



rayxscan

X-Ray Gauging System

The **RAYXSCAN** uses the X-ray beam transmission principle through the material to measure its thickness, usually shown in μm or in g/m^2 .

OPERATING PRINCIPLE

An X-ray source is situated in a housing, while another housing contains the receiver and is positioned opposite the transmitter at a set distance (Gap). When a homogeneous layer of material is positioned between the transmitter and receiver, part of the energy emitted from the source is absorbed by the material. The missing part which is not captured by the receiver is directly proportional to the thickness of the measured film according to the properties of the material.



MAIN FEATURES

NON RADIOACTIVE

Following the EURATOM guidelines, RaYxscan is recognised as a radioactive resource exempt from the requirement for a safety certificate, since during its activity remains below 5 keV and it does not have doses above the minimum safe threshold.

SYNTROL CONTROL

RaYxscan is controlled by the SYNTROL supervisory system capable of visualisation, history and adjustments.

PROCESSES

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

LIMITLESS PERFORMANCE

The measurement is not influenced by the color or the transparency of the material.

HEAVY DUTY STRUCTURE

The heavy duty engineering offers excellent resistance to bending of the main frame and guarantees perfect measurement stability.

EASY ACCESS FOR MAINTENANCE

The RaYxscan has been designed to guarantee easy access for maintenance operations.

FAST SET UP

The average start up is done in less than 2h.

STABLE AND PRECISE

Extremely stable and precise measurement: down to 0.02 micron of repeatability with a max. drift of 0.085 microns in 12h without standardization. Temperature stabilization of the scanning heads and real air gap compensation is readied through an inductive sensor.

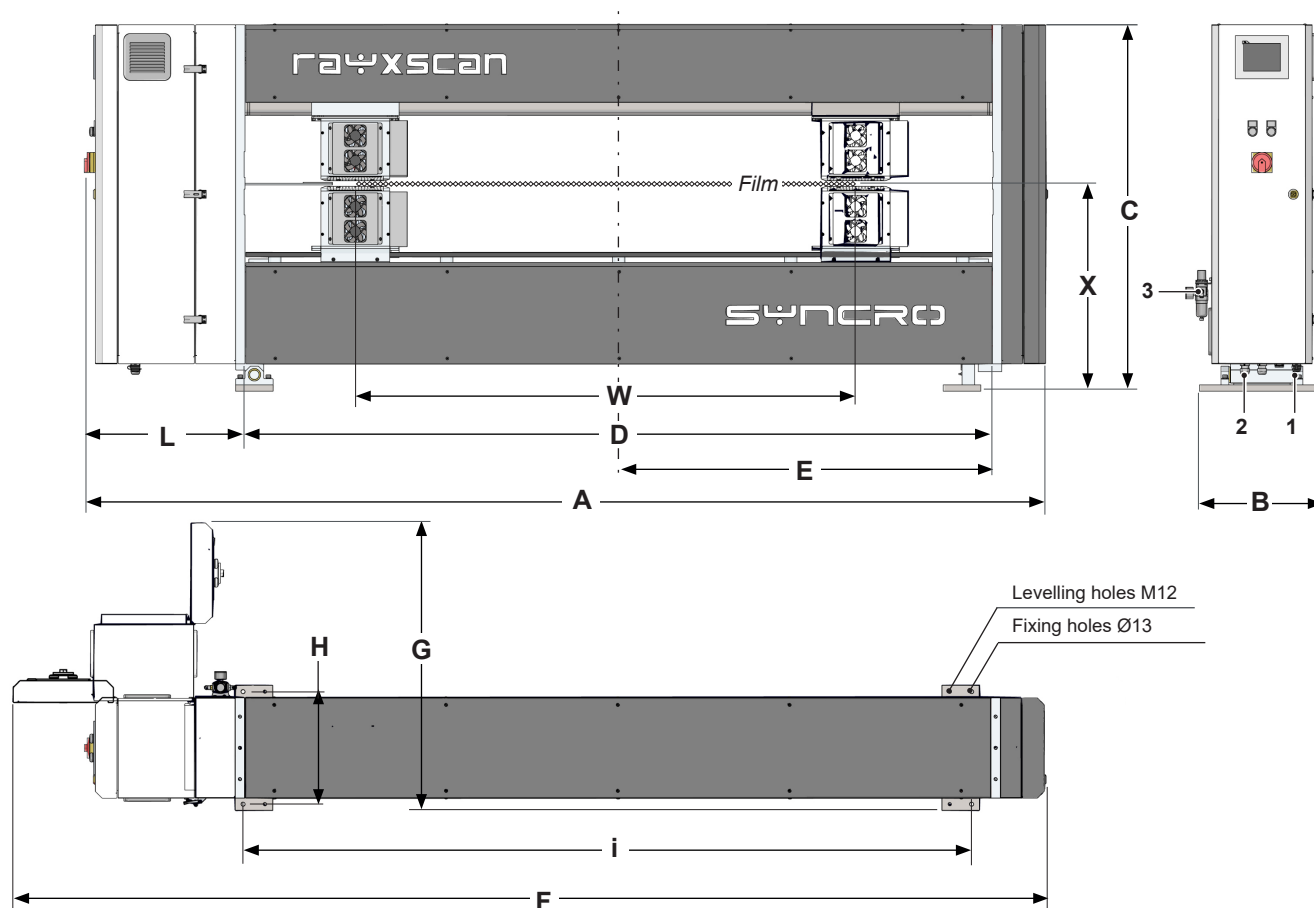
AUTO PROFILE CONTROL

As option RaYxscan can be connected to SYNTrolgauge to control automatically the thermal bolts used on flat dies or automatic air ring on blow film lines to regulate the film/sheet profile.

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	W max Film width (mm)	X h. Film (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	i (mm)	L (mm)	Max Thickness (µm)	Power (kW)	Weight (kg)
1000	1000	663,5	2460	400	1200	1790	855	2677	945	360	1733	504	500	0,8	445
1200	1200		2580			1910	915	2797			1853				465
1400	1400		2820			2150	1035	3037			2093				505
1600	1600		3060			2390	1155	3277,5			2333				540
1800	1800		3180			2510	1215	3397			2453				565
2000	2000		3420			2750	1335	3637,5			2693				600
2200	2200		3680			2990	1455	3897			2933				650
2400	2400		3800			3110	1515	4017			3053	514			670
2600	2600		4040			3350	1635	4257			3293				710
2800	2800		4280			3590	1755	4497			3533				750
3000	3000		4400			3710	1815	4617			3653				770
3200	3200		4640			3950	1935	4857,5			3893				825
3600	3600		4880			4190	2085	5097			4133				850
4000	4000		5480			4790	2355	5697			4733				950
4400	4400		5840			5150	2535	6057			5093				1010
4800	4800		6200			5510	2715	6417,5			5453				1065

1_ Communication interface; 2_ Power supply; 3_ Compressed air inlet.