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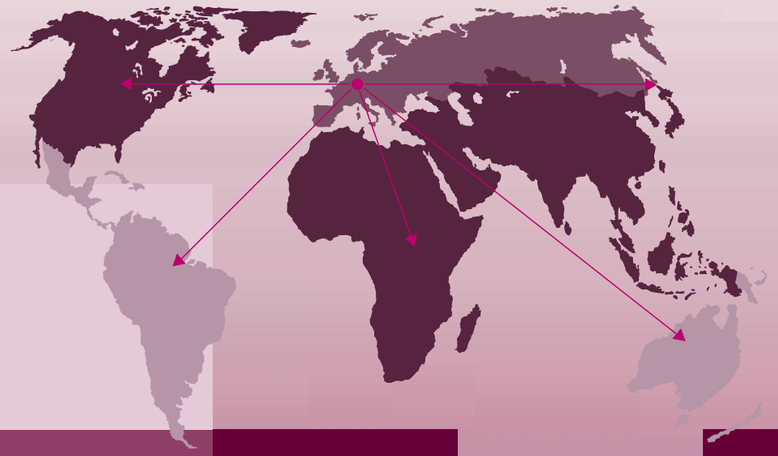
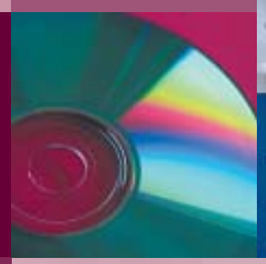
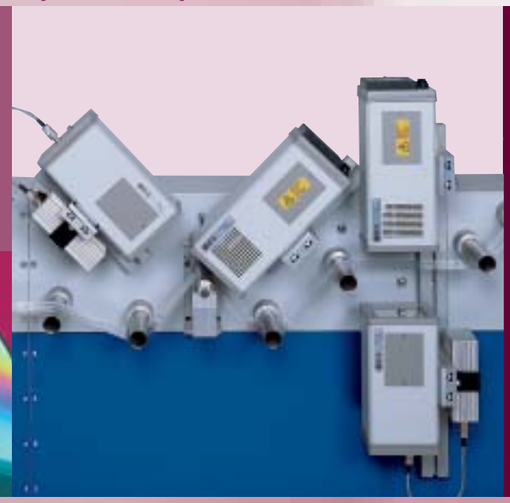


The Solution for the Polymer Industry

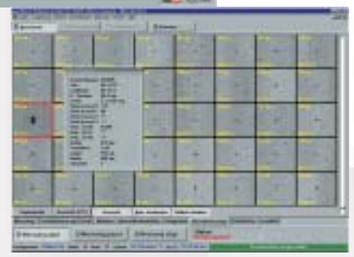


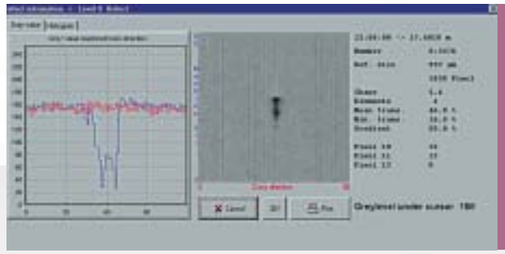


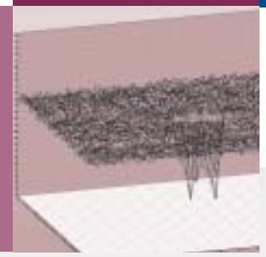
Film-Test
FSA100

The Original by OCS

Film-Test FSA100







Film-Test FSA100

FSA100 is a modular surface inspection system for use in laboratories and production. The film quality is assessed optoelectronically through the use of high-resolution line cameras and the appropriate illumination technology. The measurement data are stored in an inspection report so that later analysis is possible at any time.
The modular concept permits the use of different camera and illumination constellations and can therefore be optimally used for transparent, dyed and non-transparent plastic films. Optimum adaptation in laboratory work and in encapsulated measuring stations is a major contribution towards quality control.
In addition to the mere recognition and classification of defects, the system can also be used for analysis, recording, archiving and documentation purposes. Every defect detected is transferred with the defect image to the measurement protocol together with its feature vector (position, size, shape ...).

The system can be modified exactly to suit the respective.

Performance features

- **Modular architecture**
  Simple possibility of adaptation
- **Operation**
  Menu-guided Windows desktop with individual window representation
- **Optimum lighting technology**
  Use of special lighting techniques (filters, diffusers) depending on the material to be inspected
- **Real-time defect analysis**
  Rapid evaluation and representation of the measurement results in various ways. Table with size classes, time history, mosaic view, grades graphics ....
- **Table view**
  Tabular display (absolute, per m, total defect area etc. and trend display) as a function of defect size and type
- **Mosaic view**
  Continuous display of the defects detected as real images (display of defect sections)
- **Time history**
  Graphic representation of the defect classes detected as a function of time, length or parcels
- **Easy teach-In classification**
  Defects are automatically classified by their features thanks to the use of intelligent fuzzy technology
- **3D defect analysis**
  High-performance software tool for improved image analysis
- **Transparency measurement**
  For transmittance measurements, online determination of the absolute and relative transparency values
- **Process synchronisation**
  Linking of the inspection system to external equipment, e.g. link to industrial data acquisition system or SAP
- **Interfaces for external equipment**
  APLAIRS, thickness measurement, gloss measurement, haze measurement, label printer...
- **Open database**
  The protocol data can be converted into all common file formats (Access, Excel ...)

Fields of application

- **Transparent materials**
  (LLDPE, LDPE, HDPE, PC, PS, PET ...)
- **Non-transparent materials**
  (rubber or dyed plastics etc.)

Types of defects

- **Contamination**
- **Fibres**
- **Black specks**
- **Gels**
- **Foreign particles**
- **Holes**

Technical data

- **Inspection range** from 5 mm film width
- **Camera**
  Principle: Principle CCD line sensor
  2048 ... 8192 pixels/camera
  max. 80 MHz data rate
  resolution from 5 µm
  Dimensions: 152 x 157 x 284 mm (W x H x D)
  Weight: approx. 2.5 kg
- **Computer**
  Industrial computer: Pentium IV technology
- **Illumination**
  Cold-light illumination with cross section transformer
  Dimensions: 145 x 145 x 340 mm (W x H x D)
  Weight: approx. 4.1 kg
- **Interfaces**
  Ethernet 10/100 M Base-T, digital and analogue I/O
  Modbus, Profibus, RS232, Link to ind. data acq. system or SAP
- **Remote control**
  Extender: max. 100 m
  Service: via ISDN
- **Software**
  Operating systems: WinNT4.0, Win2000, XP
- **Main power**
  Power supply: 230 V AC / 115 V AC
- **Temperature**
  10 ... 40 °C without cooling

OCS – Optical Control Systems GmbH

Benefits

- **Improvement of quality (elimination of non-standard product)**
- **Competitiveness by QC-Automation**
- **Accurate and consistent automatic grading**
- **Reduction of customer returns and complaints**
- **Increased line speed and process throughput where manual inspection is a limiting factor. Perfect for online and laboratory applications**