



skymex

Thickness gauge for blown extrusion

NON-CONTACT SKYMEX is a capacitive thickness gauge for blown film extrusion lines. It guarantees a continuous and accurate measurement of the film thickness profile and is installed on a patented triple movement telescope.

PRINCIPLE OF OPERATION

The dielectric characteristics of the measured film produce a signal variation proportional to the film thickness. The capacitive sensor is mounted in the centre of the beam, the oscillatory rotation of the system around the bubble and the reading of the angular position allow a circumferential profile of the thickness over 360° to be generated.



MAIN FEATURES

PATENTED TRIPLE TELESCOPIC SYSTEM

The triple telescopic system is built with a patented precision mechanism (Patent WO2015/155621) and is positioned on two motorized trolleys that generate the movement around the extruded bubble.

MOTORISED MOVEMENT

SkYmex fulfils four basic requirements: rigidity, absence of vibration, wide radial measuring range and minimal overall dimensions during rotation. Thanks to the passive beam and the two motorized carriages that synchronize during rotation, the sensor is kept in the center plane of the carriages regardless of the bubble diameter, guaranteeing wide BUR ranges.

WIDE MEASURING RANGE

Each SkYmex model can adapt to the bubble diameter up to a ratio of 4:1 between maximum and minimum diameter. Up to 3.5 metres of layflat is available thanks to the numerous construction sizes. For larger layflats, up to 14 metres, the SkYmex WIDE is available.

ULTRASONIC DISTANCE SENSOR.

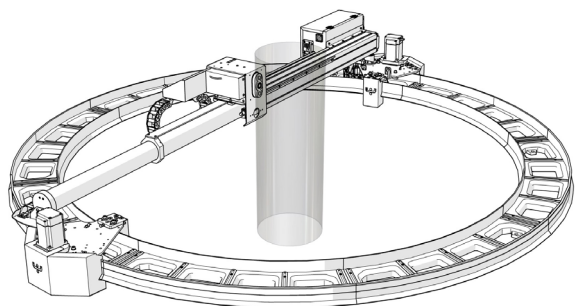
SkYmex is equipped with an ultrasonic sensor that ensures that the set distance between the sensor and the bubble is maintained.

INDUSTRY 4.0 & IoT

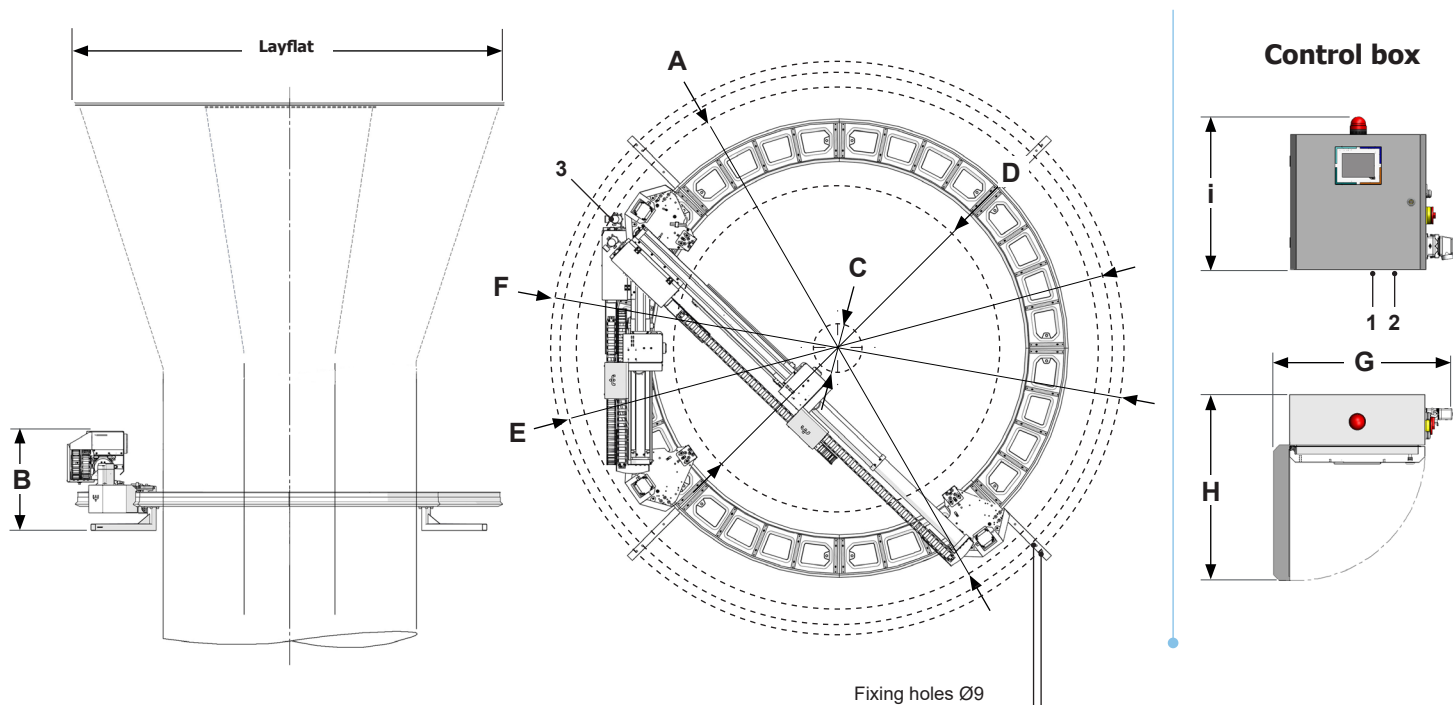
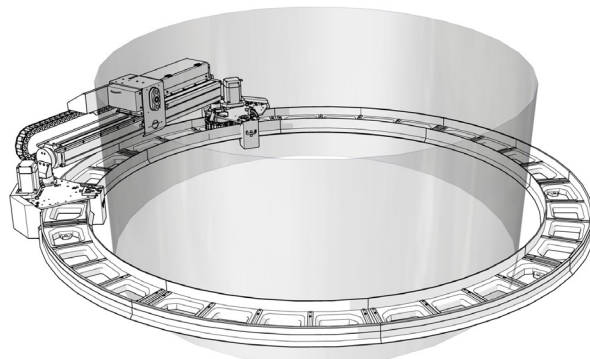
All SYncro machines are ready to be integrated with third party supervisory controls and ERP systems using the latest generation of OPC-UA protocols as standard.

TECHNICAL DATA

Minimum layflat



Maximum layflat



Model	Layflat (mm)		Ø A (mm)	B (mm)	Ø C (mm)*	Ø D (mm)*	Ø E (mm)	Ø F (mm)	G (mm)	H (mm)	i (mm)	Consume** (NI/h)	Power (kW)	Weight (kg)
	min*	max*												
1900	v1	250	2200	600	155	1235	2490	2580	660	685	565	350	0,5	150
	v2	350			215	1300								
	v3	440			275	1340								
2750	v1	260	2850	620	165	1835	3140	3230	660	685	565	350	0,5	200
	v2	360			225	1900								
	v3	450			285	1940								
3500	v1	775	3550	620	470	2050	3715	3805	660	685	565	350	0,5	250
	v2	875			530	2115								
	v3	965			590	2155								

* Indicates the cold film, during processes the diameter could be increased up to 5%.

1_ Communication interface; 2_ Power supply;