highest level of reliable quality testing for the demanding production of medical hygiene materials: New High-speed inline color cameras identify previously undetectable material defects.

Modern disposable, absorbent nonwoven hygiene materials have made an important contribution to the quality of life and skin health for millions of people. Therefore, it is not surprising that Hygiene is expected to be the largest and fastest-growing segment in the nonwoven fabrics market. Baby diapers, sanitary napkins, adult incontinence products, training pants, and lens tissues are the key application areas of nonwoven fabrics within the hygiene segment.

Since conventional inspection systems detect defects using black and white cameras, critical color defects such as oil spots cannot be classified correctly and maybe even missed altogether. To address this problem, ISRA VISION has developed a solution that is unique on the market: The SMASH inspection systems have been enhanced with a new embedded vision color camera and Real-Time-Multi-Scan-Technology that now also detect the coloring of the material and any low contrast defects for the best possible classification. In addition to their compact design, the innovative all-in-one modules are highly cost-effective. This is achieved by using fewer and smaller components to enable leaner systems and lower investment costs while aiding integration and simplifying maintenance.

The future belongs to color cameras. In order to be able to reliably detect and distinguish between black-and-white and color defects, it is necessary to have genuine color cameras as opposed to color LEDs, given their limitations. ISRA has introduced a [unique embedded color camera](#) in 8K resolution. The revolutionary, intelligent color camera enables a black-and-white and a color image to be generated simultaneously in a single scan. There are no concessions when it comes to resolution – even at high speeds.

ISRA VISION AG

Industriestraße 14
64297 Darmstadt
Germany

Tel.: +49 (6151) 948-0
Fax: +49 (6151) 948-140

info@isravis.com
www.isravis.com

Release: No. 833, 16.08.2021

Contact: Raimar Kuhnen

E-Mail: rkuhnen@isravisision.com

Phone: +49 / 2366 / 9300-241

ISRA is proud to be the first company within the industry to offer genuine embedded color cameras with additional Real-Time-Multi-Scan-Technology for the highest customer benefit. Dirt, thin areas, and holes in the material can be reliably detected and classified, delivering crucial advantages over competitors. Instead of just one image, multiple images are captured with varying light intensities seen from different angles. This solution is perfectly suited for manufacturers of a wide range of web products and a variety of applications. As with the company's image processing hardware and software, ISRA's camera and lighting technologies are designed and manufactured in-house. In this way, all components are precisely tailored to each other and guarantee the optimum in visual intelligence.

Quality expectations in today's globalized markets are creating increasing challenges for manufacturers. Competition is growing, as are the demands of customers in downstream industries. Flawless product quality is key for nonwovens in the food and aseptic, hygiene and pharmaceutical industries. Just as detecting defects through intelligent data analysis and classification, root cause analysis is essential in order to identify and remedy the causes of defects in production as part of a zero-defect strategy. This is the only way to meet the high standards required in the long term. By doing so, the producer raises both product quality and process efficiency.

ISRA VISION AG

Industriestraße 14
64297 Darmstadt
Germany

Tel.: +49 (6151) 948-0
Fax: +49 (6151) 948-140

info@isravisision.com
www.isravisision.com

Release: No. 833, 16.08.2021

Contact: Raimar Kuhnen

E-Mail: rkuhnen@isravision.com

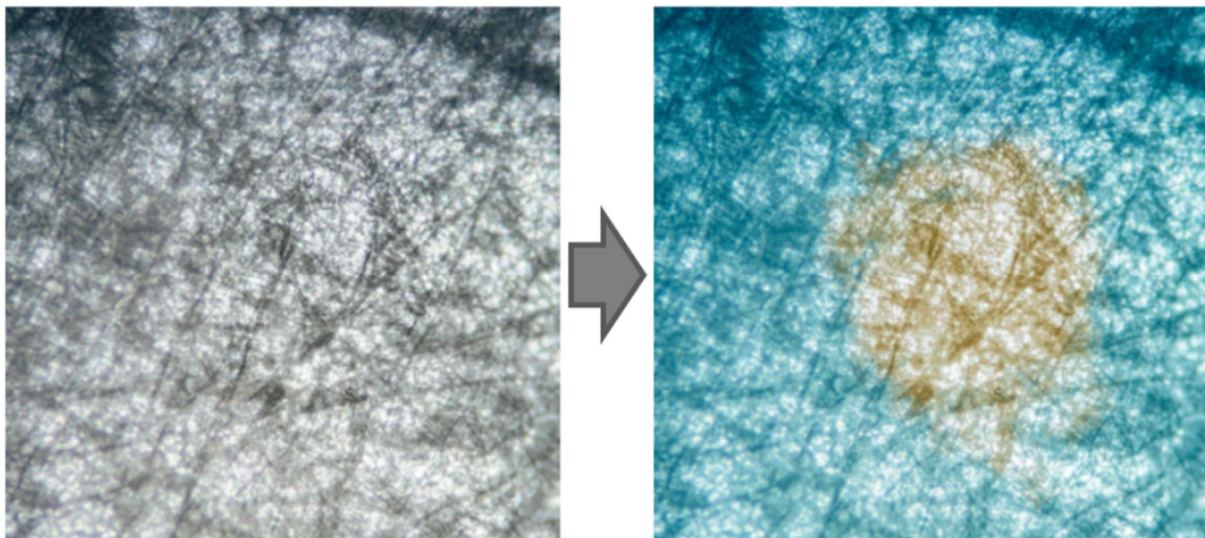
Phone: +49 / 2366 / 9300-241

Images



833_1.jpg

The ISRA embedded color camera combines the benefits from black and white cameras with the additional detection and classification of color cameras and HDR technology.



833_2.jpg

Detection and classification of defects are much easier with real color detection (right) versus grayscale detection (left)

ISRA VISION AG

Industriestraße 14
64297 Darmstadt
Germany

Tel.: +49 (6151) 948-0
Fax: +49 (6151) 948-140

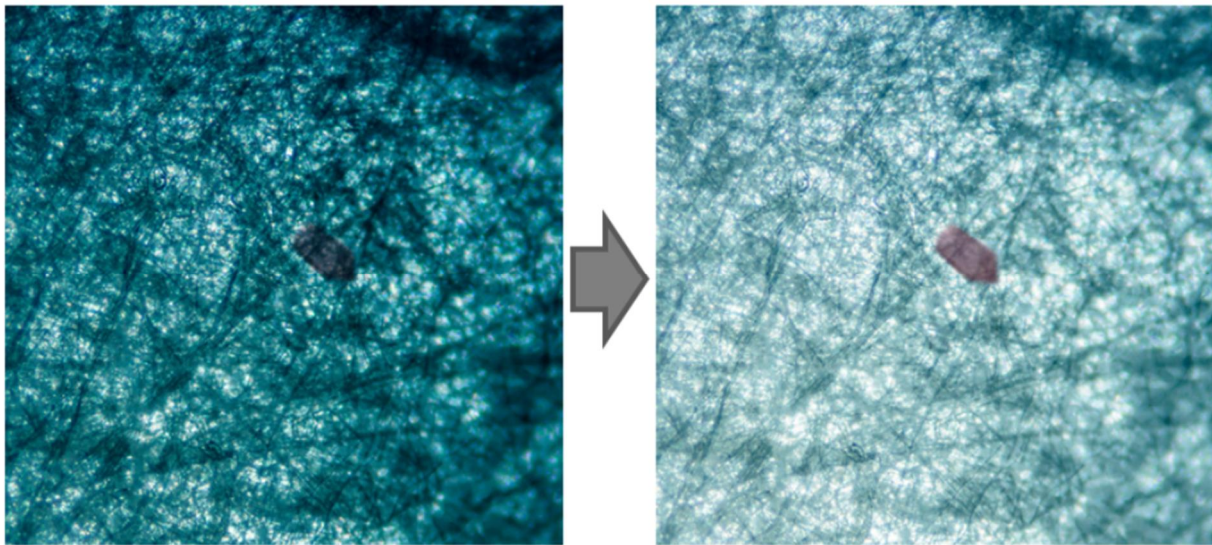
info@isravision.com
www.isravision.com

Release: No. 833, 16.08.2021

Contact: Raimar Kuhnen

E-Mail: rkuhnen@isravis.com

Phone: +49 / 2366 / 9300-241



833_3.jpg

ISRA's Real-Time Multi-Scan technology makes almost invisible defects visible to optimize the production process over time.

ISRA VISION AG

Industriestraße 14
64297 Darmstadt
Germany

Tel.: +49 (6151) 948-0
Fax: +49 (6151) 948-140

info@isravis.com
www.isravis.com