



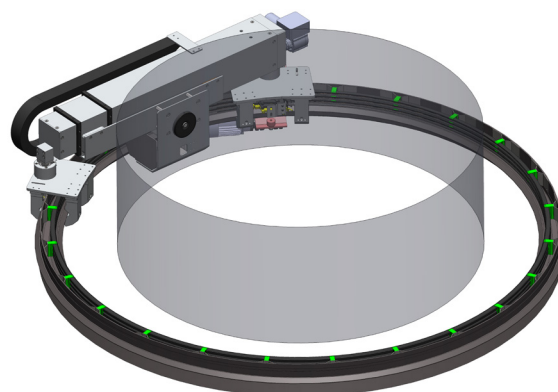
# SKYMEX

## Capacitive Gauging System for Blown Film Lines

**SKYMEX** is a contact thickness gauge for blown film lines. It provides a continuous thickness measurement around the bubble and is installed on an patented positioning device with an oscillating ring connected to an auto profile control.

### PRINCIPLE OF OPERATION

**SKYMEX** is based on capacitive technology. Dielectric characteristics of the film that is in contact with the sensor, produce a variation of the signal proportional to the film thickness.



### MAIN FEATURES

#### PATENTED TRIPLE TELESCOPIC SYSTEM

The triple telescope is based on a movement mechanism that makes the positioning of the sensor precise and safe, overcoming the common stability problems of classic systems on the market (Patent WO2015/155621).

The telescopic beam on which the sensor is mounted is positioned on two carriages that move simultaneously around the extruded bubble.

Skymex meets 4 fundamental requirements of the designers: rigidity, absence of vibrations, large radial measuring radii and minimum overall dimensions during rotation.

Skymex has no radial overhang and no intermediate "junctions" between the bogies.

#### BELT FREE MOTION

Movement is "belt free" so no maintenance or belt replacement is required.

#### DIFFERENT SIZES

SKYMEX is available in different sizes up to 14 mt lay flat.

#### BIG MIN-MAX RATIO

Thanks to its patent triple telescopic device oscillating ring SKYMEX is able to guarantee 4 ÷ 1 ratio between minimum and maximum bubble diameter.

#### ULTRASONIC DISTANCE SENSOR

SKYMEX is equipped with an ultrasonic sensor for keeping the distance from sensor to bubble always constant.

#### 360° ENCODER BAND

SKYMEX is equipped with a 360° encoder band which allows to know the angular position with the maximum precision.

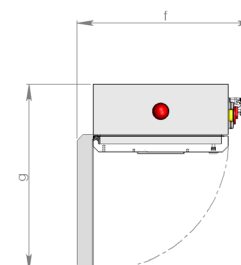
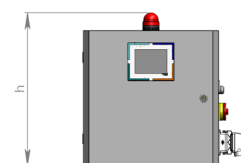
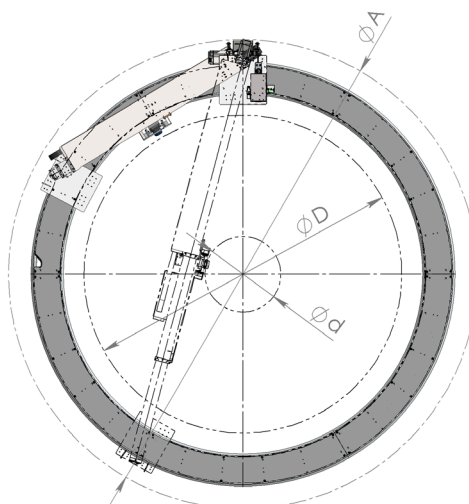
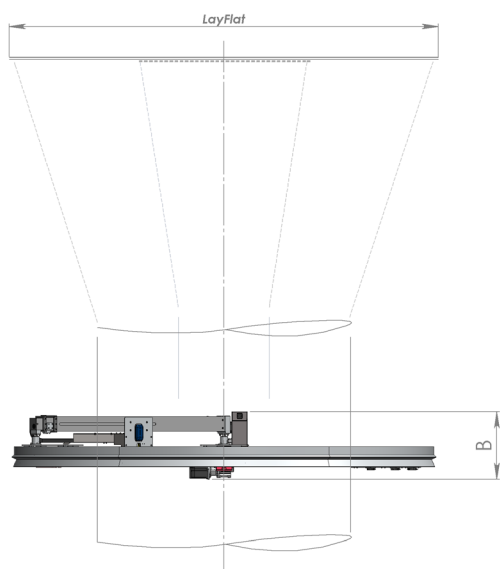
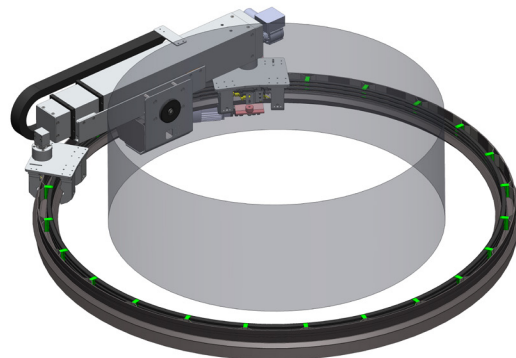
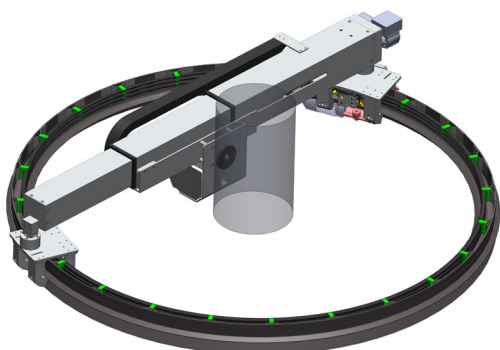
#### 360° ROTATION SYSTEM

As option SKYMEX can rotate continuously at 360° in one direction thanks to a powered rail and an industrial Wi-Fi.

#### 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



Model	Dimension Ø A (mm)	Dimension B (mm)	Dimension Ø d (mm)*	Ø D (mm)*	LayFlat		Power (kW/h)	Weight (Kg)	f (mm)	g (mm)	h (mm)
					LF min*	LF max*					
250-1650	2475	500	159	1050	250	1650	0,5	130	660	255	435
450-1900	2475	500	287	1210	450	1900		150			
500-2550	3125	500	318	1623	500	2550		175			
700-2800	3125	500	480	1750	750	2750		200			
875-3500	3470	500	557	2228	875	3500		250			
1125-4500	4245	500	716	2865	1125	4500		300			
1400-5600	5050	658	891	3565	1400	5600		360			
1800-7200	6220	658	1146	4584	1800	7200		520			

\* indicates the cold film, during processes the diameter could be increased up to 5%