



optyscan

Optical sensor Gauging System

OPTYSCAN represents the latest technology on the market in film thickness gauging. Thanks to its compact design and the same film side sender / receiver reading allow the installation on the chill roll frame. The extrusion lines will benefit from these characteristics resulting compact and the gauging being very close to the die head will guarantee a fast feedback and control particular appreciated during the start-up process.

PRINCIPLE OF OPERATION

Optyscan uses NIR (Near Infra-Red) technology. Its optical sensor is based on low coherence interferometry. The material is illuminated with a broadband near infrared light source; The optical head collects the reflection from upper and lower boundaries of the film and makes it possible to obtain the difference between the two measurements.



MAIN FEATURES

NIR TECHNOLOGY

NIR technology, based on the interferometer concept, avoid any certification needed for radioactive systems.

INCREASED ACCURACY

Optyscan has a 1 mm measuring spot with accuracy down to 0.1 micron. Precision of the measurement is improved and increased versus either IR, X-ray or Beta-ray which have measuring spots between 5 and 20 mm.

STABLE AND PRECISE

Thanks to the installation on the casting unit, Optyscan won't suffered any vibration that will affect the measurement and the quality of the measurement is kept the same independently of the film movement.

LIMITLESS PERFORMANCES

The system guarantees an absolute thickness gauging and doesn't need any calibration once set up.

COMPACT AND VERSATILE

Optyscan is backscatter so it doesn't need any receiver; Due to that it's installation directly on to the casting unit enable the length of the line to be reduced by about 2-3 meters saving space, frame structure and rolls.

FAST START UP

Thanks to the unique installation on the chill roll Optyscan will guarantee a faster response in auto profile control due to its proximity to the die, especially during start-up where each meter of film extruded is important.

EASY ACCESS FOR MAINTENANCE

Optyscan has been designed to guarantee easy access for maintenance operations.

PROCESSES

Optyscan can be used on different process such as stretch film lines, non-woven lines, BOPP lines, coating lines, Blown film lines.

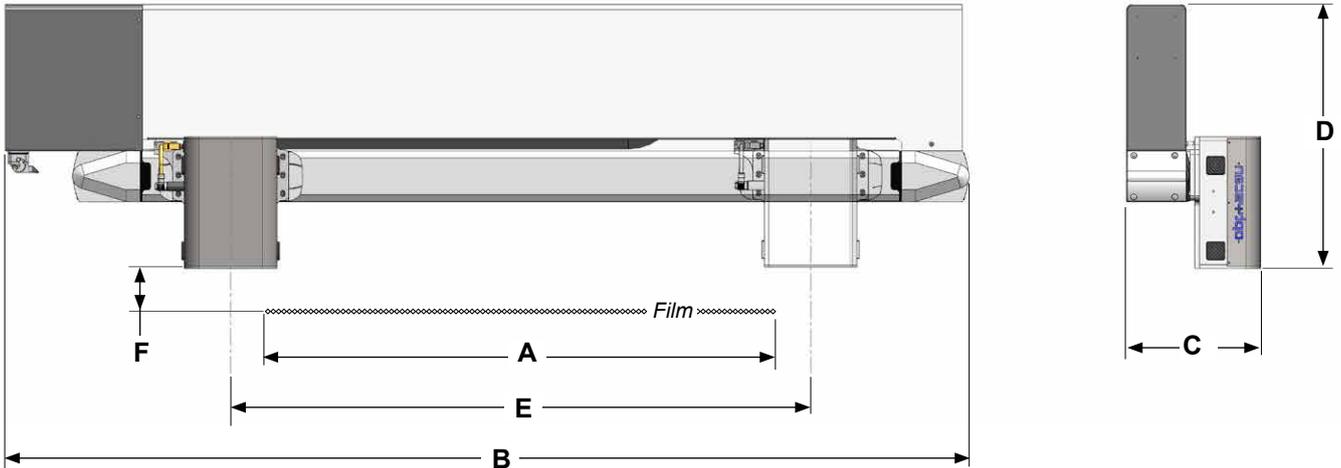
SYNTROL CONTROL

Optyscan is equipped with Control cabinet along with PC touch screen, keyboard, mouse and printer.

INDUSTRY 4.0 & IoT

Optyscan is equipped with PLC integrated with OPC-UA protocol for industry 4.0.

TECHNICAL DATA



Model	A max Film width (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Power (kW)	Weight (kg)
1100	1100	2077	290	740	1250	2,3	70
1300	1300	2277			1450		73
1500	1500	2477			1650		78
1600	1600	2577			1750		80
1700	1700	2677			1850		82
1800	1800	2777			1950		85
1900	1900	2877			2050		87
2100	2100	3077			2250		90
2300	2300	3277			2450		95
2500	2500	3477			2650		105
2700	2700	3677			2850		120
2900	2900	3877			3050		135
3100	3100	4077			3250		150
3300	3300	4277			3450		165
3500	3500	4477			3650		180

Optical sensor model	EP1	EP2	EP3	EP4
Thickness measuring range (n=1,5)	5-100 μm	20-380 μm	0,05-1,8 mm	0,15-4 mm
Resolution	< +/- 2 μm			