

Throughput and layer gauge control system ScenEx CB on co-extrusion line

Tasks

The system ScenEx CB has been specially developed for coex lines with the aim of maintaining constant quality and reducing production costs. This system offers a low-cost automatic control for coex lines of two or three layers maintaining a constant lineal weight and uniform characteristics of the finished product.

Function description

By installing a WLS throughput measurement unit on each extruder, an accurate measurement of resin consumption is achieved. The WLS units are connected to the MAC-WLS process computer which also measures the line speed and where the operator enters the required production

parameters such as lineal weight for each layer.

With this data the MAC-WLS will calculate and automatically control each required extruder screw speed thereby maintaining the required lineal weight.



A patented weighing system with special features:

- Load cell hermetically sealed
- Weighing bin protected by external hopper
- Weighing bin freely suspended and not supported by rubber joint that may affect accuracy
- Bin and hopper made of stainless steel for
 - longer life
 - no corrosion
 - no contamination of resin caused by abrasion



Quality

- Constant lineal weight of each layer
- Maintains chosen tolerance range at lower level
- Ensures consistent product quality

Advantages

- Reduced waste during start-up and job changes
- Significant savings in resin consumption - up to 5%
- Optimal use of machine capacity
- Fast return on investment

Automation

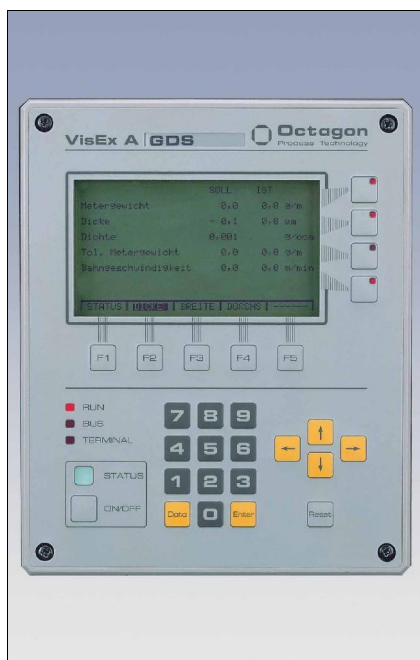
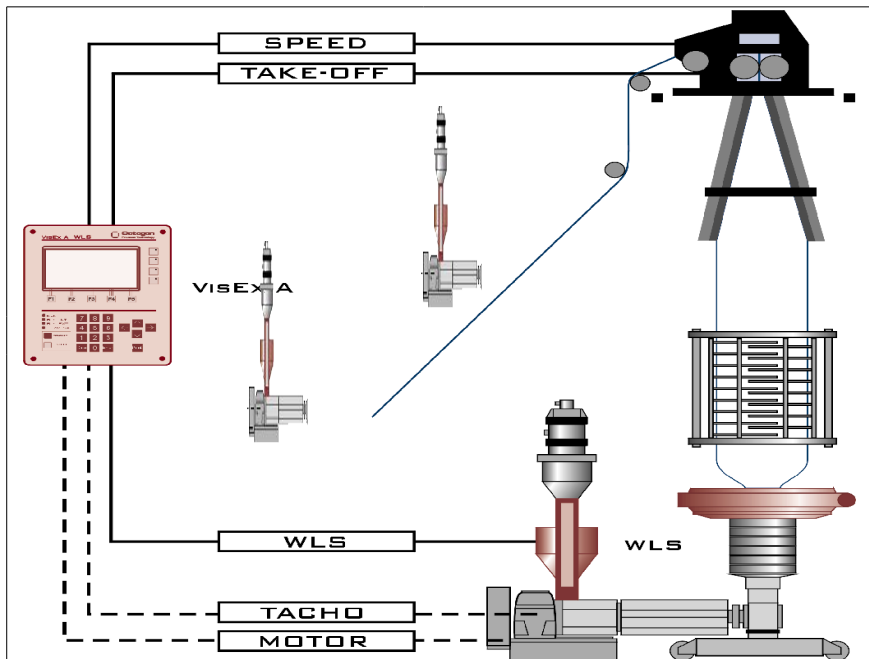
- Very user-friendly
- High controlling accuracy
- Shorter start-up and change over periods
- Continuous recording of resin consumption
- Compensation of resin flow fluctuations

Octagon measuring modules: Specially developed technology for extruder manufacturers

Integration in a blown film extrusion line

The throughput of each extruder is measured separately by a WLS throughput measurement unit. They are fitted directly at material intake of each extruder.

The user-friendly process computer MAC-WLS is normally installed in the near of the extruder control panel.



Syst. supplied layer gauge cont.

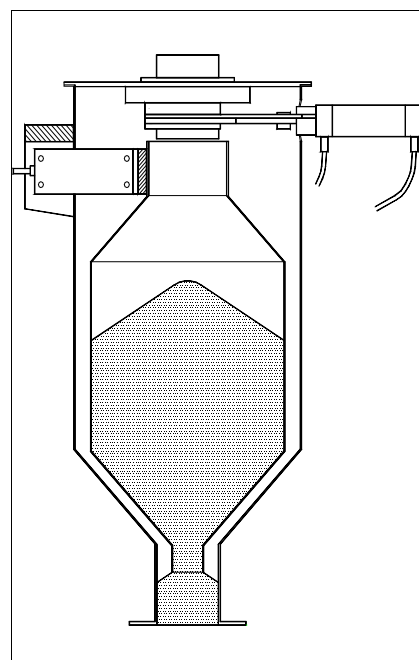
- Process control with visualisation VisEx A
- Web speed probe
- Motorised potentiometer haul-off

For each extruder:

- Throughput measurement unit WLS
- Taco rpm.
- Motorised potentiometer extruder

Input of set data:

- Target thickness for each layer
- Density for each layer
- Target total throughput
- Lay-flat width



Central material flow

Due to the special Octagon design the weighing hopper is suspended centrally. Neither counter weights nor rubber joints are used therefore eliminating any false measuring values.

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