

# Capacitive gauge profile measurement system ScenEx PA

## Function description

The Octagon on-line measuring system ScenEx PA has been designed for the measurement of the thickness profile on blown film lines.

The capacitive sensor PMS-A measures the film in the A-frame. With a sensor resolution of 0,1  $\mu\text{m}$  even minimal deviations of the thickness are recorded.

The sensor is connected to a PC where the software PMS-Win is installed for evaluation, display and memorisation of the measurements.

The PMS-Win software allows to administrate up to 10 extrusion lines and therefore offers a most economic concept for on-line quality control.

## Installation of the capacitive sensor PMS-A in the A-frame

Due to rotation of the extruder, an oscillating haul-off or rotating die, each point of the circular film profile passes the PMS-A sensor allowing the bubble to be measured around its entire circumference and a complete profile to be registered.



### Quality

- Minimises tolerance ranges
- Permanent display of thickness profile
- Ensures constant film quality
- Better fulfilment of customer's requirements
- Efficient aid for centring the die

### Advantages

- Reduced waste
- Savings in raw materials
- No customer complaints
- User-friendly and low on maintenance

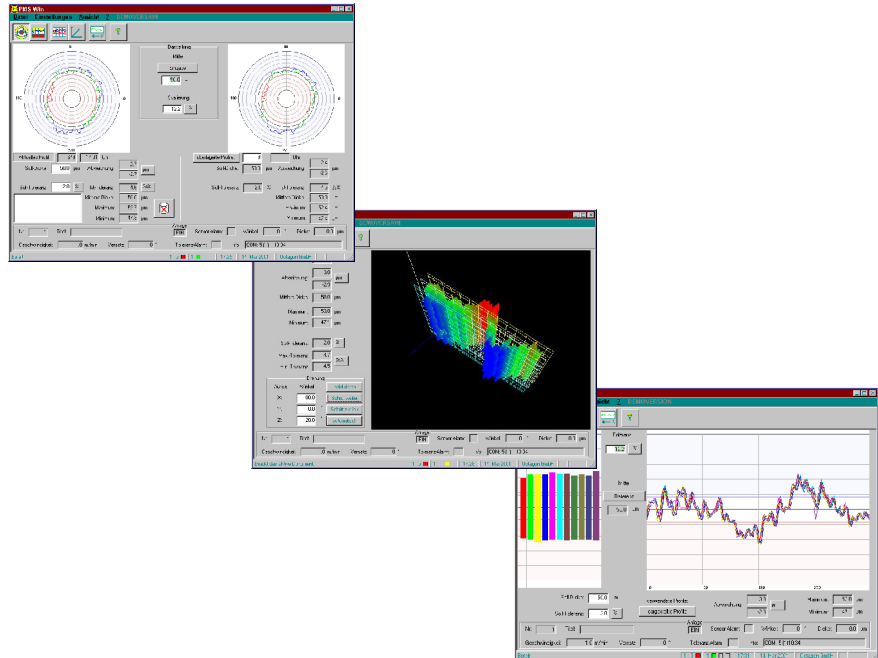
### Automation

- Safer production process
- PC software to connect up to 10 extrusion lines
- Continuous recording and display of important process data
- Able to be extended with software for gauge profile analysis
- Alarm display

# Measuring Systems by Octagon: Reliability in quality control for blown film extrusion

## Display on the PC with software PMS-Win

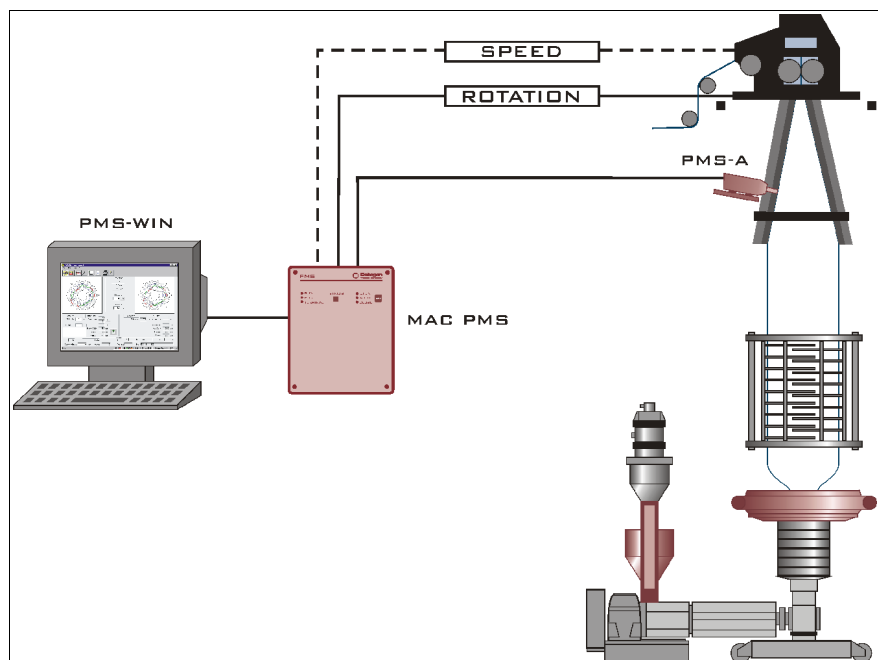
- Cartesian chart
- Polar chart
- 3-dimensional view of profiles
- Superimposed profiles
- Trend display



## Display of measured values

- Actual thickness of the current measurement
- Minimum/maximum thickness
- Average thickness
- Tolerance in sigma 1, sigma 2 or sigma 3
- Deviation to target thickness

## Installation in an extrusion line



## Standard extent of delivery

- Measuring sensor PMS-A
- Process controller MAC-PMS
- PC software PMS-Win
- O-point sensor

## Other options:

- Web speed probe
- Sensor for counting teeth

## Line specific features

- System suitable for rotating or oscillating lines

## Technical features

- Measuring range 6 - 500  $\mu\text{m}$
- Resolution 0,1  $\mu\text{m}$

Octagon  
Process Technology GmbH  
Nuernberger Straße 119  
D-97076 Wuerzburg

Phone +49 931 27 96 70  
Fax +49 931 27 47 19

contact@octagon-gmbh.de  
www.octagon-gmbh.de