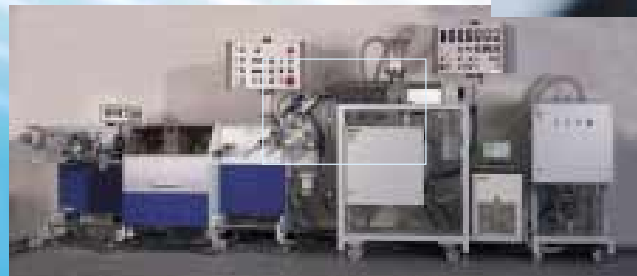


OCS - Optical Control Systems GmbH

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.



Pellet Scanning System PS-25C (Colour Camera)



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Application

The Pellet Scanning System PS-25C (colour camera) was developed for the qualitative and quantitative assessment of granules.

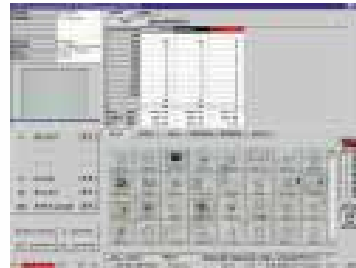
Within large scale polymer production, the high quality of the material is not just a question of 'invisible' characteristics. Even the outer appearance of the granules is of great importance. Regular granule shape and colour constancy greatly contribute to the safeguarding of quality during further processing. Aside from the aesthetic aspect, colour deviations can be an indication of hidden material defects. Recognising quality at the right time means a large contribution to competitiveness.

The PS-25 C is suitable for both laboratory purposes and on-line inspection. The pellets can be submitted as samples or they can be withdrawn from the production line by creating a bypass. Using a bypass system gives the user the advantage of direct inspection of the material during the production process. This facilitates quicker reaction to any defects. The contaminated particles can also be extracted directly after the measurement (optional).



Components

The unit consists of a 3-CCD-Chip colour camera, lighting, an image processor, a conveying device and a hopper. Equipped with a fully automatic self-cleaning mechanism which cleans the pellet feeder and the optical chamber at various adjustable intervals, it is highly maintenance-friendly.



Mode of Operation

To find and eliminate the cause of certain defects, it is essential to have the most precise information at hand, by continuously obtaining exact details of the colour, size, frequency, etc. of those defects.

The PS-25C is capable of inspecting transparent and opaque granules. The images are taken with a 3-CCD-Chip colour camera and are processed and evaluated by the image processor using specially designed software.

Features

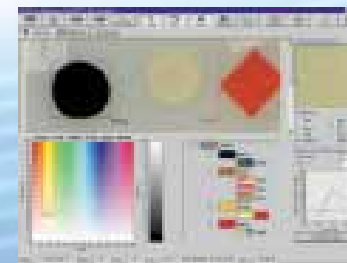
This software offers a multitude of adjustment options, enabling the user to configure the system exactly according to individual measurements.

For the detection of contamination and foreign particles which have a different colour from pure, uncontaminated material, colour classes can be defined with the "teaching" tool. Furthermore, it is possible to define alarm limits. If these are exceeded, a floating contact is activated.

The inspection can be observed on a monitor and visible defects marked and indexed. Images of special importance can be stored and the results represented by a variety of graphics and tables. A colour printer documents the results. The data, software adjustments, the time and duration of the inspection can be easily accessed. This facilitates later evaluation or long-term evaluation.

The system can be integrated into any internal data processing system by means of an existing software interface, e.g. via Ethernet.

The unit is maintenance-friendly, as it is equipped with a fully automatic self-cleaning mechanism which cleans the pellet feeder and the optical chamber at various adjustable intervals.



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 online and laboratory applications.

