

epos

Multidisciplinary
Innovation

Fabric Color and Defect Detection System

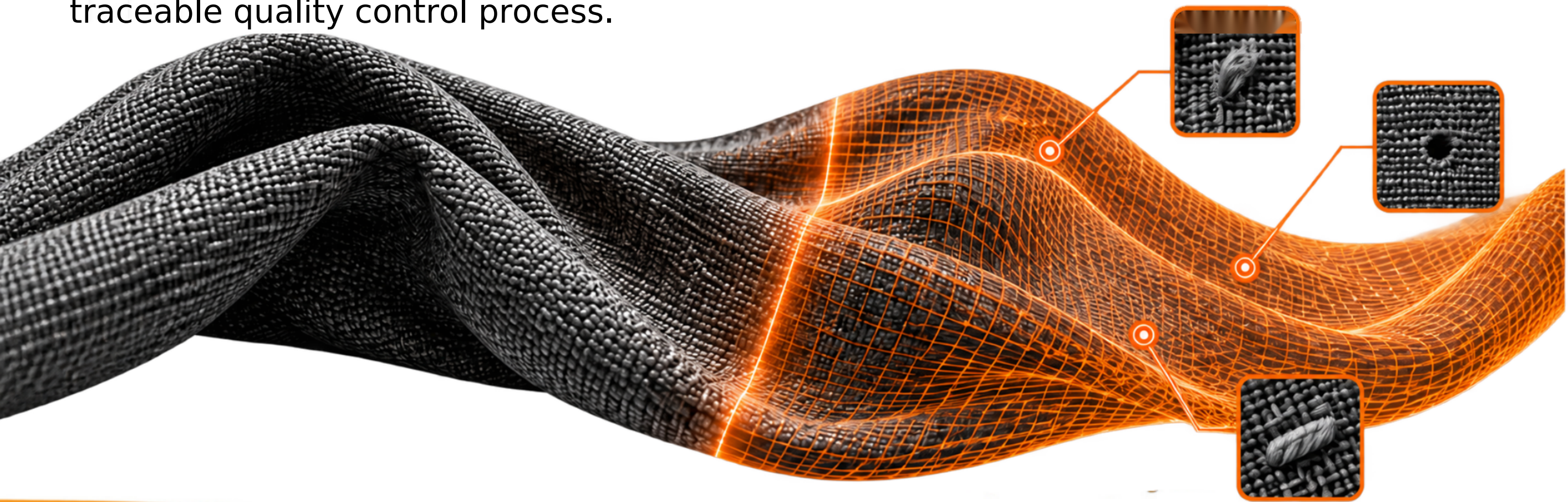


ColIMAGE FD

WHAT IS COLIMAGE **FD**?

Colimage FD is an AI-powered fabric defect and color assessment system that inspects moving fabric across its full width in real time on the production line.

High-resolution cameras and advanced image processing algorithms automatically detect structural defects, surface faults and shade variations in the fabric. This reduces differences arising from visual assessment and establishes a consistent, objective and traceable quality control process.



Color and Visual Consistency

Shade Variation

Color Analysis Across the Entire Fabric Surface

ΔL , Δa , Δb and ΔE Monitoring

Surface and Appearance Defects

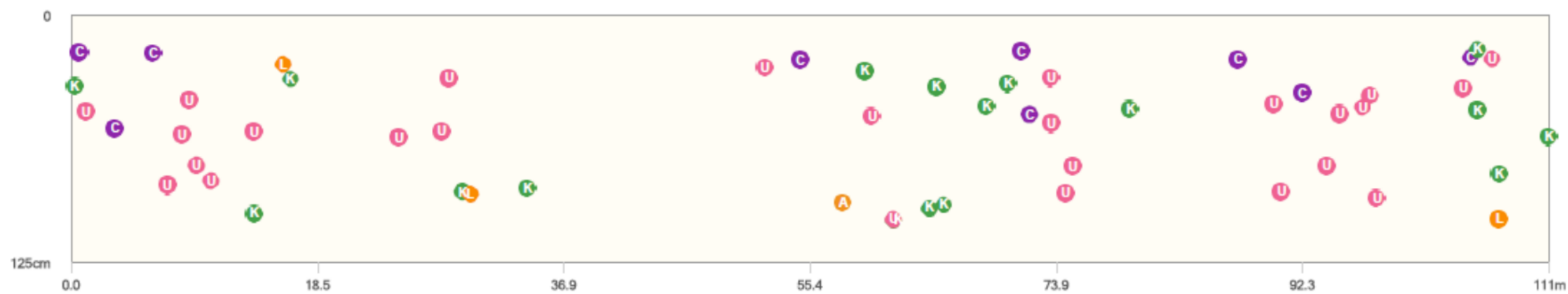
Stains and Contamination

Holes and Surface Damage

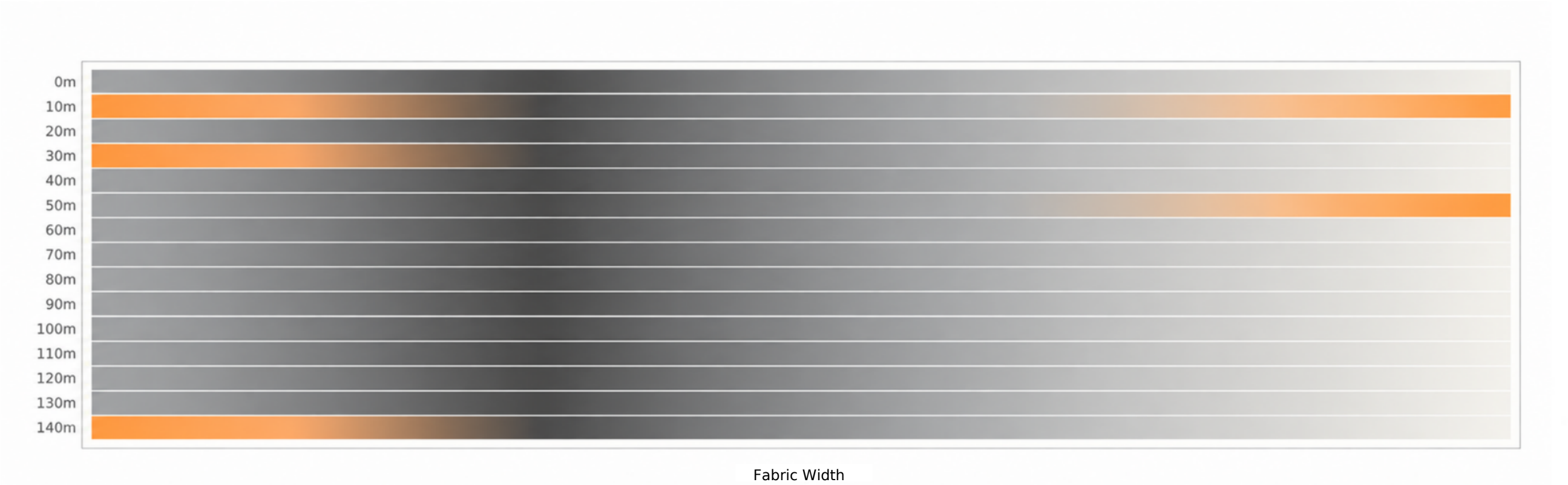
Creases / Fold Marks

COLIMAGE **FD** HOW DOES IT DETECT DEFECTS?

AI models analyze and classify defects in fabric images. Detected defects are recorded with their images, positions and dimensions. Active defect classes and assessment thresholds are configured according to the application and fabric structure.



HOW DOES COLIMAGE **FD** ASSESS COLOR DIFFERENCES?



EPS Teknoloji's patented technology monitors color differences across the entire fabric surface without using a spectrophotometer or limiting assessment to point measurements or a single line. Both the magnitude and spatial distribution of color variations are determined.

ΔL , Δa , Δb and ΔE values quantify deviations along the lightness-darkness, red-green and yellow-blue axes, as well as the overall color difference. Comparing color data from different fabric areas and throughout production provides objective, repeatable and traceable color control.

Weaving and Structural Defects

Missing / Double Warp or Weft

Slubs / Yarn Irregularities

Fly / Neps

Digital Quality Management

4-Point System and Digital Reports

Defect Images and Coordinates

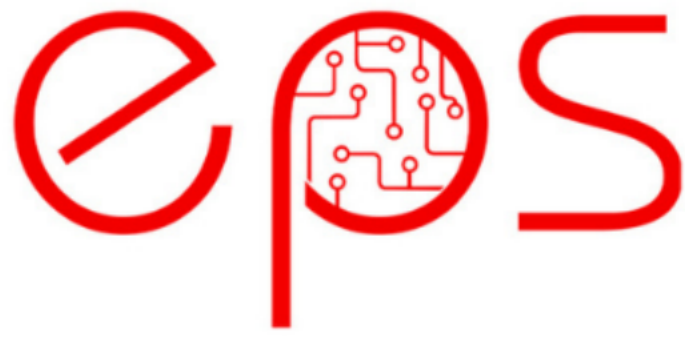
Operator Alerts and Integration

DIGITAL QUALITY MONITORING AND CONTINUOUS IMPROVEMENT

Colimage FD automatically assesses detected defects using the 4-point system, recording their type, size, position and score. Quality is monitored numerically and visually through a digital defect map showing the distribution of defects across the fabric width and length.

The operator monitors live fabric images, detected defects and color assessment results on a single screen. Digital records and reports facilitate roll- and batch-based comparisons, providing a traceable quality control process.

Comparing defect frequencies and color variations helps identify recurring quality issues and supports process improvement. Early detection during production helps shorten response times, reduce production losses and maintain consistent quality.



Multidisciplinary Innovation



COLIMAGE FD Benefits

- Real-Time Fabric Defect and Color Control
- Full-Width Fabric Assessment
- Consistent, Objective Quality Decisions
- Automatic Assessment Using the 4-Point System
- Digital Reporting
- Roll- and Batch-Based Traceability
- Improved Operator Productivity
- Early Defect Detection and Reduced Production Losses
- A Common Quality Assessment Language with Customers
- Live Defect Display and Digital Defect Mapping



WEAVING



OPEN-WIDTH DYEING



STENTER



QUALITY CONTROL



FABRIC SPREADING AND CUTTING

Contact Us for Questions, Information, or Orders!

EPS Teknoloji Electronics Machinery Textile Industry and Trade Ltd. Co.

info@epsteknoloji.com
www.epsteknoloji.com

Ergene Mahallesi 457. Sokak No: 7/A
Bornova / İzmir / Türkiye



WhatsApp
+90 533 620 03 77

COLIMAGE FD: Fabric Defect and Color Detection System is manufactured by EPS Teknoloji.

© EPS Teknoloji. İzmir. Türkiye. All rights reserved. Reproduction of the whole or any part of the product without the written permission of the rights holder is prohibited. Some images in the content are representative and were not generated by COLIMAGE FD.