



syibc

IBC control System

SYIBC is SYNCRO's full IBC control system designed to manage and control several components in the Blown Film line for set up and control of the lay flat of the film, the system can be installed standalone or fully integrated.

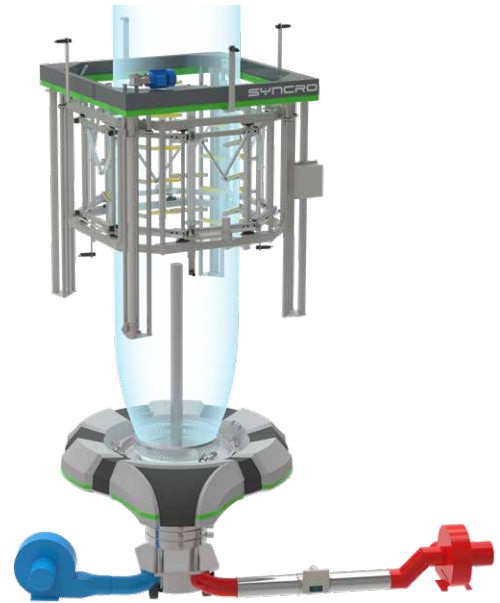
SYIBC guarantees to maintain the width set point of the film, controlling the blowers ratio, valve and bubble cage.

PRINCIPLE OF OPERATION

Syibc is connected to 4 Ultrasonic Sensors located on the Bubble Cage Arms to manage the gap set up and 4 Ultrasonic Sensors located on the top part of the Bubble Cage to measure and manage the lay flat width.

In order to maintain the gap set up, Syibc controls both the IBC blower inverters and IBC valve, modifying blower RPM and IBC valve position.

When equipped with the LAY FLAT CONTROL OPTION, Syibc also controls the Bubble Cage diameter.



MAIN FEATURES

EASY INSTALLATION

Syibc can be easily installed on existing Blown Film Lines.

OPTION LAY FLAT CONTROL

As an option, Syibc can control the lay flat width in full AUTO mode, acting on the bubble cage diameter and keeping the lay flat set point within a $< \pm 2$ mm tolerance.

With the LAY FLAT CONTROL option, Syibc uses 4 LAY FLAT sensors in order to keep a perfect 90° angle, additionally a potentiometer is also installed in order to detect the bubble cage diameter.

GAP SENSORS

Syibc uses 3 GAP sensors when the cage has 6 or 9 arms and 4 sensors when the cage has 8 or 12 arms in order to keep a perfect angle between them.

AMBIENT TEMPERATURE COMPENSATION SENSOR

With the LAY FLAT CONTROL option, Syibc uses 1 temperature compensation sensor in order to calibrate all the sensors when the ambient temperature has a variation.

FINE TUNING VALVE

Syibc has an IBC valve equipped with a stepper motor with a 7000 step function for precise and accurate regulation.

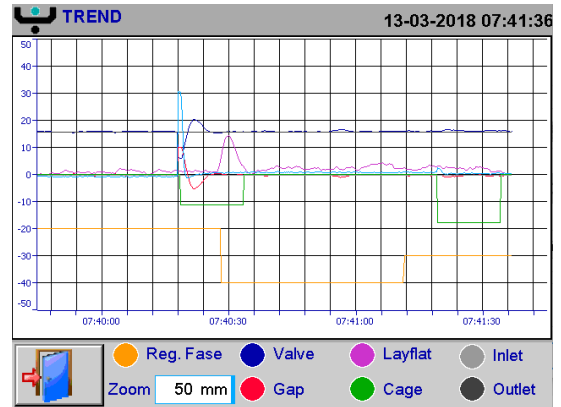
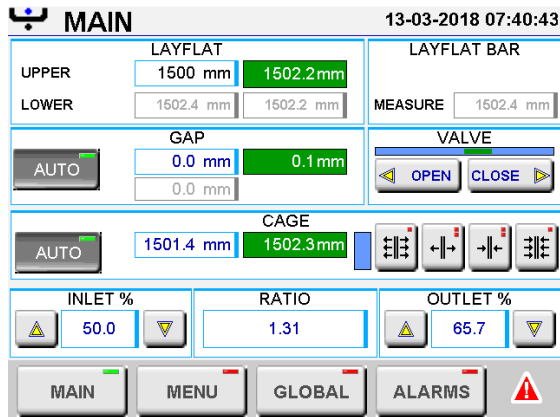
OEM or BOX VERSION

Syibc can be supplied in a stand alone BOX or wired on a panel integrated in the SYNTROL cabinet or OEM cabinet.

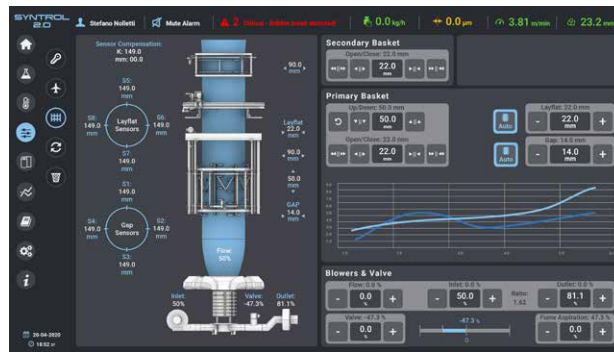
INDUSTRY 4.0 & IOT

The Syibc control cabinet is equipped with PLC & PC ready OPC-UA protocol for industry 4.0.

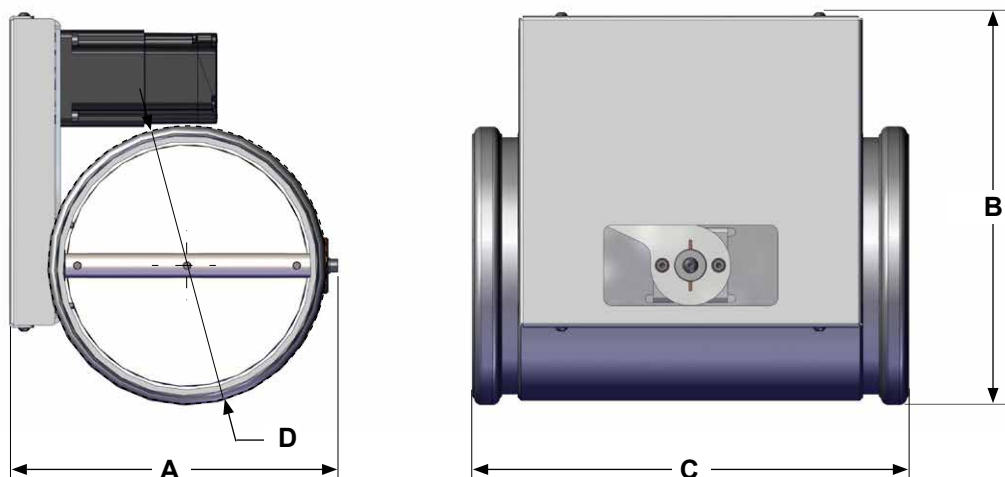
TECHNICAL DATA



With the OEM version, Sybco is integrated in the cabinet of the Syncro supervisory system with a dedicated operator page



SYBIC VALVES DIMENSIONS



Model	A (mm)	B (mm)	C (mm)	Ø D (mm)
Valve Ø 100	144	229	271	100
Valve Ø 160	204	244		160
Valve Ø 200	244	280		200