

PASTEURIZER 100 L/h



Experimental capabilities

- Identification of the components of a three-stage pasteurization plant
- Study of the module's characteristics
- Commissioning and adjustment of the system
- Processing of agri-food products (juice, milk, etc.)
- Calculation of heat balances on heat exchangers
- Influence of parameters on product quality
- Installation cleaning procedure

Operating principle

The bench GPA PA0 allows the study of three stages pasteurization. The liquid to be treated (fruit juice, milk...) is sent into the tubular exchanger using a pump. In the exchanger circulate heating water against the current what will heat up the liquid to be pasteurized by thermal transfer.

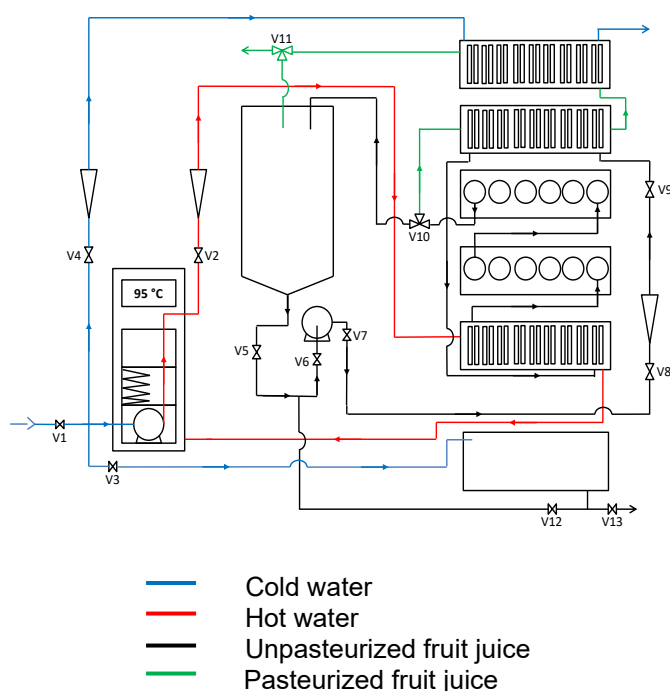
At the exchanger exit, the juice leaves pasteurized

The robust design of this device makes it suitable for use in schools.

The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

Illustrations



The bench includes a power supply box that complies with European electrical standards with a standby power disconnector, white voltage presence light, emergency stop button, earthing connection and differential protection. A 7-inch colour touchscreen displays the temperature values at the various measuring points. The bench is installed on a square stainless steel profile frame.

Technical details

It includes:

1. Thermoregulator

- Heating power = 9 kW
- regulation of the power according to the temperature of the product to be treated.

2. Centrifugal pump

- Material: 316L stainless steel body
- Q = 100 L/h minimum

3. Feed tank

- Material: 316L stainless steel
- Volume : 240 L useful
- With low-level sensor
- Unpasteurized juice recycling system

4. 3-zone pasteurization tubular heat exchanger

- Materials: 316L stainless steel
- Preheating (by the outgoing product)
- Heating (by the circuit of the thermoregulating group)
- Cooling (by mains water)

5. Insulated chambering circuit

- Chambering time: 30"

6. Washing tank

- Material: 316L stainless steel
- Volume : 30 L usable

7. Temperature measurement with Pt100 sensors

- Heating system inlet/outlet (heat transfer fluid)
- Exchanger inlet/outlet (product to be processed)
- Cooling inlet/outlet (water)

8. Flow measurement

- Measurement of the flow rate of the product to be treated
- Measurement of the flow of the heat transfer fluid (hot water)
- Measurement of the flow rate of the refrigerant (cold water from the Network)

9. Accessories

- Data acquisition system (temperatures, flow rates)
- Supervision software with export of data in Excel

GPAPA0



Services required

- Electrical supply : 400 Vac – 50 Hz – 32A
- Electrical network : 3 phase(s) + Neutral + Earth.
- Water supply : 15 L/min – XX bars
- Dimensions: (LxWxH mm): 2000 x 1400 x 2000
- weight (Kg): 250

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Electrical diagram
- Hydraulic diagram
- Software :
- Certificate of conformity CE