



Yronflat

Stand Alone Annealing System for Film extrusion lines

YRONFLAT is an automatic flattening unit which heats and stretches the blown film, annealing it to improve flatness, bagginess, camber and curl caused by irregularities in gauge, melt temperature, cooling and/or mixing, surface scratching and stretching in the collapsing frame, non-optimal vertical and horizontal bubble stability, mechanical contact with the collapsing frame guide rollers. Yronflat significantly improves the performance of the downstream equipment in respect of printing, lamination quality and speed, but it has no negative influence on the thickness profile of the film.



PRINCIPLE OF OPERATION

YRONFLAT heats the film then stretches it permanently between 1-3% in machine direction and is then subjected to carefully controlled cooling, using four individually motorized and thermoregulated rollers.

MAIN FEATURES

STRETCH GAP ADJUSTABLE BY SOFTWARE

You can choose the stretching value by setting the speed of the motorized rollers and the speed and space of the deformation by adjusting the distance between the rollers that stretch the film. All the process parameters (speed and distance) can be set from the control panel or recalled, after saving, from the working recipe.

THERMO-REGULATED MOTORISED ROLLS

Yronflat has 4 motorised rollers thermoregulated through water and temperature control units. The temperature and speed of the rollers can be set independently to guarantee maximum flexibility in the regulation of heat treatment and film elongation.

SEMI-AUTOMATIC WEB THREAD-UP

Yronflat is equipped with a motorized chain system to simplify the passage of a traction rope of the film between the rollers during start-up.

VERTICAL OR HORIZONTAL INLET & OUTLET OF THE FILM

Yronflat provides for free film entry and exit direction (both vertical and horizontal) to offer high flexibility of machine installation in the extrusion line.

BYPASS

Yronflat provides a by-pass path outside the unit itself when the film does not require treatment.

EASY INSTALLATION

Yronflat is positioned and installed downstream of the take-off on existing lines without the need for any invasive intervention on the line.

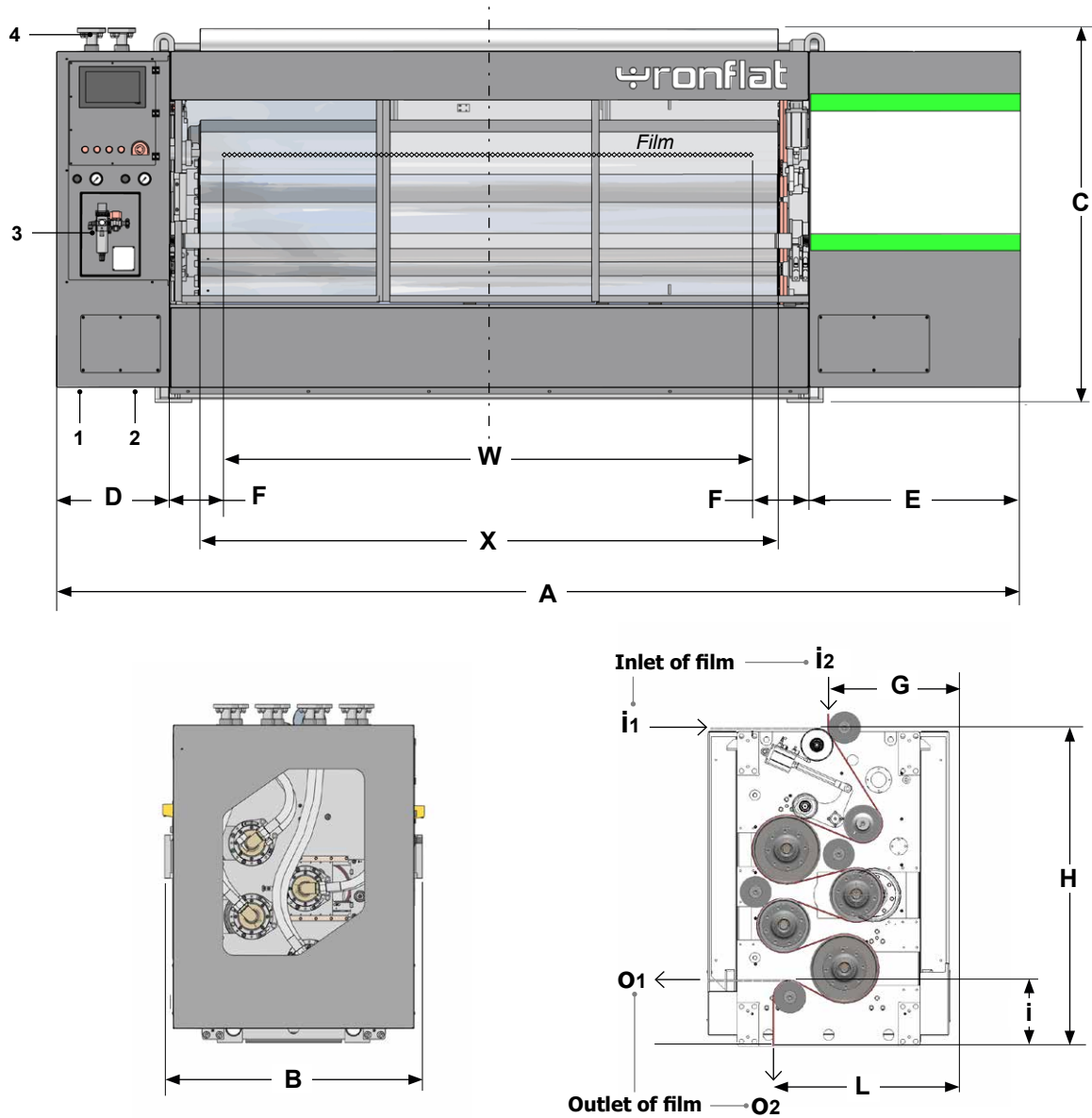
EASY INSTALLATION

Yronflat has no negative influence on the thickness profile of the film and is not intended to improve it.

INDUSTRY 4.0 & IoT

Yronflat is prepared with OPC-UA protocol for Industry 4.0.

TECHNICAL DATA



Model	W Max film width (mm)	X (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	i (mm)	L (mm)	Motor Power (kW)	Thermal Power (kW)	Max line speed (m/min)	Weight (kg)
1200	1200	1400	3000	1200	1550	470	880	225	595	1495	340	850	18	45	240	2725
1400	1400	1600	3200										21			3050
1600	1600	1800	3400										24			3350
1800	1800	2000	3600										27	3700		
2000	2000	2200	3800										31	4000		
2200	2200	2400	4000										34	4300		
2400	2400	2600	4200										37	4625		
2600	2600	2800	4400										40	4950		
2800	2800	3000	4600										43	5250		
3000	3000	3200	4800										46	5575		

1_ Communication interface; 2_ power supply; 3_ compressed air inlet.; 4_ hydraulic connection