

PRODUCTION CALEVA

# 50 KG PER HOUR SPHERONIZATION SYSTEM

## **TECHNICAL SPECIFICATION**





## THE CALEVA PRODUCTION SCREEN EXTRUDER 35

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#### DESCRIPTION

The Caleva Extruder 35 is a cost effective screen extruder ideal for many pharmaceutical and other industrial formulations. It is designed to produce low pressure extrudate at high capacity. It is suitable for product development, pilot plant and full scale production.

## EXTRUDER CAPACITY

The extruder has a measured operating capacity of up to 3kg 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.

## STANDARD CONFIGURATION:

#### **Physical specifications**

Size: Approximately 900 mm d x 700 mm w x 1150 mm h

Weight: Approximately 150 kg

Cabinet: Brushed 304 Stainless Steel

**Product Contact Parts: 316 Stainless Steel** 

and polycarbonate

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#### **SUPPLIED STANDARD WITH:**

#### Extrusion Screen:

Full height, 150 mm inside diameter by 65 mm height by 1 mm thick and with 1.0 mm diameter holes, stainless steel.

Extrusion screens with other hole diameters can be supplied. Please contact Caleva to discuss your specific requirement.

Screen hole diameters are available range from 0.5mm diameter up to 2.0 mm diameter.



#### Product Feed:

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

#### Water jacket for cooling

The rear plate of the extrusion chamber contains connections to allow the flow of cooling water to be run across the back plate to removes some of the heat generated by the extrusion process.

#### Temperature Measurement

The temperature of the extrudate is measured as it comes through the extrusion screen by an infrared detector located on the safety cover. An instantaneous and continuous reading is given.

#### O Power measurement

A reading of power usage by the extruder during operation is displayed on the control screen

## ELECTRICAL AND CONTROL

Motor Power: 180 Watt AC

Electrical Supply: 100/110 or 220/240 Volts (must be specified with order), 1

Phase, 60 Hertz

#### Front panel mounted controls comprising:

- Stop, start
- Emergency stop
- Power connected indicator
- Motor running indicator
- Variable speed control with a digital display of rotation speed
- Product temperature
- Amperes used.



The Extruder 35 is supplied fully functional no additional options are required.

## OPTION OVERVIEW

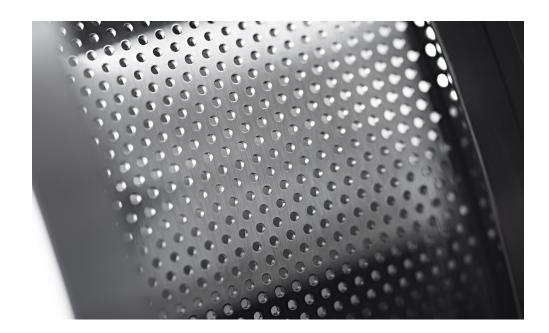
- All machines are supplied with a 150mm diameter extrusion screen.

  Additional screens are available as extras. Amongst the options available are:
- Screens with apertures from 0.5mm to 2.0 mm.
- Customer specific apertures in 0.1 mm increments can be supplied.
- Replacement screens of different designs can be supplied as needed.
- Please contact us for additional details about available options.

## 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 wishes 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 380

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#### **DESCRIPTION:**

Designed for product development and pilot scale production spheronization. A floor standing, robust, production spheronizer with a throughput of about 50 kg per hour. Production rates are product and process dependent and may exceed or not reach this figure.

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#### PRODUCTIVITY:

About 50 kg per hour (product and process dependant)

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#### MIN/MAX BATCH SIZE:

Minimum: 0.250 kg Maximum: Up to 5 kg

A batch size of 2.0 to 4.0 kg is considered normal



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#### **MECHANICAL:**

**Size:** Approximately 1155 w x 660 d x 1500 h

Weight: Approximately 360 Kg

Cabinet: Brushed 304 Stainless Steel

Product Contact Parts: 316 stainless steel and polycarbonate

Standard disc supplied: One 3 mm cross hatch pattern spheronizer disc supplied as

standard. Other disc patterns are available and can be supplied as required

Product feed: Manual

**Product discharge:** Automatic. An "air blast" gun is included with the standard machine to assist in the cleaning of the discharge door and thus improve throughput rates This can be particularly useful with products known to be sticky

Product contact parts: 316 Stainless Steel (unless stated)

Spheronizing disk: 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: 2.2 kW AC motor. Motor speed infinitely variable (between set upper

and lower limits).

Electrical Supply: 400 VAC, 50 Hz or 460 VAC, 60 Hz 3 ph 5.5 A

## FRONT PANEL MOUNTED CONTROLS COMPRISING

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.

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## TALK TO US

Please call us without obligation

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Cert No. 1503 ISO 9001