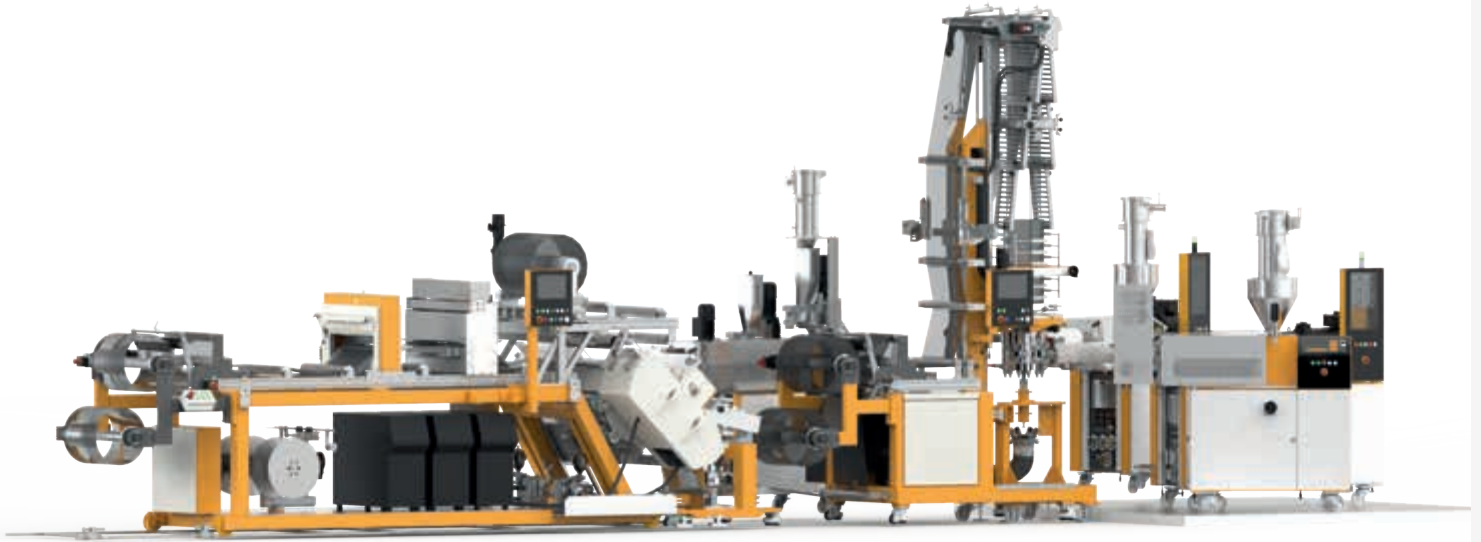


**PILOT<sup>®</sup>LINE**

Extruders  
Calenders  
Blown film lines (air-cooled)  
Blown film dies and cooling rings  
Flat film lines

Flat film dies and feedblock  
Multifunctional lines  
Stretching lines  
Blown film lines (water-cooled)  
Winders



Pilot Line lines are used for pilot tests and upscaling but also for the production of special products.

## Extruders T

E 25 T, E 30 T



The high-speed machines of the Type T extruder series unite the advantages of Type P, however, due to the strongly increased speed at a high drive torque, the output is essentially higher. Especially the development of the screw geometry and the feeder for the high-speed machine required enormous technical competence.

## Calenders

**CL 168/250/250-800 P, CL 168/250/250-1000 P, CL 200/200/200-600 H, CL 200/200/200-800 H, CL 300/300/300-800 H, CL 300/300/300-1000 H, CL 300/300/300-1200 H**

Calenders are used for the continuous production of semi-finished, thermoplastic films or the continuous finishing of different films and surfaces. An extremely variable, modular system allows for adapting calender units to a wide range of requirements.

They are suitable for the production of films and platens with many different types of layer thickness made from various polymer materials as well as for the production of films with extremely low wall thickness tolerance.

Collin calenders are used in the finishing of films and sheets by lamination or contact lamination. The finishing calenders are used for smoothing thick-walled films or sheets, or for embossing, coating and laminating. Gap measurement is the standard for Collin calenders and gap regulation is optional. All of the three rolls are individually powered by servo motors, thus rotation speed frictions can be adjusted. For easy processing, the heavy calender unit can be optionally moved via air cushion. The roll heating control is either done with oil up to 350°C or with water up to 150°C (medium temperature).



## Blown film lines (air-cooled)

**BL 600 P, BL 800 P, BL 1000 P**

Blown film lines of Collin are used in various ways: Production of multi-layer films as well as the production of film hoses in the food and medical sector.

The modular system of Collin allows for the configuration of lines with 13 layers and matching screw diameters. The machines can be equipped with melt pumps or gravimetric dosing to ensure that the necessary wall thickness proportions are observed.

Collin blown film towers have exchangeable frames for layflat (e.g. carbon rolls, wooden slats etc.) and fit the modular concept. A huge advantage is the height adjustment for the take-off rolls of the blown film tower. This way, it is possible to individually deal with the cooling characteristics of the polymer. Fundamentally, the lines allow for an enormous range of features such as thickness measurement, annealing tank, corona, camera and edge cutting.





## Blown film dies and cooling rings

**RW 80, RW 120, RW 160**

### Blown film dies

Multi-layer dies for 2 up to 13 layers are suitable for many different numbers of layers. For these processes, Collin provides dies with radial spiral mandrel distributors and matching mandrels and female dies.



- ▶ Optimised distribution design provides highest layer thickness constancy across the circumference.
- ▶ IBC (inner bubble cooling) is optionally possible.
- ▶ Fully linear, constant bubble volume control (LBVC), allowing for big diameter variability as well as high-precision regulation of the bubble volume control.
- ▶ Easy retrofit between different layers – e.g. from 3 layers to 5 layers.
- ▶ Very good thermal decoupling of the layers

### Cooling rings

Collin cooling rings have the following special features:

- ▶ Very good flow distribution
- ▶ Compact design
- ▶ Modular and exchangeable inserts

## Flat film lines

**CR 400/168/168-600 P, CR 400/168/168-800 P, CR 400/168/168-1000 P,  
CR 800/300/300-600 P, CR 800/300/300-800 P, CR 800/300/300-1000 P, CR 250/250-600 P,  
CR 250/250-800 P, CR 250/250-1000 P, CR 250/250-600 P**



Flat film lines are particularly used for the production of films or sheets with a variety of options for smoothing, embossing and laminating.

- ▶ Take-off speed up to 200 m/min
- ▶ Roll position mutually adjustable in x and y direction
- ▶ Good accessibility

## Flat film dies and feedblock

**BSD, FB 80/3, FB 80/5, FB 80/7, FB 80/9, FB 80/11, FB 80/13, FB matrix**

### Flat film dies BSD

- ▶ Manually adjustable gap via differential screw
- ▶ Coat hanger distributor
- ▶ Prepared for co-extrusion
- ▶ Automatic die gap setting optionally possible
- ▶ High variability of die width -> 50 mm width grading
- ▶ High temperature version possible up to 450°C incl. lip and side jaw heating
- ▶ Multi-layer die



### Feedblock Type 80

- ▶ The flow-optimised feedblock represents excellent layer thickness distribution
- ▶ Extremely compact design and shape
- ▶ Very short purging times allow for quick material change
- ▶ Width 80 mm up to 13 layers



## Multifunctional lines

**MF 800 P, MF 1000 P**

Multifunctional coating lines are used in the packaging sector, helping to produce multi-polymer composites with carrier materials such as paper, textile, fleece or aluminium. The system allows for integrating different additional devices, e.g. corona pre-treatment, application of glue, IR-oven or further unwinders.

Custom-made solutions can be delivered for the following applications:

- ▶ Flat film extrusion
- ▶ Smoothing – Embossing
- ▶ Extrusion coating
- ▶ Laminating
- ▶ Take-off speed up to 200 m/min
- ▶ Roll position mutually adjustable in x and y direction.
- ▶ Good accessibility

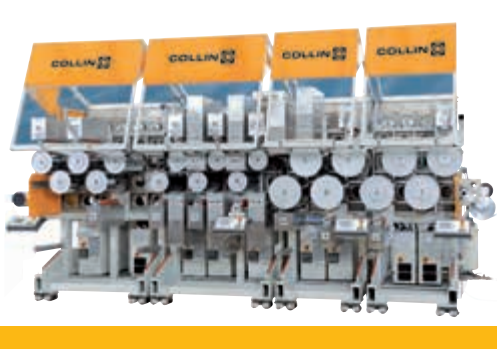
Exemplary dimension:

LxWxH = 15.000 x 7.000 x 8.800 mm



## Stretching lines

**MDO single 800, MDO single 1000, MDO dual 800, MDO dual 1000**



The stretching of polymer films improves their characteristics in a variety of ways. Collin stretching lines consist of an extrusion group, the stretching unit, take-off and winder.

These lines are used for quality control and the development of new products and processes. They can also be used in the production of narrow films. The machines also show high variability by the option of one or two stretching gaps. The film can easily be pulled in due to the compact design.

## Blown film lines (water-cooled)

**WBL 600 P, WBL 800 P, WBL 1000 P**

These lines are designed for the production of films. The radial spiral mandrel distributor provides an accurate thickness distribution, the vertical extrusion into in a water cooling ring guarantees optimal transparency of films.



## Winders

**W 600 E central, W 800 E central, W 1000 E central, W 600 E contact,  
W 800 E contact, W 1000 E contact, W 600 E gap, W 800 E gap, W 1000 E gap,  
W 600 P, W 800 P, W 1000 P, W 600 T, W 800 T, W 1000 T**

Winders are available in many different designs, and all winders are designed for the respective web speed:

1. Simple contact or central winder (with or without roller way)
2. Winder centrally powered by a lay-on roller
3. Winder with contact slide: there are three options of winding with this winder unit – central winding, contact winding with adjustable pressure and gap winders with an adjustable gap (0 - 30 mm)
4. Turret winder



## PILOT<sup>®</sup>LINE

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