LABORATORY EXTRUSION AND SPHERONIZATION KITS

caleva

PRODUCT SELECTION

HOW DO I DECIDE WHICH LABORATORY EXTRUDER AND SPHERONIZER I SHOULD CHOOSE?

We are often asked for advice by researchers and teachers who want to acquire laboratory equipment for the development of both formulations and processes using Extrusion and Spheronization in the laboratory. All users are individual and have different requirements and there is not a single system that will fit all needs.

Caleva offers three different kits for use in the laboratory. These kits are designed to give customers a choice so the equipment chosen will be the most appropriate for their specific needs. This chart is offered to help you make that choice.

There are **three key things** to consider.

- The batch size you want to work with. This is fundamental and is generally the first thing you need to decide.
- Do you need the ability to work with extrudate or pellets of different density? The effect of density on a formulation can effect product properties. If your formulation is new then the ability to look at the effect of product density is recommended.
- If your development will lead to production then consider the extruder type you want to use for production now. This can have significant long range practical and financial consequences.

The Kit	The Equipment	Key Uses	Additional Benefits	Comments
Caleva Multi Lab (CML)	• The Caleva Multi Lab with a granulator, extruder and spheronizer on the same small base unit	• Small batch sizes of from about 10 g to 140g (product density dependant) • Save time and bench-top space • Save cost with three items in one • Fastest turnaround of experiments	• Optional bowls and blades for higher viscosity mixing • Consistent batch size for comparable results. • Use small batches to save material and cost • Can accept "variable density" dies	• Cost effective in a university situation. • Ideal for class teaching with multiple heads with functional differences. • Despite using small batch the CML is a real GLP/GMP development tool.
Caleva Multi Bowl Spheronizer	• Screen Extruder 20 with different screen heights. • Multi Bowl Spheronizer. Range of bowl size options on the same base	• Batch size flexibility from 50 to 1500 g • Low pressure screen extrusion • Rapid scale up to cost effective production	• Purchase only what you need now – upgrade later as needed • Extruder screen hole depths can be 1 or 2 mm to increase extrudate density	• No other currently available bench top system will offer you this wide range of batch sizes
The Variable Density Kit	• Caleva Variable Density Screw Extruder • Multi Bowl Spheronizer with a range of bowl size options on the same base.	• Multiple die hole diameter and depth options on the extruder • Vary the density of your extrudate or pellets	• Increase the options for final product properties • Increase the chance of development success by widening your options	• Batch sizes from 150 grams to 1.5 kg. • Screw extruder system that can be scaled up the Caleva Variable Density Twin Screw Extruder for production

Common to all Caleva laboratory equipment are the following advantages:-

- Caleva experience and support for your project. Talk to the experts!
- Try your products in our laboratory on different types of equipment before making a decision. Accept our pelleting challenge!
- All Spheronizer bowl sizes can be supplied with cross hatch and radial discs appropriate for the pellet size being used.

If you have additional questions or want to try the kits then please make contact with us directly by phone (+441258 47 11 22) or by email to info@caleva.com..

TALK TO US

Please call us without obligation

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