

# KALIBRO

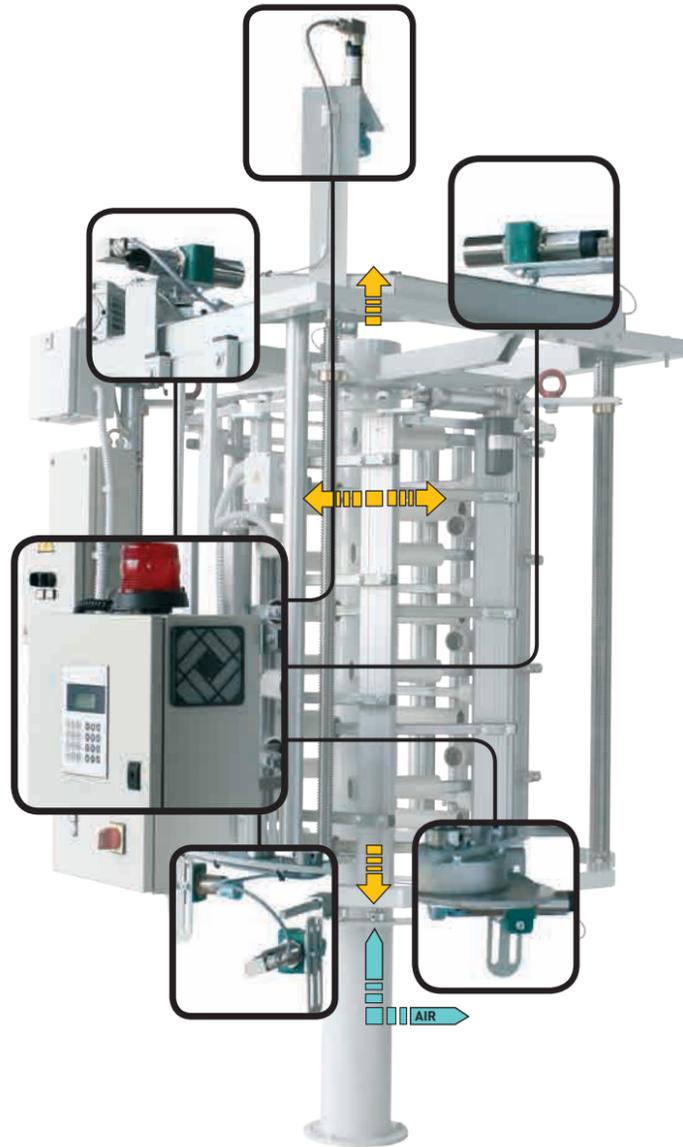
AUTOMATIC CAGE CONTROL SYSTEM

# KALIBRO

## AUTOMATIC CAGE CONTROL SYSTEM

### Suitable for blown film lines:

- already provided with IBC;
- with stationary or rotating die;
- also for gusseted film.



## MEASURING SYSTEM AND ACCURACY

- Ultrasonic sensors for stable and repeatable measurement
- Measurement resolution 0.1 mm
- Display resolution 1 mm
- Control accuracy +/- 2 mm (for lay-flat up to 1800 mm).

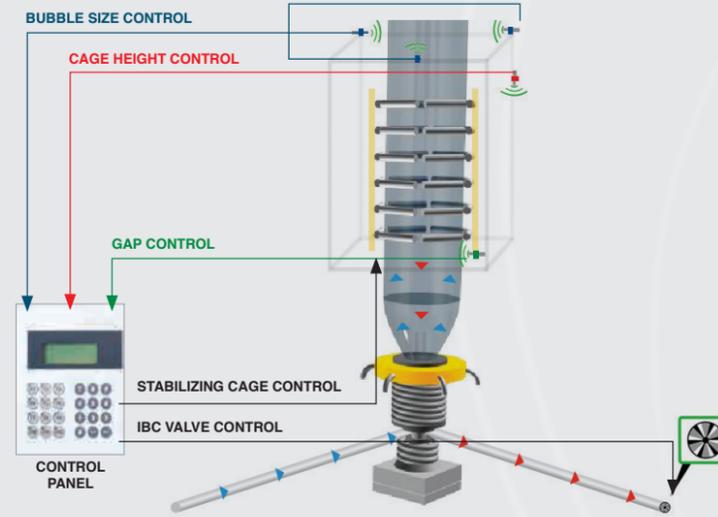


## ADVANTAGES

- Ideal in case of:
  - frequent lay-flat size changes (on-the-fly);
  - low line speed;
  - personnel with limited experience.
- Simple to use: just set the lay-flat set point and tolerance targets.
- Save time and reduce waste during start-up and size changes.
- Lower tolerances and much better control than with manual adjustments.
- Constant lay-flat stability, all through the production process.
- Supplies process information needed to validate the production lot as required by quality assurance.



## SYSTEM OPERATING MODE AND FUNCTIONS



- Measurement and control, by ultrasonic sensors:
  - of the bubble diameter;
  - of the distance between the bubble and the cage (gap);
  - of the calibration cage height;
  - of the cage opening.
- Just setting a new lay-flat, the system performs automatically the width size change:
  - adjusting the cage height to suit the BUR value;
  - adjusting the cage opening to suit the width set-point;
  - opening the IBC valve to inflate or deflate the bubble up to the right size;
  - the bubble diameter, hence also the lay-flat width, are kept stable by constantly controlling the gap and the IBC valve opening.
- Continuous display of the lay-flat measurement.
- Reaches and maintains the lay-flat set value.
- Prevents lay-flat variations due to changes of the environment temperature (day / night).
- Manual and automatic operating mode.

## MAIN FEATURES

- High speed iris valve for controlling the cooling air flow.
- Control panel with operator HMI ( touch screen ).
- Process alarms and diagnostics in plain text.
- Statistical reporting for product quality assurance.



## COMMUNICATION INTERFACES FOR REMOTE CONTROL AND DATA ACQUISITION

- OPC via Ethernet (one entry-point)
- OPC via CanBus (one entry-point or multi entry-point)
- ModBus TCP/IP (one entry-point)
- RS485/422 ModBus (one entry-point or multi entry-point)
- Profibus (one entry-point or multi entry-point)
- CanBus (one entry-point or multi entry-point)



- KALIBRO is also available in the following versions:
- **IBC Control**, only for bubble size control (keeps the gap between the bubble and the calibration cage);
  - **W-Scan**, only for lay-flat monitoring.



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