



Automation module for VP1000 and VP6000-vacuum-soldering systems

The automation module integrates the VP1000- and VP6000-vacuum-series into carrier-free production lines. The design of the inline connection also allows the manual loading of the work piece carrier such as for special electronic devices, special dimensions, small production volumes. With this automation module the ASSCON VP1000- and VP6000-vacuum-series become all-round soldering systems.

The optional lift module can achieve significant increase of throughput. Additional cooling modules also ensure short inline cycle times for high mass electronic components.

At any time the monitoring of the complete process and the unrestricted accessibility to the soldering system is guaranteed during the work piece carrier operation as well as during inline production.

Module Conception

The automation module is installed on the backside of the vapour-phase soldering system. PCBs arriving in the production line are first positioned on the loading unit and afterwards the pusher system loads the PCBs on a special fixture. Depending on their size PCBs can be loaded multi-lane.

After the loading process has been finished, the special fixture with PCBs is moved by an electrical axis system into the soldering system. The soldering process takes place. After the soldering process is finished, the soldered PCBs are moved out again of the vapour-phase soldering system. The pusher system singularizes the PCBs which finally will be moved out of the automation module via an unloading unit into the production line.

At a glance

- Multi-lane loading guarantees maximum efficiency of the vapour-phase soldering system
- Significant increase of throughput via lift module
- Short inline cycle times also for high mass electronic components by using additional cooling modules
- Quick adjusting for different PCB sizes
- SMEMA – Interface allows easy integration into each production line

Advantages

- Maximum production flexibility – change between inline production and work piece carrier operation unrestricted possible
- Optimal work load of vapour-phase soldering system – multi-lane automatic loading possible
- Safe process monitoring – unrestricted control of the soldering process is guaranteed by operator side

