



caleva

TECHNICAL SPECIFICATIONS

PRODUCTION

CALEVA

HIGH DENSITY GEAR EXTRUSION AND SPHERONIZATION SYSTEM

TECHNICAL SPECIFICATION



THE CALEVA PRODUCTION GEAR EXTRUDER 40

✓ DESCRIPTION

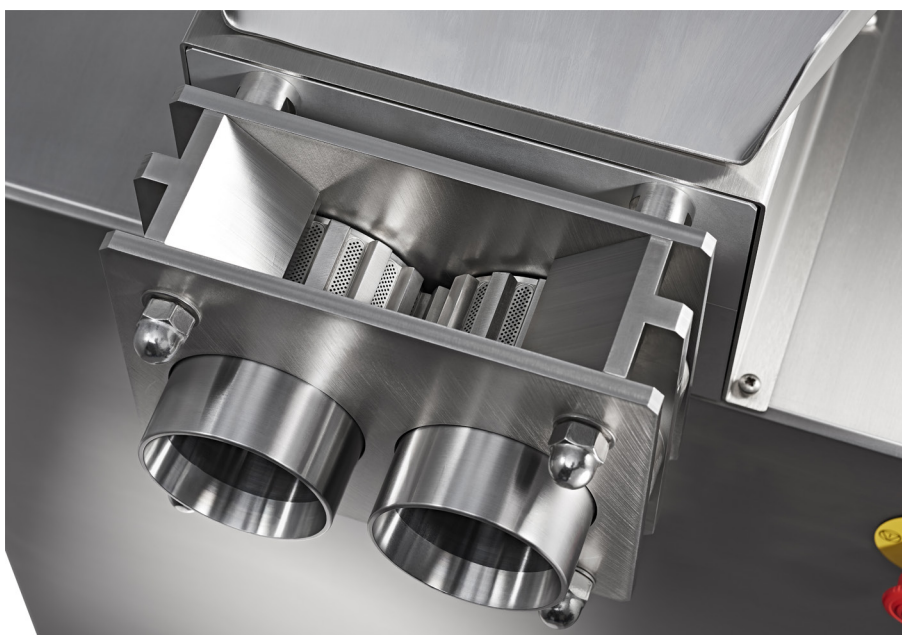
The Caleva Gear Extruder 40 is ideal for applications where a dense, high quality, extrudate is required. The 4:1 ratio (hole depth to hole diameter ratio) is designed to generate a high extrusion pressure with as little heat as possible. The amount of heat generated is a function of the product characteristics and the operating parameters but gear extruders are the extruder types that produce the highest pressures whilst generating the lowest level of unwanted heat

The Caleva Extruder 40 is suitable for product development, clinical work, pilot plant and full scale production.

✓ EXTRUDER CAPACITY

The extruder has a measured operating capacity of up to 1 kg per minute, (product dependent), with a minimum batch size of approximately 500g. Product capacity is dependent on both operational parameters and the characteristics of the formulation being extruded. The figure quoted may be exceeded or not reached.

Product development can be completed on the Extruder 40 saving investment cost.



HIGH DENSITY GEAR EXTRUSION AND SPHERONIZATION SYSTEM

✓ STANDARD CONFIGURATION

Mechanical

Size: Approx 860 mm d x 600 mm w x 980 mm h

Weight: Approximately 150 kg

Cabinet: Brushed Type 304 Stainless Steel

Product Contact Parts: 316 Stainless Steel and polycarbonate

✓ SUPPLIED STANDARD WITH:

○ **One standard set of extrusion:**

Nominally 75 mm internal diameter at the product outlet with holes 1 mm diameter x 4 mm deep. A range of gear hole diameters are available. Please contact us for details.

○ **Product Feed:**

Manual, loaded through top loading aperture placed at a convenient height for manual loading.



✓ ELECTRICAL AND CONTROL

Motor Power: 2.2 Kw AC motor. Motor speed infinitely variable

Electrical Supply: 400/500 V, 3-phase, 5.5 A, 50/60Hz,

Operation and controls:

Side panel mounted controls comprising stop, start, emergency stop, power connected indicator, motor running indicator, and a variable speed control with a digital display of rotation speed.

- **The Extruder 40 is supplied fully functional no additional options are required.**

✓ MANY CUSTOMERS WHO PURCHASE THIS PRODUCT ALSO PURCHASE

- **A full IQ/OQ completed at the Caleva site before shipment**

The IQ/OQ package completed at the Caleva site by us. The customer can attend if he or she wished to do so. An additional set of blank documents will be provided to allow the customer to re-do the IQ/OQ in their own facility if required.



THE CALEVA PRODUCTION & PILOT-SCALE SPHERONIZER 500

✓ DESCRIPTION

Designed for pilot scale and production spheronization. A floor standing, robust, production spheronizer with a production rate of up to about 60 kg per hour. Production rates are product and process dependent and may exceed or not reach this figure.

✓ OPERATING CAPACITY

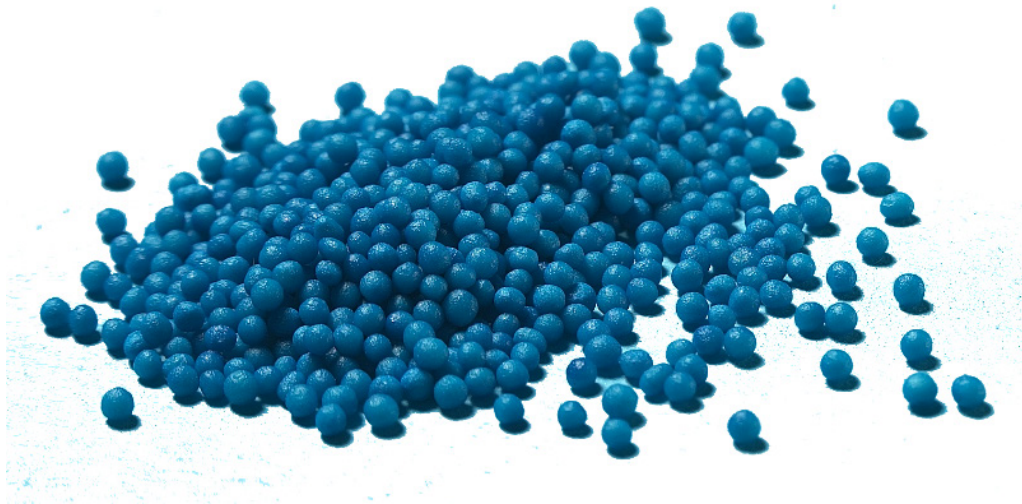
About 60 kg per hour (product dependant)

✓ MIN/MAX BATCH SIZE:

Minimum: 2.0 kg

Maximum: Up to 10 kg (product dependent).

A batch size of a 4.0 to 8.0 kg is considered normal.



✓ MECHANICAL:

Size: Approximately 1250W x 800D x 1300mm

Weight: Approximately 320 kg

Cabinet: Brushed Type 304 Stainless Steel

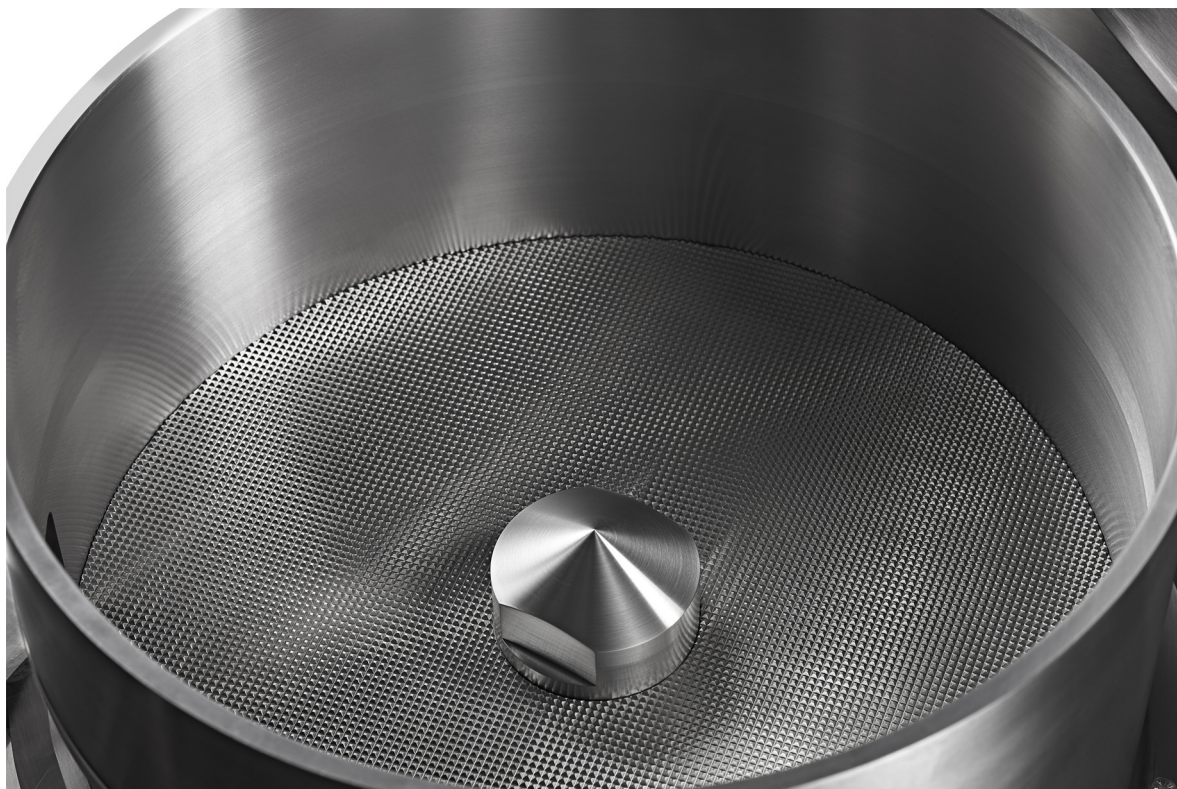
HIGH DENSITY GEAR EXTRUSION AND SPHERONIZATION SYSTEM

- Standard disc supplied:** One 3mm cross hatch pattern spheronizer disc supplied as standard Other disc patterns are available.
- Product feed:** Manual
- Product discharge:** Automatic. An “air blast” gun is included in the standard machine to assist in the cleaning of the discharge door and thus throughput rates. This can be particularly useful with products known to be sticky.
- Product contact parts:** 316 Stainless Steel (unless otherwise stated):-
- Spheronizing Drum
 - Standard Disc 380 mm Dia. 3mmx3mm square pitch
 - Discharge door
 - Discharge chute (with air blast unit included)
 - Drum lid and chute cover (transparent polycarbonate)



ELECTRICAL CONTROL

- Motor Power:** 4.0 kW AC motor. Motor speed infinitely variable
- Electrical Supply:** 400 to 460 V, 3 phase, 50/60 Hz, 5.5 A



HIGH DENSITY GEAR EXTRUSION AND SPHERONIZATION SYSTEM

✔ FRONT PANEL MOUNTING CONTROLS

- Stop, start
- Emergency stop
- Power connected indicator
- Motor running indicator
- Variable speed control with a digital display of rotation speed
- Rpm indicator – digital read out
- Automatic electric run timer control showing run time remaining

✔ OTHER TECHNICAL DATA:

- Standard 3x3 mm cross hatch pattern disc
- Fully safety interlocked for your protection. Safety interlocks on drum lid, product discharge chute and cover
- Infinitely variable speed between approximately 300 to 800 rpm
- Speed control Inverter Integrated speed display
- Pneumatically operated product door
- Water jacket (as standard)
- Automatic timer (as standard)



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TALK TO US

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Cert No. 1503
ISO 9001

Ver 60831