

# Thickness profile measuring sensor PMS-A for measurement in the A-frame

## Solutions ...

The PMS-A sensor has been specially designed for the measurement of the thickness profile on blown film lines. Highly sophisticated and well-proven in design it assures safe functioning thereby playing an important part in improving quality control in blown film production.

## 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.

## ... for 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 and processed for display in a gauge profile.

## ... modular and economic.

Equipped with its own process electronics, the PMS-A sensor connects to a central computer via field bus interface, e. g. profibus, for the display of measurement data and gauge profile.



## Capacitive sensor



For measurement of the thickness profile the sensor needs to be in contact with the film.

### Quality

- Certified quality
- Ensures constant film quality
- Minimises tolerance ranges
- 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

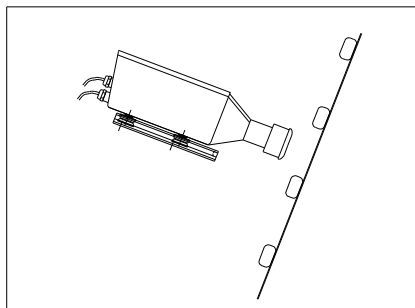
### Automation

- Safer production process
- Continuous recording and display of thickness profile
- High-tech sensor for modular concept of extrusion control

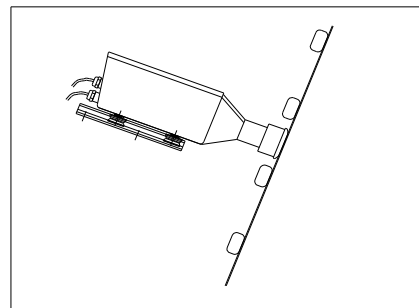
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## Operating the sensor

For automatic positioning on the bubble the sensor is mounted on an adjustment unit which is driven by a stepper motor. Whenever the measurement is switched on, the sensor automatically moves forward into measuring position.



Sensor in parking position



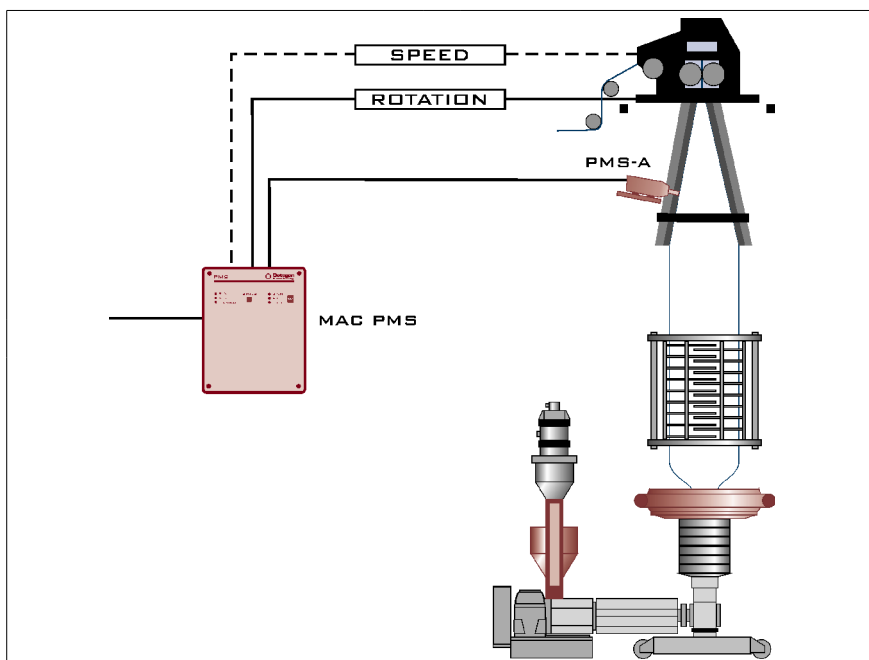
Sensor in measuring position

## Automatic positioning device



The sensor is mounted onto a steel rail allowing it to be moved into measuring position and vice-versa. Drive is by stepper motor located in the sensor housing. This makes the mechanical and electrical installation a simple process.

## Installation in an extrusion line



## Standard extent of delivery

- Measuring sensor PMS-A
- Controller MAC-PMS
- 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  $\mu\text{m}$

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