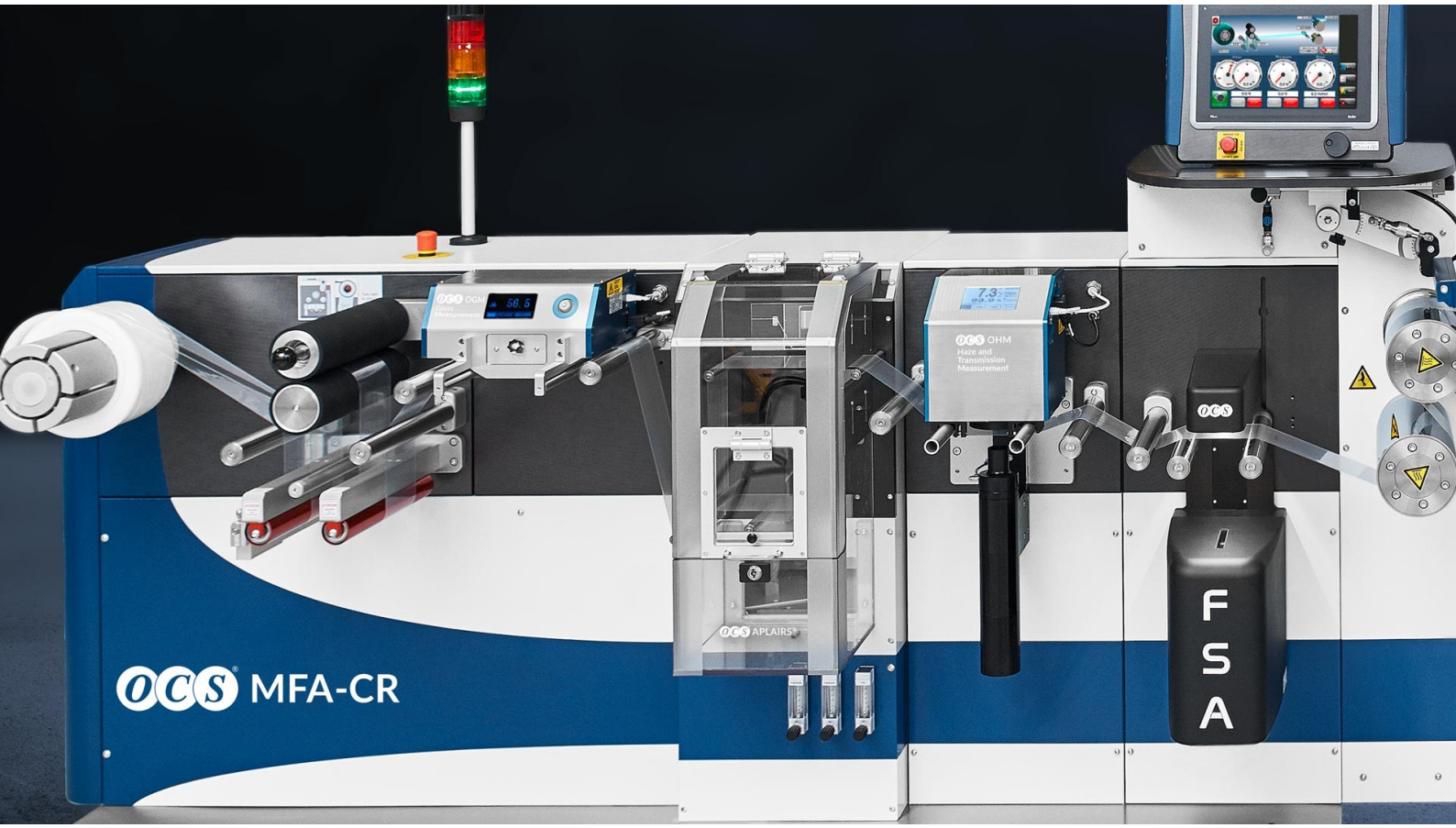
Optical Control Systems



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. 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 reliable control of various processes. The automated sample preparation leads to personnel savings and significantly reduces labour costs.

Application Areas

- Analysis of materials, such as LDPE, LLDPE, HDPE, PP, ABS, PS, PET, EVA and PC
- Analysis of additives such as antioxidants, lubricants, UV absorbers, stabilisers, fillers, processing aids, etc.
- Testing of physical properties, such as density in polyolefin, thickness, etc.

Features

- Using the software, continuous recording of spectrums and prediction of analysis data (every three minutes)
- Robust and precise FTIR spectroscopy
- Conventional as well as multivariate analysis can be applied to predict the analysis data

Sales Team

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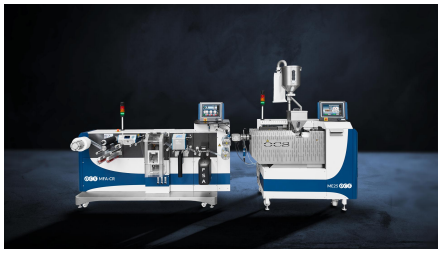
Compatible with

- OCS Cast Film Line
- OCS Blown Film Line

Technical Details

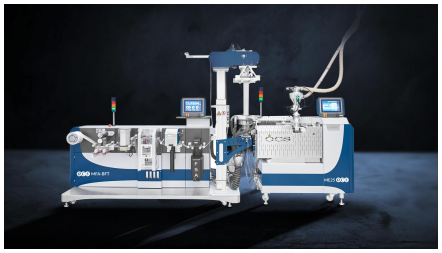
Communication protocol	MODBUS (RTU, TCP/IP), PROFIBUS, PROFINET, OPC (Server/Client), CSV file, customer-specific

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]

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, ... [read more on our Website]