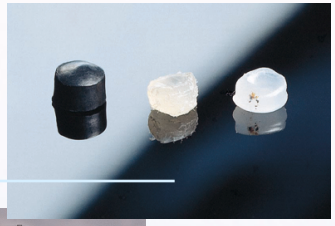
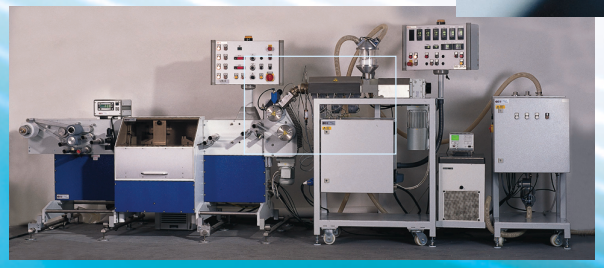
OCS - Optical Control Systems GmbH

As one of the world's leading manufacturers of optical quality control systems, OCS supplies customised and complete solutions in the fields of digital image processing, optical measurement and automation. Our systems ensure maximum product quality control. With the aid of precision cameras in conjunction with high performance online image processing, even the smallest defects in polymer products are detected, located and analysed in detail. The applications for OCS systems range from laboratory use to complete integration into the production process.

Leading manufacturers in the petrochemicals and polymer industries benefit from these features. In Europe and the USA, Canada, South America and Asia: everywhere in the world, our system solutions are successfully in service. With a highly expert and innovative team of development and production engineers, OCS supplies top level technology and know-how worldwide – always at the leading edge with our systematic research and development work. Our manufacturing processes, delivery, installation and user training are also state of the art. Service to our clients is our paramount aim: in no time we will repair damaged systems worldwide – guaranteed.





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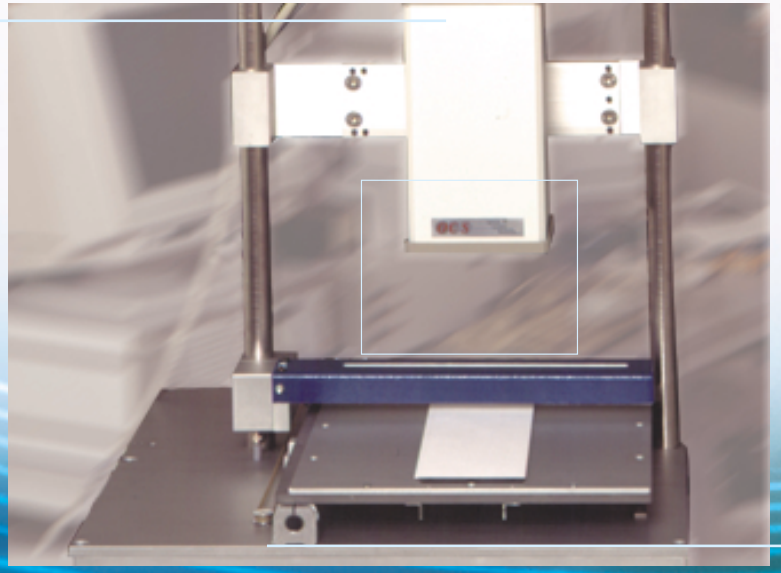
Sample Testing Unit ST-4



Application

The Sample Testing Unit ST-4 was designed for the precise inspection of surfaces with a small area. Transparent materials such as films, sheets, glass etc. and non-transparent / opaque materials like coloured films, rubber, paper, metals or textiles can be examined. The system detects impurities, holes, scratches and other surface irregularities. It is suitable for laboratory use and ideal for R&D, technical centres and customer support.

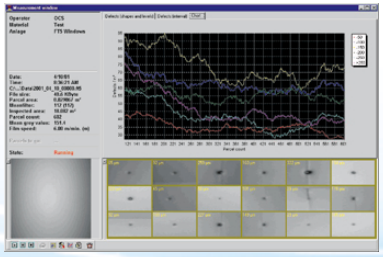
Components

ST-4 is a small, compact unit consisting of a special high-speed digital line sensor and two lighting units, one located in the protective aluminium housing and one just above. The line sensor is connected to a high-performance image-processing computer, which is integrated in a 19''-4HE housing.

Mode of Operation

Direct light is used for the inspection of transparent material. For this the lighting unit in the housing is used, with the material moved between it and the sensor. The metal plate is removed and the material placed on the frame and secured with clamps.

Reflected light is used for non-transparent/opaque materials, the source being the outer lighting unit on the same side of the object as the sensor. The material is placed upon the metal plate which is screwed on to the frame.



Software

The system's software is menu-driven under Windows NT, is user-friendly and complies to a large degree. All data is immediately stored and evaluated, and can be further processed later.

Benefit

- Improvement of quality
  (elimination of non-standard product)
- Labour savings
- Accurate and consistent automatic grading
- Reduction of customer returns and complaints
- Fast return on investment (ROI)

Perfect for laboratory applications.