

# SEMI-AUTOMATIC SOLDERING MACHINE WITH POSITIONING JIG

## For heatable backlites in mixed production

This machine is very suitable for mixed production, equipped with a positioning jig, suitable for each or a few different backlites models. The soldering heads are positioned in the guide indents of the jig, thus descending at the exact, desired location, corresponding to each backlite model.

### COMPOSITION

The positioning of the glass is assured with 3 fixed and 1 mobile pinion, which hold the glass in place on the positioning jig during the soldering cycle. The system comprises :

- A bridge, 2500 mm wide and 2000 mm high made of sturdy aluminium profile
- A workstation to hold the jig, located between the vertical columns of the bridge.
- An electric control cabinet, 600 x 600 x 350 mm, containing the control equipment common to both soldering heads, and a power transformer for soldering head No. 1. On the door of the control cabinet are mounted: power indicator, main breaker, 2 voltage indicators for adjustment of power supply to the electrodes, and 2 knobs for adjustment of the auto-transformers for primary power supply.
- Another electric cabinet, containing a power transformer for soldering head No. 2.
- Control panel, the location of which is chosen by the customer.
- 2 soldering heads, suspended on the bridge and manipulated with coil elevators

### OPTION

Pre-heating system for the glass : hot air blower with 2 fully adjustable nozzles.

This system is located below the workstation, with 360° rotation, independent of the rotation of the workstation. The blower is movable along the arm and its position can be adjusted on 2 axes to enable exact direction of the hot air flow onto the points to be soldered.

### OPERATION

The selected positioning jig is placed onto the workstation, the soldering heads are docked into their corresponding guide indents on the jig.

The glass is placed between the fixed positioning pins and the connector guide is placed on the glass. If included, the optional hot air nozzles are adjusted according to the glass model.

The hot air blower is started with the pushbutton and when the glass surface reaches the correct temperature the hot air blower stops.

The connectors are placed into their corresponding slots

Power is connected to the electrodes and soldering starts, with simultaneous measurement of soldering intensity ( A ). A warning signal indicates exceeded set parameters.

The electrodes are retracted after a short cooling time and the soldering heads are raised.  
The glass is unloaded from the workstation and visual control is made  
The automatic cycle takes approx. 28" ( incl. pre-heating phase and cooling ).

## SPECIFICATIONS

Protection devices and electro-mechanical components:

Transformer :

Power transformers :

Electronic timers :

Pneumatics :

Electric control cabin :

TELEMECANIQUE OR SIEMENS

LEGRAND

Custom made

OMRON

JOUCOMATIC or FESTO

RITTAL

