

## The ultimate resource for Quality Control Systems

### PRODUCTION OF GRANULES ANALYZERS – TOP OF THE LINE IN ANALYSIS FOR THE POLYMER INDUSTRY

#### Pellet Size and Shape Distribution Analysis System-PSSD

The measuring system PSSD - Pellet Shape and Size Distribution System - inspects the size and shape distribution of granules or pellets. The system works at high speed which contributes to expediting production processes and improving quality control. At a large measurement range and high throughput, up to 50 kg/h depending on the size of the pellets, a high repeatability is guaranteed, independent of the shape of the pellet.

The system consists of a housing containing a high-speed line sensor, a lighting source and the transport mechanism. The line sensor is connected to a high-performance image-processing computer.

#### Application

It is possible to test transparent and non-transparent granules. To gain a better overview, the pellets are classified in up to 10 definable class sizes of 100µm and above. The resolution is 100µm. The line sensor and the lighting source are installed opposite one another. The pellets move from a funnel over a vibrating conveyor to a ramp between sensor and lighting source. From there, they fall into a container in one layer and are recorded gaplessly by the sensor.

#### Software

The software is completely menu-driven and meets SAA-standard. Operating the system is thus very user-friendly and easy to learn. All measuring data and results are stored on hard disc together with time and date which facilitates later evaluation (SPC).

During the measurement, the recorded images and the measurement data can be observed on a monitor. The results can be represented in coloured graphs or tabular form and after each completed measurement a test certificate can be printed out. For further evaluation, it is possible to create diagrams on time behaviour and histograms. It is also possible to define alarm limits. When these are exceeded, a floating contact is switched (optional).

The system offers the possibility to make many individual adjustments which ensures an exact adaptation to special requirements. These can be stored on hard disk.

#### Benefits:

- Quality control polymer production processes
- Measuring the size and shape of transparent or non-transparent granules, eg. twins, triples, dog bones and fines
- Continuous process pelletiser monitoring incl. pellet weight/count)

#### The PSSD

