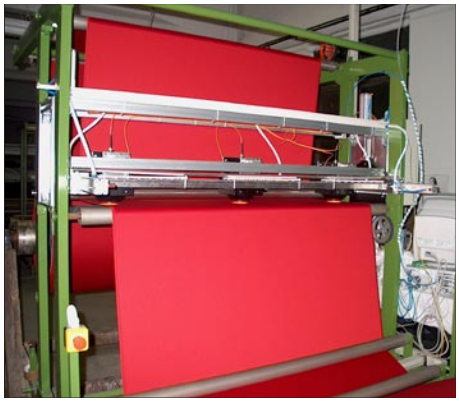
ONLINE COLOR MEASUREMENT IN TEXTILE DYEING

Hyperspectral imaging has been proven to be efficient tool in color quality control. System is developed by DV s.r.l. (Italy) and commercialized by IRIS DP s.r.l. (Italy). Utilized technology: SPECIM's ImSpector V10 imaging spectrograph combined with high accuracy CCD camera and integrating sphere.



Textile analysis

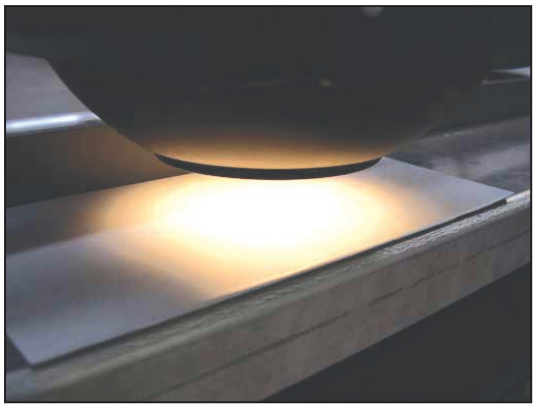
As a result of COLTEX development project, an automatic system for continuous control of color defects has been since available. Coltex has been designed in order to provide a continuos spectrographic quality control of fabrics. Coltex is a modular and automatic inspection system designed as an alternative to current expensive systems for colour control.

System objectives:

- On-line dyeing process monitoring, such as wet/dryer textile webs
- Off-line finished dyed product inspection
- Reduction of claims as all color defects are register/documented in advance
- Determination of color defects allowing intervention in dyeing process that's saving in material costs and energy costs

Coltex can be used to detect defects as:

- Centre-selvage colour control measurement expressed in dE
- Measurement of the difference between start and end of roll expressed in dE
- Measurement of the difference between sample and roll expressed in dE
- Graphical signalling of Uneven

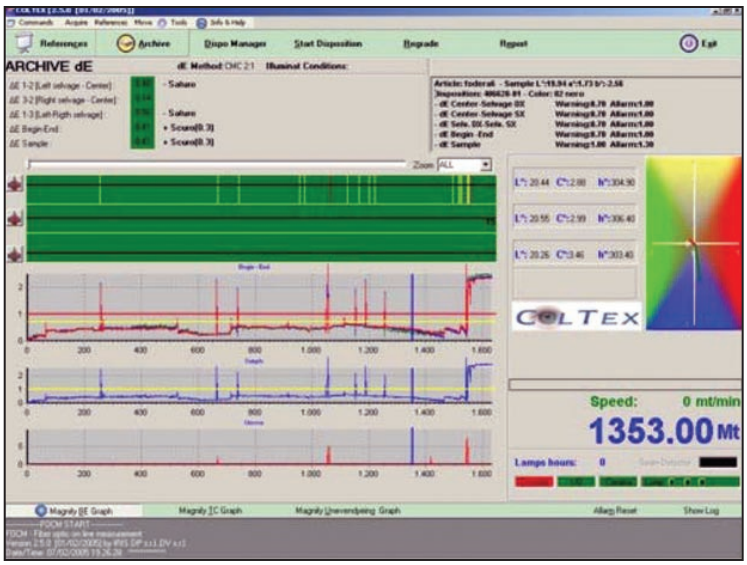


Coltex sensor

HYPERSPECTRAL SOLUTIONS

Spectral Imaging Ltd.
POB 110
Teknologiantie 18 A
FIN–90571 Oulu, Finland

Tel. +358 (0)8 551 4495
Fax +358 (0)8 551 4496
Email info@specim.fi
www.specim.fi

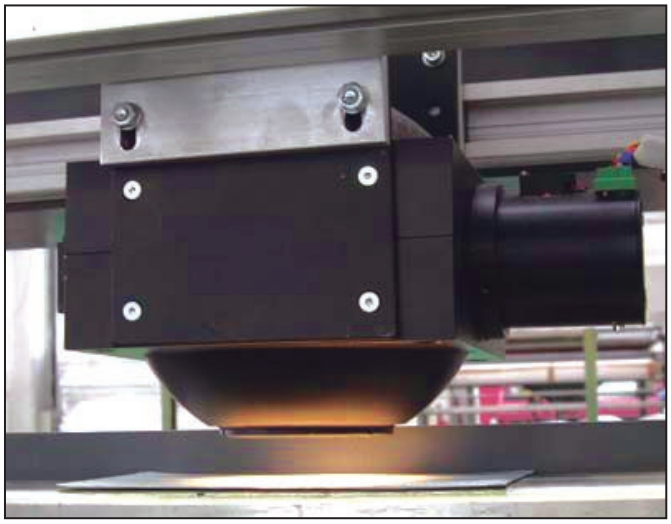


System highlights:

- Modular, compact, low costs
- No specific knowledge of colour software is required for system operation
- Automatic fabric inspection during the finishing process
- Rapid, real-time inspection

System performance:

- Measurement accuracy of the system better than 0,1dE
- Measurement Repeatability between the probes better than 0,1dE
- Measurement Repeatability between different measures on the same probe better than 0,1dE
- Thermal Stability: measurement drift better than 0,1 dE in 1 hour



Mechanical and measurement accuracy:

- The new designed Probe allows high measure repeatability and high mechanical/optical/light precision.

Product information and photos by courtesy of DV s.r.l. and IRIS DP s.r.l., Italy

TECNOLOGIE D'AVANGUARDIA

IRIS DP