



Online Polymer Analyser – Complete Online Quality Control Systems

In cases where site conditions, infrastructure requirements or a long distance between the sampling point and the laboratory make direct analysis challenging, OCS delivers a practical and cost-effective alternative:

The Online Polymer Analyser (OLPA).

This fully equipped, climate-controlled mobile unit brings the lab directly to the process, enabling installation right where it creates the most value—next to the production.

A key advantage of our solution is seamless connectivity. By integrating the OCS Pellet Transport System (PTS), it transforms into an online laboratory. The PTS provides automatic transport of representative pellet or powder samples directly from the production line into the OLPA, transforming manual checks into a streamlined, automated workflow, and transferring the data continuously into the Plant Control Room (DCS)

The OLPA are precisely configured to the customer's specific quality parameters and needs. OCS integrates advanced optical, chemical, and physical measurement systems to analyse critical product properties directly on site. This setup allows immediate validation of product quality and process stability, with analyses ranging from:

- Optical inspection for Gels and Contamination of Pellets and Films.
- Rheological measurement for the Melt Flow Rate (MFR) and Melt Flow Volume (MFV).
- Spectroscopy analysis, measuring additives, copolymer, and density.

Profound engineering depth, reliable execution, and the flexibility to customize every solution to

Sales Team



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the customer's unique applications.

Features

- Standardised online concepts for a 'closed loop'
- Constant quality control
- Customised equipment options, for example HVA (heating, ventilation and air conditioning) and other measurement and analysis systems
- Location-independent laboratory

Devices and Systems (Example)

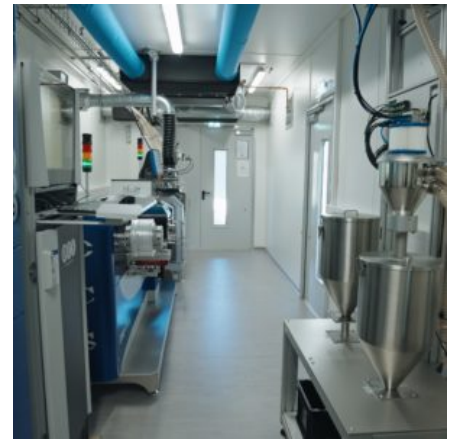
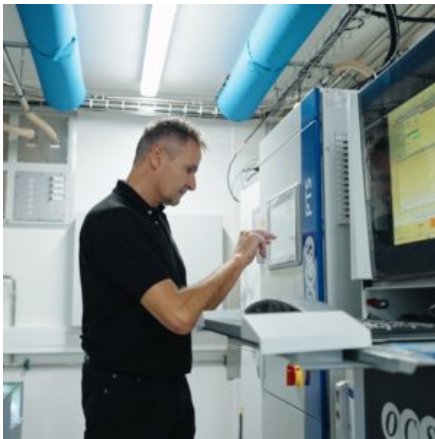
- OCS Line (Cast Film or Tape)
- OCS Pellet Analysing System (PA66)
- OCS Melt Flow Measurement System (OP5)
- OCS Pellet Transport System (PTS)

Take a Look Inside

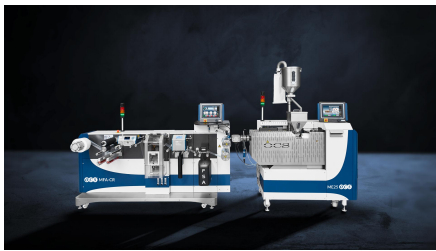
Video shows possible equipment that can be included in an OLPA and gives you insight into the diverse application and testing options for the flexible test lines.

[vc_video link="https://youtu.be/hU7DexA3lkk"]

More Product Pictures

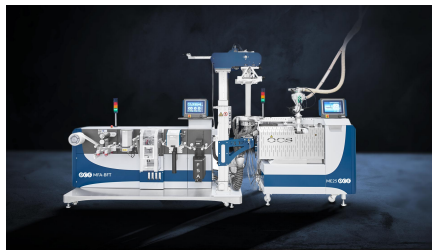


Similar Products



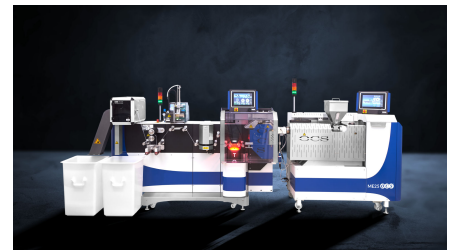
Cast Film Line

The OCS Cast Film Line is used to perform optical and physical property measurements of polymers in the production of high-quality cast (flat) films (extrusion, cooling, stripping and winding). All settings and parameters, e.g. extruder speed, temperature, film tension, winding force, winder diameter, are stored by a touch panel control system which guarantees that the film quality can be reproduced at any time. This is an important parameter for optical and physical on-/offline measurements, for example in detecting gels, contaminations, degradations and other impurities as well as haze, gloss, density and additive measurement. Possible testable polymers include, for example, ... [read more on our Website]



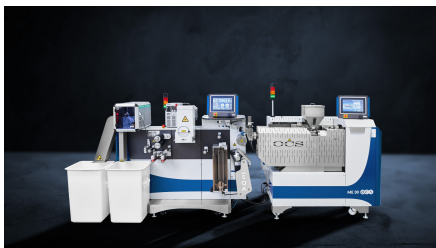
Blown Film Line

The OCS Blown Film Line is used to carry out optical and physical property measurements of polymers in the production of high-quality blown films (blowing, cooling, laying flat, haul-off and winding). All parameters of the line, e.g. extruder speed, temperature, haul-off speed, film width, film bubble ratio, are stored by a touch panel control system, which ensures that the film quality is reproducible at any time. This is an important parameter for optical and physical on-/offline measurements, for use with gels, impurities, fibres and other contaminants, as well as for turbidity, transmission, gloss, density and additive measurements. Possible testable ... [read more on our Website]



Tape Line (TCA®)

The OCS Tape Line Type TCA® is used for testing transparent polymer films (tape). It consists of the OCS Measuring Extruder (ME) and the OCS Modular Film Analyser with Calender (MFA-Calender). Our calendaring system has been specially developed for the wire and cable industry. It presses and cools the extruded polymer film (tape) from both sides, thus ensuring a smooth and consistent surface thickness for optical analysis. The Tape Quality Analyser (TQA100) contains a high-resolution camera system that detects contaminants, gels, black specks, fibres and metal particles. The detected errors are marked by the LASER Marking System (LM100) or ... [read more on our Website]



Tape Line (SSA®)

The OCS Tape Line type SSA® is used specifically to detect surface irregularities (pips) on non-transparent polymer films (tape) in the wire and cable industry. The SSA® Line consists of a Measuring Extruder (ME) and a Modular Film Analyser with a Chill Roll (MFA-CR). During the measurement of the surfaces, the extruded polymer film (tape) passes over a chill roll, which leads the tape to the Surface Quality Analyser (SQA). This high-resolution CMOS camera system uses a specially developed measuring roll to measure the height of the surface defects (so-called pips or agglomerates) with a resolution of 1 ... [read more on our Website]



Pellet Analysing System (PA66)

The modular OCS Pellet Analysing System (PA66) consists of the following components: The Pellet Scanner (PS25C) detects impurities that show a colour deviation from the product. The Pellet Size and Shape Distribution Measurement (PSSD) classifies pellets (oversize and undersize, abrasion, agglomerates, etc.) according to their morphological properties. The Colour Measurement (CM3) measures relevant colour values (Yellowness Index, Whiteness Index, CIE L*a*b*, etc.) based on the recorded colour spectrum (optional). A further advantage is the data transfer of real-time results to the production and process control. [vc_column width="1/2"] Testable Raw Materials Highly transparent pellets Opaque pellets Includes OCS ... [read more on our Website]



Melt Flow Measurement System (OP5)

The OCS Melt Flow Measurement System (OP5) allows the measurement of the Melt Index (MI) of polymer powder or pellet samples. The time between sampling and measurement is 5 to 10 minutes. The OP5 melt process minimises any changes in the structure of the polymer by providing a very fast transition from solid to liquid without the negative effects of an extruder screw. The OP5 MFR measurement process is carried out by means of exact control of the melt flow in combination with a highly precise, OCS-developed melt-pressure measurement technique. This method typically achieves a reproducibility of +/- 1%. ... [read more on our Website]

Website]



Pellet Transport System (PTS)

The OCS Pellet Transport System (PTS) is a control system that ensures the continuous and automatic transport of plastic granules (pellets) between production lines and measuring systems. The pellets from the production line are removed by pneumatic samplers. The samples are transported through special conveyor pipes, distributed and fed to the corresponding measuring system. This ensures a gentle transport of the pellets to avoid dust and streamers. Features
Individual and fully automated transport system for supplying the measuring systems
Enables timely readjustment in case of parameter variations (minimisation of scrap)
Simple operation via touch panel with optical and ... [read more on our Website]

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