



# 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.

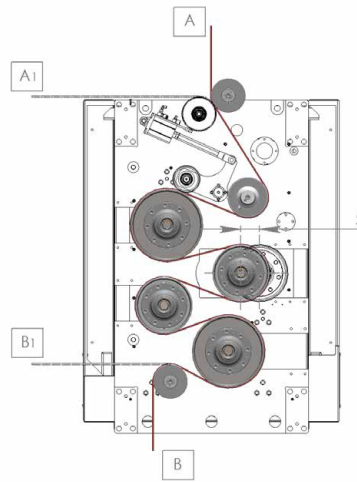
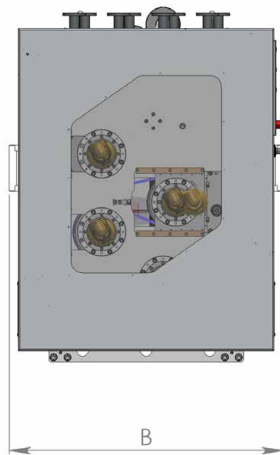
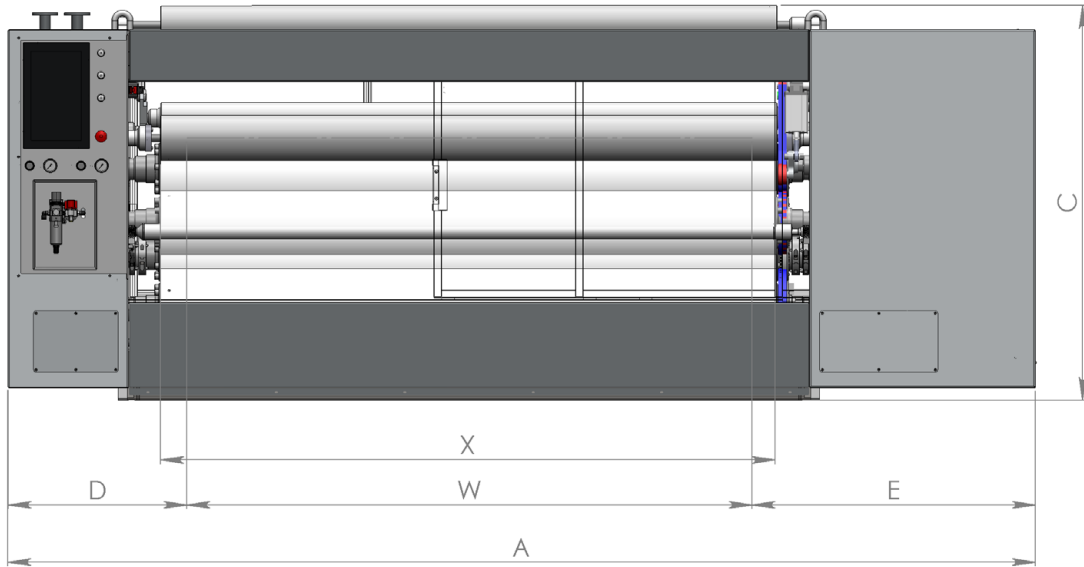
#### EASY INSTALLATION

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



	Y1200	Y1400	Y1600	Y1800	Y2000	Y2200	Y2400	Y2600	Y2800	Y3000	
<b>W (mm)</b>	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	
<b>X (mm)</b>	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	
<b>A (mm)</b>	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	
<b>B (mm)</b>	1200										
<b>C (mm)</b>	1550										
<b>D (mm)</b>	700										
<b>E (mm)</b>	1100										
<b>Motor Power (kW)</b>	18	21	24	27	31	34	37	40	43	46	
<b>Thermal Power (kW)</b>	45			72				90			
<b>Weight (Kg)</b>	2725	3050	3350	3700	4000	4300	4625	4950	5250	5575	
<b>Max. line speed (m/min)</b>	240										
<b>Inlet of film</b>	A - A1										
<b>Outlet of film</b>	B - B1										