

Thickness profile measuring sensor PMS-B for measurement on the bubble

Solutions ...

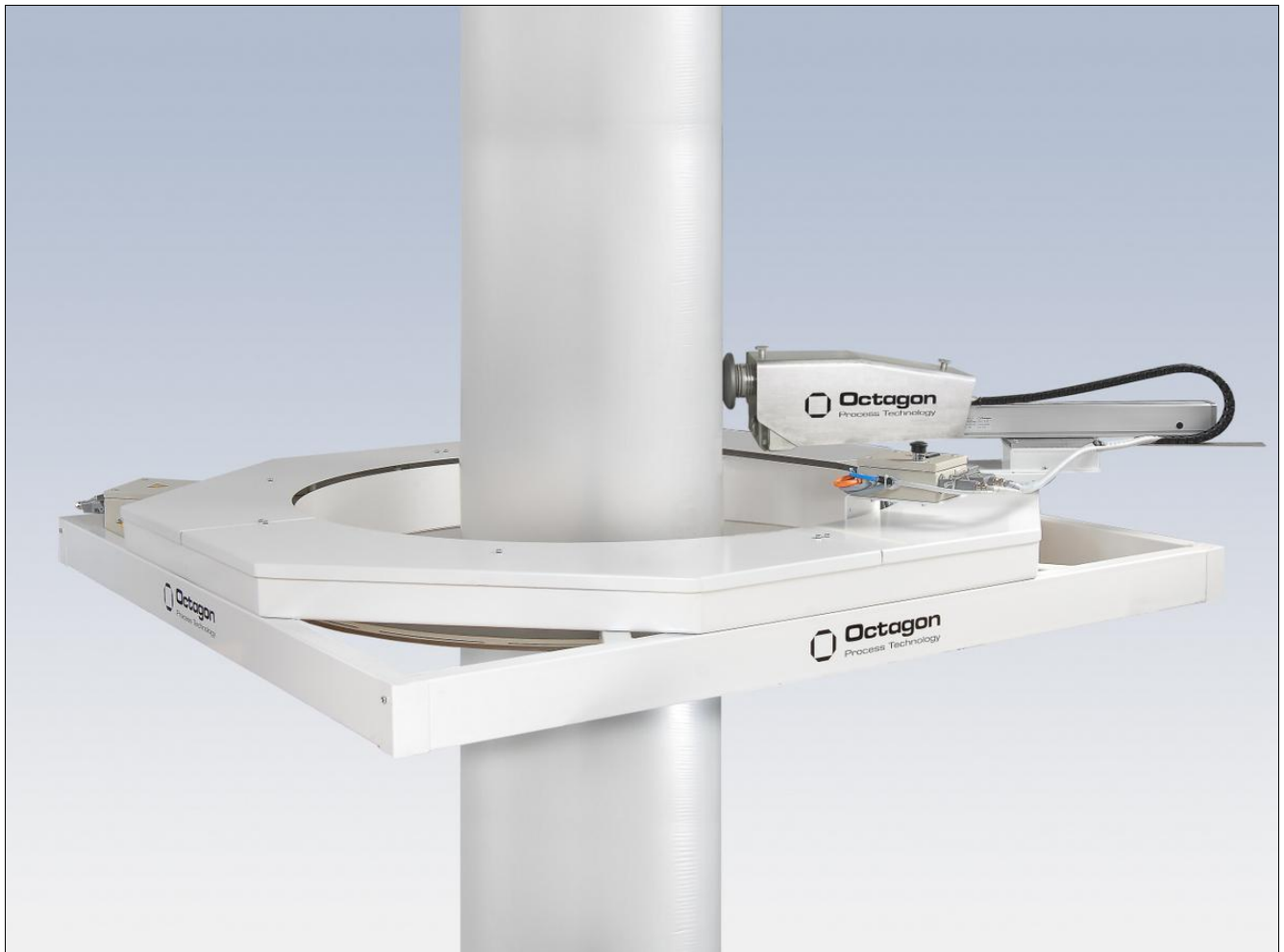
The PMS-B sensor has been specially designed for the measurement of the thickness profile on blown film lines with oscillating haul-off. Highly sophisticated and well-proven in design it assures safe functioning thereby playing an important part in improving quality control in blown film production.

... for blown film lines ...

The capacitive sensor is installed on an oscillating rail allowing it to travel around the bubble by 360°. This results in a very short measuring time, a particular advantage in connection with the SmartLip system where it makes an efficient control of the thickness profile possible.

... modular and economic.

With a sensor resolution of 0,1 µm even minimal deviations of the thickness are recorded. Equipped with its own process electronics, the PMS-B sensor connects to a central computer via field bus interface, e. g. profibus, for the display of measurement data and gauge profile.



Quality and reduced costs

- Reduced waste
- Savings in raw materials
- No customer complaints
- Ensures constant film quality
- Minimises tolerance ranges
- Easy to operate
- Better fulfilment of customer's requirements

Sophisticated technology

- Fast measuring process allows efficiency in control
- Constant speed of rotation therefore precise positioning of profile around the bubble
- Oscillating rail equipped with maintenance-free belt-drive

Automation of process

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

Octagon Measuring Modules: Technology especially developed for extrusion control

Capacitive sensor

For the measurement of the thickness profile an adjustment unit is provided to keep the capacitive sensor in continuous contact with the film. An ultrasonic sensor is integrated to ensure an optimal contact of the sensor head with the film thereby eliminating the film from being scratched.



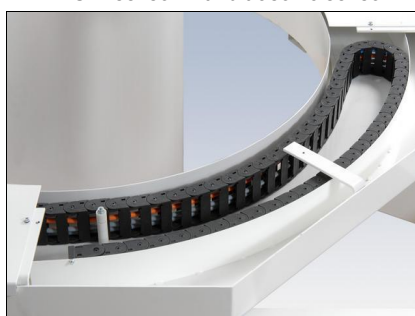
PMS-B sensor with ultrasonic sensor



PMS-B sensor in measuring position

Oscillating rail

The oscillating device allows a rotation of the sensor around the bubble by 360°. Drive is direct via the toothed wheel of the ball bearing whereby the speed of rotation is kept constant. The transmission cables are enclosed in a drag chain protecting them from any damage.

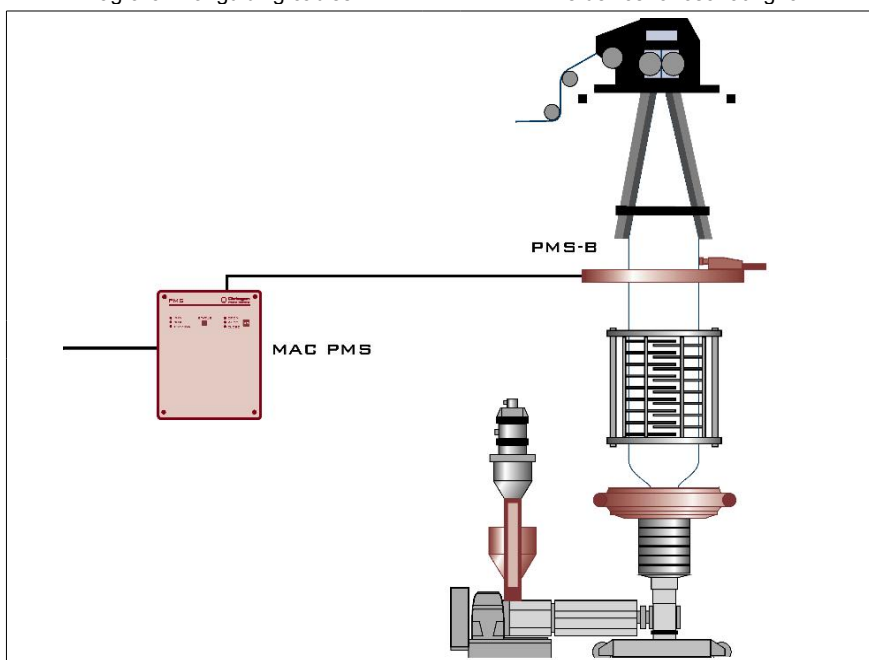


Drag chain for guiding cables



Drive device for oscillating rail

Installation in an extrusion line



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Standard extent of delivery:

- Measuring sensor PMS-B
- Oscillating rail
- Controller MAC-PMS

Technical features:

- Measuring range 6 - 500 μm
- Resolution 0,1 μm