

EXTRUSION LINES



Laboratory machines for the processing of polymers

Blown Film Unit Type 180

The high performance unit for development work, production control, and small scale production



From polymer to information

BLOWN FILM LINE TYPE 180

Application

In development work: For approval of the suitability of polymers or polymer blends. To check the maximum stretchability of polymers and their characteristics.

In production control: For approval of specks and pigments dispersion as part of incoming inspection. In batch production for checking the dispersing efficiency of the compounder or extruder.

In production: For production of small diameter film tubes, which would be uneconomic to produce on large production lines. For example the production of thin tubes for food packaging, wrapping etc.

Blown Film Die

Main part of the blown film die is the centrally fed spiral melt distributor, combined with the cooling ring – high air stream, perfect distribution – does grant small thickness tolerances.

Blown Film Unit Type 180

Central Telescope Column

The main part of the equipment is the **telescope column** which allows the take-off rolls to be moved up and down over a distance of approximately 1000 mm or 1500 mm.

This design makes it possible to set the blowing line in optimum accordance to the room height and the extruder position.

Rails at the front side of the column allow free, stepless positioning and supporting of the die, the cooling ring and the calibration ring.

Bubble support / calibration

To stabilize the bubble a hand operated support can as an option be substituted with centrally adjustable calibration.

Lay flat unit

The blown film is collapsed by means of adjustable wooden slats. As an option easy running PTFE-coated roller-stacks can be delivered.

Take-off

The nip rollers consist of one rubber-coated pneumatically adjustable roll and a chromium-plated coolable roll. They are mounted on top of the central column. Both rollers are driven via gears by a geared servo motor directly attached to the nip rolls.

Winder

The film wind-up is designed with wind-up shaft and bobbin holder. The film wind-up unit is offered as surface and/or central winder.

Base

The film blowing line also accommodates the blower for the cooling air as well as control valves for inflation air and furthermore, the electric control cabinet with the control elements for the take-off and wind-up.

The control of the haul-off and wind-up unit as well as the control of the supporting and cooling air are positioned at the central column in a way for easy operation.

Special equipment

- Dual-lip cooling ring
- Tubular film guiding support with central adjustment
- Automatic lay flat width control
- Side edge slitting device
- Additional haul-off unit
- Second winder
- Winder for winding without cone
- Oscillating unit
- Blown film breaking control
- Cooling machine
- Film inspection system



Blown Film Unit used for production control with automatic adjustment of lay flat width and special winder for winding without cone.

Blown Film Line Type 180 / 400

consisting of:

- Extruder 30 mm \varnothing x 25 D with ECS-microprocessor control,
- Blown Film Die with a diameter of 60 mm with Dual-lip cooling ring,
- Blown Film Unit 180 / 400 with centrally adjusted calibration and lay flat unit with closed loop control.



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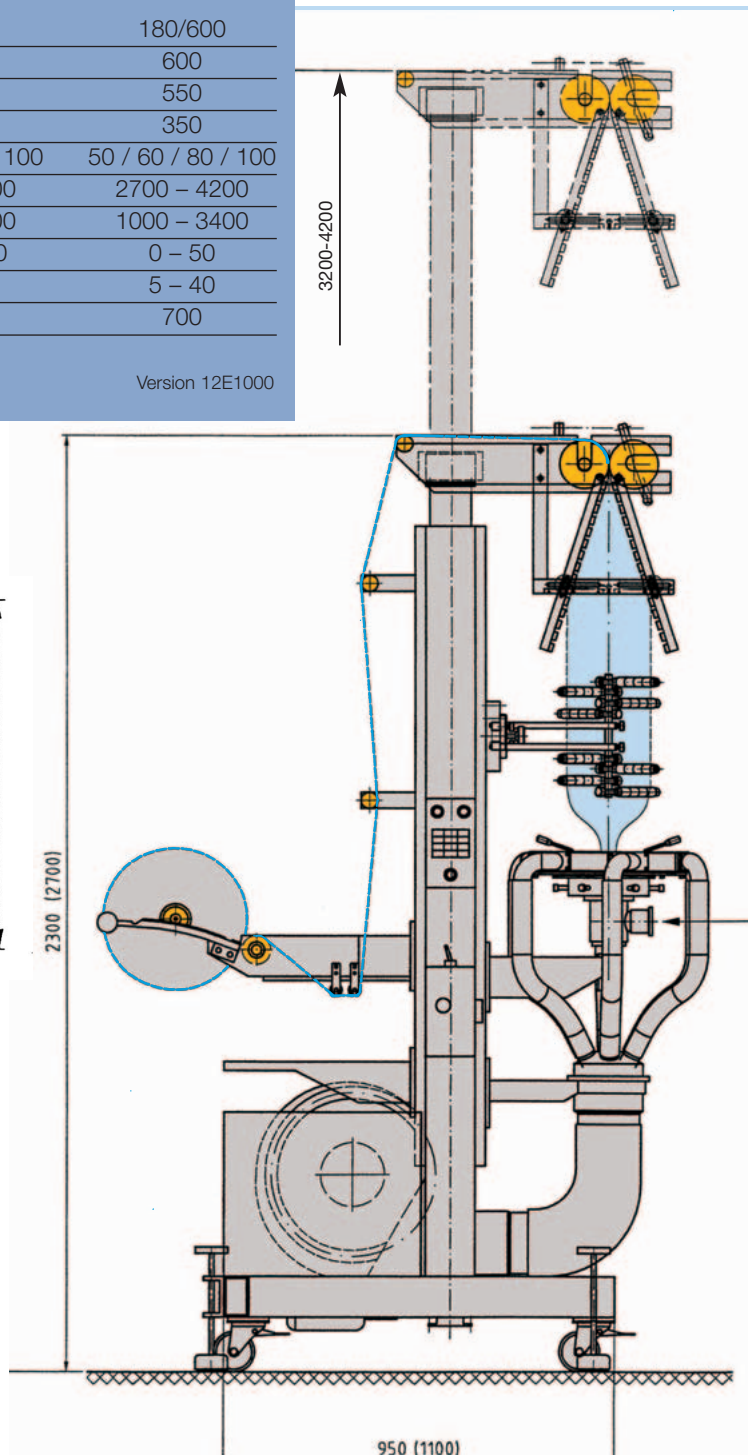
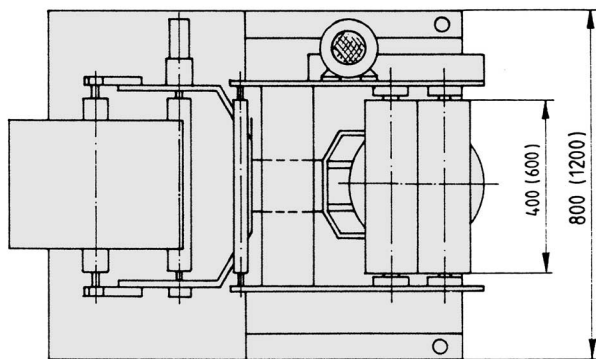
Technical Data

Type		180/400	180/600
Roll width	(mm)	400	600
Lay flat width	max. (mm)	380	550
Bubble diameter	max. (mm)	240	350
Die diameter	(mm)	50 / 60 / 80 / 100	50 / 60 / 80 / 100
Total height	(mm)	2200 – 3200	2700 – 4200
Cooling height over die	(mm)	1000 – 2400	1000 – 3400
Take-off speed	(m/min)	0 – 12 / 30	0 – 50
Throughput	max. (kg/h)	2 – 20	5 – 40
Weight (without extruder)	(kg)	450	700

Technical data subject to change

Version 12E1000

Dimensions



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