

Film Thickness Measurement (FTM)

The OCS Film Thickness Measurement (FTM) allows the continuous measurement of the thickness of polymer film (flat film, blown film or tape). For measurement, the film is guided between two precision rollers. One of the rollers is deflected according to the film thickness. This deflection is measured by a digital probe and evaluated by microcontroller-based electronics. The measured value is shown on a display and can be evaluated via analogue or digital interfaces.

Measurable Materials

- Polymer films

Features

- Continuous thickness measurement of the polymer film

Optional

- Customer-specific data preparation and transfer
- Remote control (via communication protocol or digital I/O)

Compatible with

- OCS Cast Film Line
- OCS Blown Film Line
- OCS Tape Line (TCA)
- OCS Modular Film Analyser (MFA)

Sales Team



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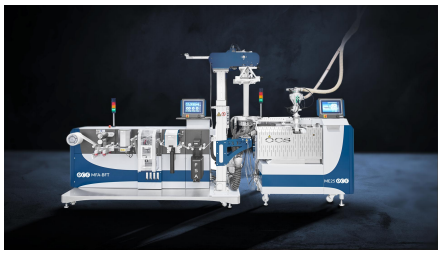
Address

OCS Optical Control Systems GmbH
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Technical Details

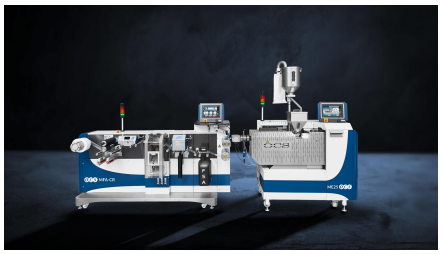
Measuring range	0–5000 µm
Exactness	+/− 1 µm
Haul-off force	1 N
Haul-off speed	0–20 m/min
Communication protocol	MODBUS/RTU (further protocols on request)

Similar Products



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 polymers ... [read more on our Website]



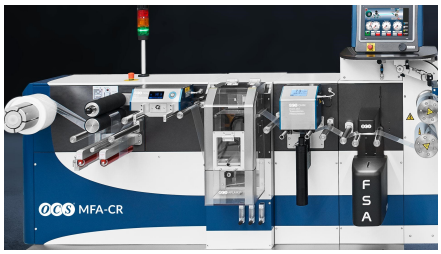
Cast Film Line

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, PP, ... [read more on our Website]



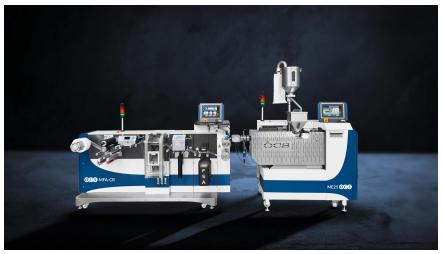
Tape Line (TCA®)

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 anlysis. 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 the ... [read more on our Website]



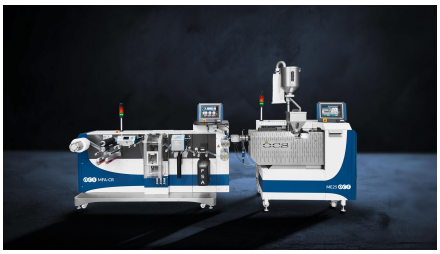
Spectroscopical Measurement APLAIRS®

APLAIRS® (Analysis of Plastics by InfraRed Spectroscopy) is a spectroscopic method for measuring additives, (co-)monomer compositions and chemical and physical properties in the production of polyolefins.



Gloss Measurement (OGM)

The OCS Gloss Measurement (OGM) is designed for the constant and precise control of film gloss properties. The measuring device is integrated into the Modular Film Analyser (MFA). It enables a continuous measurement of the gloss value on polymer film. The gloss



Haze and Transmission Measurement (OHM)

The OCS Haze and Transmission Measurement (OHM) is used for the automated and continuous measurement of the haze properties on polymer film. It additionally determines the transmission

This concept allows the automation of the daily continuous measurement requirements for quality control. For this purpose, the polymer film runs through the APLAIRS® system, which is equipped with an FTIR spectrometer and specially developed software. The measurement takes place in real time. The spectra are recorded and properties are predicted, documented and graphically processed. The results can also be transferred to superordinate systems. This ensures continuous quality control and documentation and the resulting ... [read more on our Website]



Modular Film Analyser (MFA)

The OCS Modular Film Analyser (MFA) is used for the continuous cooling, stripping and winding of extruded polymer film. In combination with a variety of different measuring instruments, a wide range of applications for the analysis of different sample materials is covered. In addition to the Film Surface Analyser (FSA100V2/FSA200V2) for optical quality control of the polymer film, online spectroscopy, the measurement of haze and transmission as well as gloss and thickness can be integrated. This allows the combination of a tailor-made and yet economical solution. [vc_column width="1/2"] Features Modular architecture for customer-specific configuration with different measurement devices Homogeneous, yet ... [read more on our Website]

properties of films are analysed based on their different ability to reflect light. A special LED lighting unit illuminates the continuous film while a photo diode measures the strength of the reflected light. The measured amount of gloss, from matt to glossy, is given in GU (Gloss Units). [vc_column width="1/2"] Measurable Materials Polymer films Features Robust, precise measuring ... [read more on our Website]

average. The measuring instrument is integrated into the Modular Film Analyser (MFA) or can be used as a stand-alone version (tabletop unit). [vc_column width="1/2"] Features Continuous haze and transmission measurement according to ASTM D 1003 Simple multi-point calibration [vc_column width="1/2"] Compatible with OCS Cast Film Line OCS Blown Film Line OCS Modular Film Analyser (MFA) ... [read more on our Website]

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