

Pilot Units for High-Pressure Sterilization

Standard Design

Max. operating pressure	7,000 bar
Max. operating temperature	80°C
Sterilization autoclave	70 ml

Options

10,000 bar
120°C
100 ml

Applying ultra-high-pressure to pharmaceutical or natural products leads to an inactivation of germs without thermal alteration of the products.

Advantages

- No thermal degradation of the product
- Unchanged vitamin content
- Natural food taste
- Natural product flavour and colour

Features

- Digital indication of pressure and product temperature
- Hand-operated quick-opening closure
- High-capacity sterilization autoclave with heating/cooling jacket
- Basket insert

Options

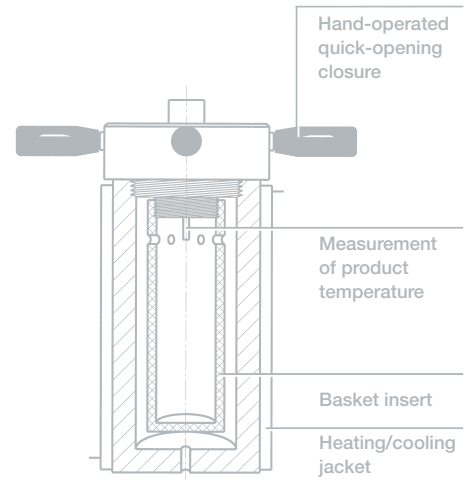
- Multivessel design
- 2nd pressure intensifier
- Sterilization cell with window units
- Data acquisition system
- Process control and batch documentation with programmable logic controller (PLC)

Applications

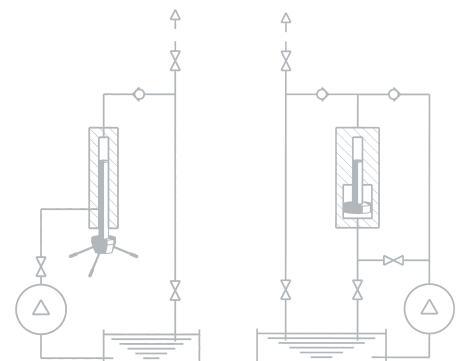
- Sterilization of food
- Sterilization of pharmaceutical products
- Inactivation of micro-organisms
- Inactivation of enzymes



Pilot unit for high-pressure sterilization equipped with two redundant pressure intensifiers for pressure generation (Germany). The sterilization cell (100 ml) is equipped with a hand-operated quick-opening closure and a basket insert. It can be heated and cooled. The internal temperature is measured and indicated.



Principle of sterilization cell.



Flow diagram of desktop model for sterilization based on a hand pump (7,000 bar).

Flow diagram of sterilization system based on a pressure intensifier (7,000 or 10,000 bar).