

## Description

A heat-treatment device to treat AC ampoules with hot water is designed as a single-purpose, semiautomatic, permanently manned device. The working process is managed by means of a Programmable Logic Controller and by means of a HMI display unit and by means of adjustable working values of temperature and time.

The AC ampoules placed in stainless baskets are inserted by the operator into a hanger for eight baskets which is anchored to an arm of a manipulator. Having the door been closed and the process started, the lids of the tub are automatically tilted off, the baskets are lowered into the bath and the lids are closed. Having the determined time elapsed, the lids are tilted off, the hanger with the baskets is slid out to the initial position, the lids are closed and the heat-treatment process of AC ampoules is finished. The end of the process is indicated on the HMI display unit and a report on the course of the process is printed out. The operator will remove the stainless steel baskets with the ampoules and will insert next ones into the hanger.

## Equipment and options:

- The device is formed by a base frame and by a skeleton which are fitted on feet with adjustable height.
- Openable protective covers made from PVC glass and equipped with safety controlled locks are fitted on the soleplate and on the frame.
- A double-surface process tub made from stainless steel with pneumatically hinged lids.
- Typical operating temperature of the bath is 92°C.
- Temperature regulation with sensors in twelve places of the process tub ensures homogeneity of the temperature in the bath within the range of  $\pm 1^\circ\text{C}$ .
- The power output of stainless-steel heating units is 36 kW.
- A circulation loop with a pump, a coarse filter and a fine filter contributes to achieve temperature homogeneity.
- The manipulator with vertical motion within a range of 750 mm is powered with a pneumatic cylinder with a brake.
- The working area is connected to the exhaustion system in the top part of the cover.
- A control box is located in the front right part of the device where control elements are located including a printer and a colour touch control panel.
- The main electric switchboard is located on the right lateral side and timers, regulators of pressure and temperature are located there.

## Basic technical data:

Length:	1674 mm.
Width:	1057 mm.
Height:	2175 mm.
Weight:	820 kg.
Power supply:	3 NPE 400/230V AC 50 Hz TN-S.

