

# STREAMING PASTEURIZATION PILOT WITH SIMPLIFIED SORTING PLATES



*Non contractual photo*

**SERVICE : 52 \* 380 V THREE-PHASE - 50 HZ  
- 7 KW WITH HEATING GROUP WATER  
UNDER 1 BAR, 1000 L / H MINIMUM  
DIMENSIONS : 1700 X 1000 X 1800 MM**

**REFERENCE : MP313S**

- Low viscosity food liquid <50cp

### **3 Stainless steel plate exchangers :**

- Recovery
- Pasteurization
- Cooling

Flow rate 0 to 50 L / h

Study of the efficiency of heat transfer in a plate heat exchanger and its properties for the pasteurization of food products =

- Tube counterbore
- Cooling to the desired temperature in the cooling exchanger
- Calculation of the pasteurizing value
- Study of the operation of a temperature controller
- Study of flow parameters, pasteurization temperature and holding time
- Realization of thermal balances
- Study of the operation of a heat exchanger and its properties for the pasteurization of food products

### **Technical specifications :**

#### **The pasteurizer consists of three areas :**

- Preheating: plate heat exchanger incoming / outgoing product (area 0.1 m<sup>2</sup>)
- Pasteurizer: plate / product heat exchanger (area 0.1 m<sup>2</sup>)
- Cooling: product / water plate heat exchanger (surface area 0.1 m<sup>2</sup>)

**All plates are removable and 304L stainless steel. The circuit is made of 304L stainless steel in the SMS standard and includes :**

- A rooming area
- Stainless steel flowmeter
- A supply can of 20L
- A peristaltic pump for feeding
- 4 temperature probes Pt 100 with converter, 1 regulator linked to the valve of diversion a recorder with disk
- 5 temperature gauges
- An electrical box with control and protection of the pump, the temperature controller, the 3 temperature displays and the paper recorder.
- A pressure indicator at the outlet of the cooler

- 1 heating group 6 kW

### **OPTIONS :**

Optional: Acquisition software developed under Autolink to plot the evolution curve of the pasteurization temperature and calculate the pasteurizing value.