

"Long-die" production and pilot scale gear extruder

Designed to produce a dense, high quality extrudate with minimum heat generation.

The **Extruder 40** is designed for production use but suitable for process development and batch production.

Working capacity is suited to the Caleva production **Spheronizers 380** and **500**.

A comfortable working rate could be up to 40 kg/hour making the **Extruder 40** ideal for work where

production batches are a few hundred kilos and a dense, high quality extrudate is required.

The **Extruder 40** is equipment that uses a limited amount of floor space whilst being a powerful machine for production needs.





The wet mass is introduced into the void between two contra rotating gears forcing the product through the extrusion holes at the root of each gear tooth.

The extrudate exits from the center of each gear providing the best quality extrudate with a good surface finish suitable for pharmaceutical spheronization.

GEAR EXTRUDERS

- Higher level of compression than screen extruders.
- Best extrudate quality
- Best choice if higher extrusion pressures are required or the product is very sensitive to heat.

COMPANION EQUIPMENT

The Caleva Extruder 35 is suitable for use with the Caleva Spheronizers 380 and 500 models. A larger model is available and more suitable for the Spheronizer 700. Contact us for further information.

CONFIGURATION AND CONTROL

Supplied with a standard extrusion gear 1 mm diameter 4 mm deep drilled holes.

Manually loaded thorough a top-loading feed tray.
The extruded product falls directly into a collecting tray.

Product contact components are manufactured in 316 stainless steel, FDA approved PTFE and polypropylene.

OPERATIONAL REQUIREMENTS

- Minimal floor space requirements (about 1 m²).
- The equipment is easily moved between locations.

OUTPUT AND PRODUCTIVITY

■ Output is product dependant but rates equivalent to 40 kg per hour have been achieved.

OPTIONS

- Customer specific apertures in 0.1 mm increments can be supplied as required. Although we can make gear sets with very small apertures we do not currently recommend aperture sizes below 0.8 mm or above 2.0 mm in diameter on 95 mm diameter gears.
- A proximity switch can be placed so that the machine will not operate unless a collection bin is in place.
- A "Datastor" package to monitor and record operating parameters such as temperature of the product as it is extruded, power consumption, rpm during product processing is available.



We have several extruder options available and can make recommendations depending on your requirements. Please call our helpful team to find out more.

