
HOCHDRUCKTECHNIK UND ANLAGENBAU

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HIGH PRESSURE STERILISATION

- ☛ Desk-top and Pilot Units for High Pressure Sterilisation
- ☛ Sterilisation Cells with easy to handle quick opening closures
- ☛ 7,000 bar and 10,000 bar models



Picture 1:

High Pressure Sterilisation Unit (7,000 bar, 80 °C, 100 ml sterilisation cell with 70 ml basket insert).

Advantages

- no thermal damage of the product
- applicable to thermo labile components
- no influence on vitamin content of the product
- no change of the natural flavour
- no adulteration of food taste
- no influence on product colour
- no effect on amino acids
- selective treatment of large molecules
- no adding of preservatives required
- alternative food preparation method
- new food design options available

Applications

Sterilisation of food

e.g. fruit juices
fruits
spices
milk

Sterilisation of pharmaceutical products

e.g. liposome
drugs

Inactivation of micro organisms

e.g. bacteria
bacteria spores
mould
yeast

Inactivation of enzymes

Structure changes of biological
macromolecules

e.g. starch (cold-bonding)

Denaturation and coagulation of proteins

e.g. meat curing

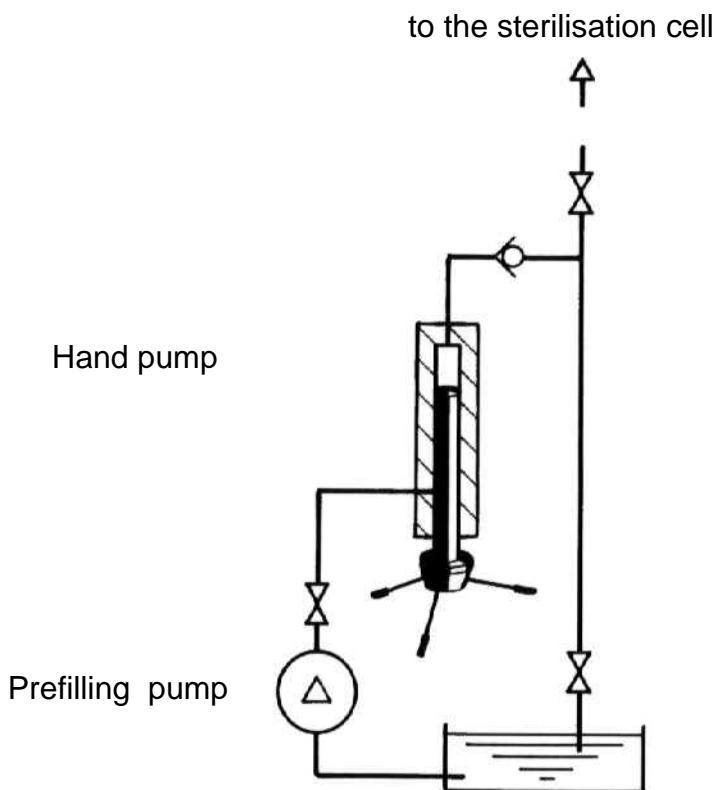
Phase modification of lipids

e.g. crystallisation of fats

Desk-Top Model for High Pressure Sterilisation

Main features of standard **model 760.0537**:

- max. sterilisation pressure: **7,000 bar**
- for solid and liquid products
- hand operated pressure generation
- **25 ml** high pressure sterilisation cell with **quick opening closure**
- 18 ml basket insert
- **Heating/cooling thermostat** for sterilisation cell
- temperature measurement inside the basket insert (digital indication)
- digital indication of sterilisation pressure
- **turn-key unit** (completely piped up and wired)
- different sterilisation cell capacities on request

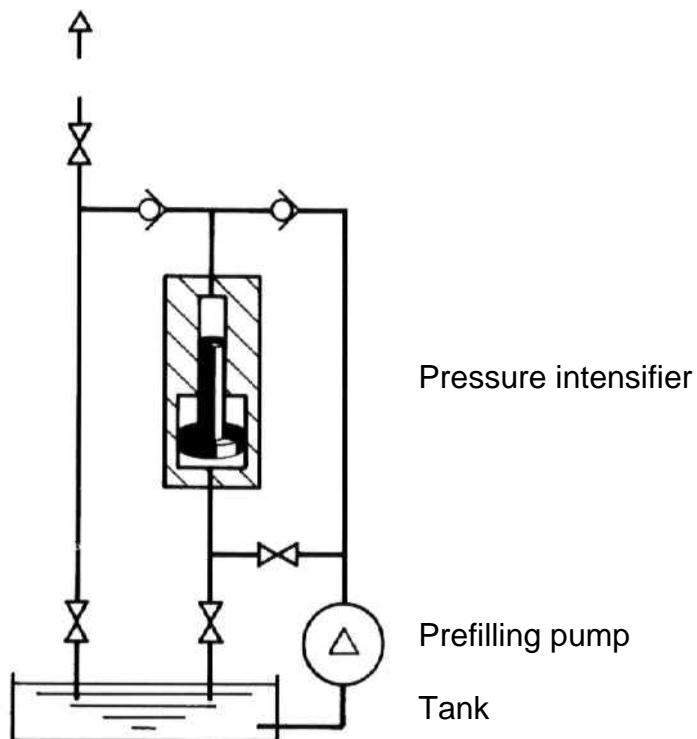


Pilot Unit for High Pressure Sterilisation

Main Features of standard **models 760.0118 / 760.0119:**

- max. sterilisation pressure: **7,000 bar / 10,000 bar**
- for solid and liquid products
- **pressure intensifier** with external piston-position indicator
- **25 ml** high pressure sterilisation cell with **quick opening closure**
- 18 ml basket insert
- **Heating/cooling thermostat** for sterilisation cell
- temperature measurement inside the basket insert (digital indication)
- digital indication of sterilisation pressure
- **turn-key unit** (completely piped up and wired)
- different sterilisation cell capacities on request

to the sterilisation cell



Standard Design and Options (Please mark required data)

Max. operating pressure:

	7'000 bar	10'000 bar
Pressure generation by hand pump	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pressure generation by intensifier	<input type="checkbox"/>	<input type="checkbox"/>

Max. operating temperature: **80°C** 120°C Pressure exchange medium: **water**

Sterilisation cell capacities:

25 ml with 18 ml basket insert
 50 ml with 35 ml basket insert
 100 ml with 70 ml basket insert

Number of sterilisation cells: 1 2 3 **Options:**

- Data acquisition system by PC
- PLC control with batch documentation
- Window units for sterilisation cells (2 x Ø 6 mm; max. 7,000 bar!)
- Colour camera system with endoscope
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