

Brabender® Twin-Screw Compounder B-TSE-A 20/40

20 mm twin-screw extruder attachment
for stationary MetaStation drive units



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Brabender Twin-Screw Compounder B-TSE-A 20/40

The Twin-Screw Compounder B-TSE-A 20/40 is an electrically heated, co-rotating twin-screw extruder (Ø 20 mm) as a measuring attachment for the MetaStation 8/8E and 16 drive units for compounding small quantities of material and additives on a laboratory scale.

With the appropriate die and screw configuration, the extruder is used, among other purposes, for the production of round strands, ribbons, sheets, profiles, round rods, cables, pipes, as well as blown and flat films on a laboratory scale for quality control, material and recipe development.

With a wide temperature range, high torque density, as well as multiple feeding options, this extruder is versatile in applications including plastics, rubber, and food and feed.

Specifications

- Screw diameter: 20 mm
- Barrel length: 40 D
- Throughput: 0,5 - 20 kg/h
- Materials: Pellets, powders, fibres, liquids
- Screw speed max: max. 200 min⁻¹ (MetaStation 8 / 8E), with intermediate gear unit max. 800 min⁻¹ max. 400 min⁻¹ (MetaStation 16), with intermediate gear unit max. 1200 min⁻¹
- Dosing openings: 0 D, 10 D, 20 D, 30 D (along the barrel), 12 D, 22 D (side dosing)
- Screw torque: 2 x 40 Nm
- Operating temperature: max. 400 °C
- Pressure: max. 300 bar
- Heating / cooling zones: 4 (electrically heated, water cooled)
- Power supply: 3 x 400 V, 50/60 Hz + N + PE, 32 A
- Dimensions (W x B x D, with feed hopper, without die head) : 1440 mm x 600 mm x 1320 mm
- Weight (without die head): 330 kg



The B-TSE-A 20/40 features an openable liner for optimum process monitoring and easy cleaning



B-TSE-A 20/40 with MetaStation 8

Highlights

Powerful

- Torque density of 40 Nm per screw
- High shear energy achieved with an OD/ID ratio of 1.43
- Up to 1200 rpm, depending on the selection of the drive unit
- Up to 300 bar of pressure

Flexible

- Processing of pellets, powders, fibres, liquids
- Up to 400 °C in 4 separately controlled temperature zones
- 4 feeding options (3 top / 2 side)
- Optional: integrated vacuum pump

Easy handling

- Clam shell design with an openable liner for process monitoring and easy cleaning
- Split L-liner with detachable upper and lower half
- Hygiene-compliant components in the area in contact with the product
- Stainless steel components for corrosion resistance and additional cleanability

Modular

- Compatible to all rheological stationary drive units of the MetaStation series (8, 8E, 16)
- Segmented screws with a wide range of different screw elements allow for applications specific configurations
- Exchangeable liner with different variants for high corrosion and/or high abrasion resistance
- Compatible to a very wide range of extrusion dies and downstream equipment, e. g. for conveying, cooling, pelletizing and winding up of the sample material

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