

# Blown film take-off unit Downstream equipment for lab-scale film extrusion

Brabender: Blown film take-off unit



# Blown film take-off unit

The blown film take-off unit is used in combination with an extruder and a film blowing die head for simultaneous inflation, cooling, flattening, take-off and winding of an extruded film tube.

This device supports the testing of input materials or processing behaviour of new recipes. Application options exist in final material testing and in quality control during production. It is suitable for thermoplastic elastomers and biopolymers, polyolefins and engineering plastics such as polyamide.



Photo: Film blowing die head

## Technical data

- Maximum height: 3200 mm
- Number of Nip rolls: 2
- Dimension of the Nip rolls: 84 mm Ø, 321 mm long
- Material of the Nip rolls: Hard paper winding sleeve
- Winder: 50 mm Ø \* 300 mm long
  
- Dimensions (H x B x T): 880 x 3200 x 978 mm
- Mains connection: 3 x 400 V, 50/60 Hz + N +PE, 16 A



## Highlights

### Comprehensive setting parameters:

- Exact adjustment of the tube diameter via reproducible setting of inflated air
- Optional control of the flattened film width by ultrasonic measuring system
- Adjustment of the film thickness by control of take-off speed, blow-up ratio, bubble height
- Adjustment of the height of the roller assembly to the material and film thickness by means of an electric lifting column, thus enabling a wider range of film thicknesses to be produced
- Adjustable angle of inclination of the flattening device to different foil diameters
- Adjustable annular gap of the film blowing head (thereby influencing the „frost line“ – transition from plastic to solid state)
- Adjustable take-off speed and supporting air

### User-friendly:

- Touchscreen with MetaBridge software for more user-friendly control, including more precise setting of parameters (working height, winding torque, cooling air)

### Scalable concept:

- Optional installation of a camera system for film quality analysis
- Optional ultrasonic sensor for film width measurement and control