



Encapsulator B-390

**For innovative microbeads
and microcapsules**



Encapsulator B-390

Your partner for the production of microbeads and microcapsules

The versatile system for controlled encapsulation of active ingredients and materials for laboratory-scale research and development work. The simplicity and adaptability of the device allow its use in a variety of areas – pharmaceuticals, materials, cosmetics, the food industry and agriculture.

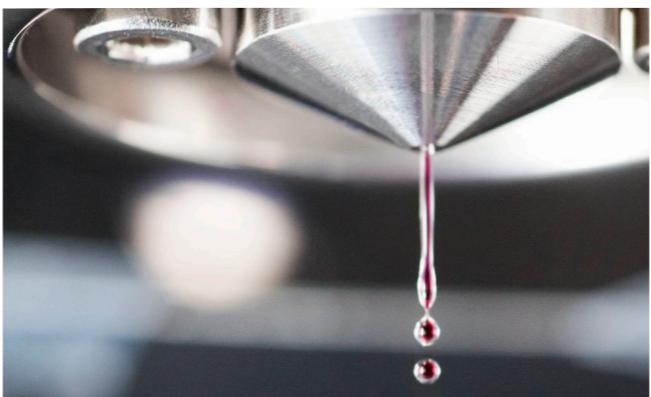


Versatile

Numerous applications in a variety of scientific fields.

Reliable

Efficient, reproducible encapsulation process.

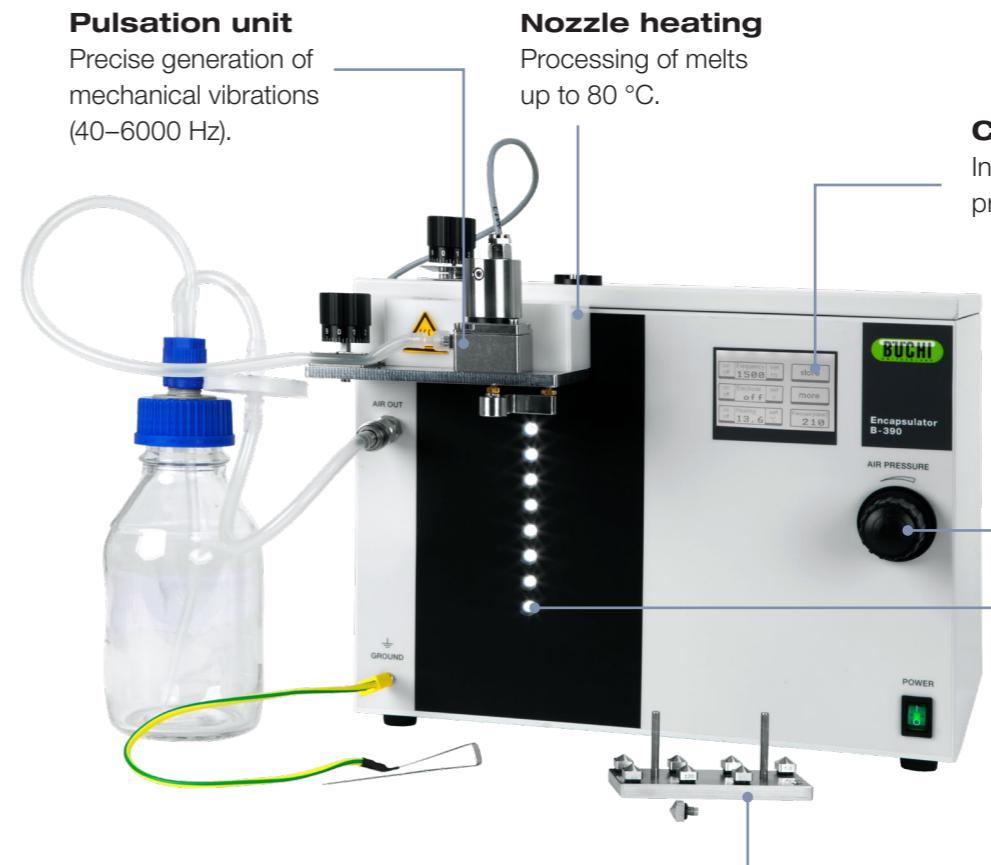


User-friendly

Intuitive to operate and easy to maintain.

Pulsation unit

Precise generation of mechanical vibrations (40–6000 Hz).



Nozzle heating

Processing of melts up to 80 °C.

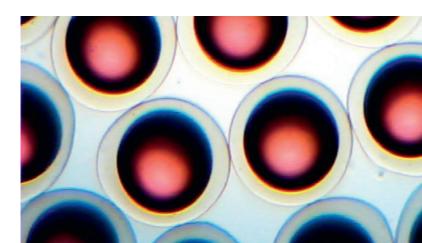
Control panel
Intuitive control of process parameters.

Pressure regulating valve
Precise control of pressure up to 1500 mbar.

Stroboscopic lamp
Visualization of droplet formation process.

8 precision nozzles
(80, 120, 150, 200, 300, 450, 750 and 1000 µm).

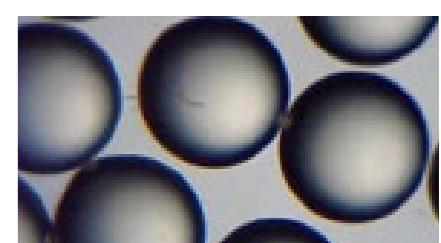
Application examples



Alginate capsules with oil core and red colouring



Alginate capsules with multiple oil cores



Beads made of gelatine with Vitamin C



PLGA beads with Ibuprofen



Dried gelatine beads



Wax beads

Encapsulator B-390:

Your most important benefits



Concentric nozzle system

Concentric nozzle system for creating core-shell capsules (dia. 200–2000 µm).



Flow vibration nozzle

Airflow-assisted nozzle system for producing beads (dia. 80–1000 µm) from highly viscous polymers.



Big capsules nozzle

Nozzle system for production of large core-shell capsules (dia. 2–4 mm) by means of drop separation process.

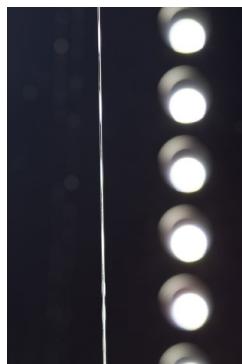


Nozzle heating

The integrated nozzle heater expands the breadth of applications. It enables the processing of melts such as wax or gelatine.

Method of operation

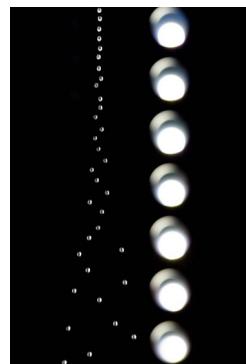
A laminar-flow fluid jet is subjected to a superimposed mechanical vibration, as a result of which it disintegrates into regular-sized droplets. They are then hardened by means of chemical or physical processes. Easy to achieve with the Encapsulator B-390 from BUCHI!



Generation of a stable fluid jet.



Generation of a stable, vertical droplet chain.



Electrostatic dispersal of the droplet chain.

