

Manual microwelding machine SR/SP10 - 1012

Stability, flexibility and ergonomics for reliable processes



- Universal platform for hot-bar soldering, heat sealing, heat staking or resistance welding
- Technology carrier mounted on portal frame with manual stroke unit (pedal on cable pulley), pneumatic stroke unit available optionally
- Frame adjustable in height, stroke 60mm
- Force applied by spring assembly
- Optional manual X-Y table, manual Y table, pneumatic Y table
- Actuation by start button or pedal
- Programming and operation via touch screen
- More than 90 different part programs can be stored
- Modular configuration, various options available



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Technologies

Hot-bar soldering

- A reflow generator of type R1260 with 2.5kVA power is used for soldering; components (e.g. cables on sensors, displays on control boards, etc.) are connected with soldering tin.
- The connection with soldering tin is not suitable for components which are exposed to vibrations. The soldering tin often tends to crack when subjected to vibration.
- The process can be freely parameterized; the temperature gradient, soldering temperature, time and cooling temperature can be set as parameters.
- Due to the standardized holder, soldering heads for thermodes from 1 - 220mm width can be used. On request, an automatic capton tape dispenser can be mounted.
- The Kapton tape protects the thermode from contamination.
- If no Kapton tape is used to protect the thermode, it must be cleaned with a brush after a defined number of cycles. For this purpose the machine can be equipped with an automatic cleaning unit.



Heat sealing

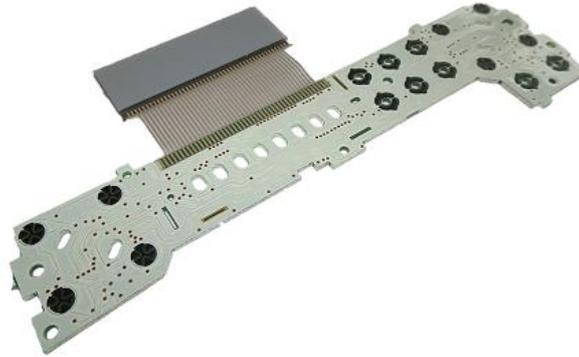
- A reflow generator of type R1260 with 2.5kVA power is used for heat sealing; components (e.g. displays on control boards, etc.) are connected by means of a double-sided conductive adhesive tape.
- The connection process is carried out in 2 steps: in the first step the adhesive tape is stuck to a component, in the second step first the protective foil is removed from the adhesive tape and then the second component is connected to the first.
- The connection with adhesive tape is less susceptible to vibrations; therefore this technology can be used where soldering tin is not suitable.
- The process can be freely parameterized; as parameters the temperature gradient, the soldering temperature, the time and the cooling temperature can be set.



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Technologies

- Due to the standardized holder, solder heads for thermodes with widths up to 220mm can be used. For heat sealing, the thermode must be protected from contamination with a silicone band; for this purpose the machine is equipped with an automatic silicone band dispenser.
- The double-sided adhesive tape used to join the two components can be automatically fed and positioned; before the second gluing process, the protective film is automatically removed



Heat stacking

- Heat stacking is used to form plastic pins, e.g. to seal housings. It is extremely important that the thermodes or the plastic is cooled down before the tool head moves upwards.
- If the tool is started up too early, threads can be pulled out of the plastic, with the result that the thermode becomes contaminated and the plastic has tears on the surface.
- Therefore we also use a reflow generator R1260 with 2.5kVA power.
- The process is freely parameterizable; as parameters the temperature gradient, the process temperature, the time and the cooling temperature can be set.
- Any contamination on the thermodes can be removed with an automatic cleaning unit.

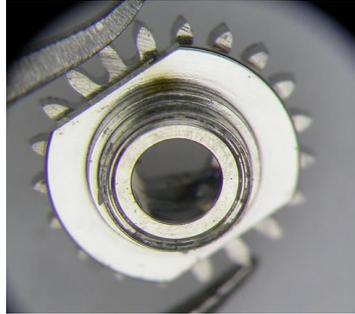


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Technologies

Resistance welding

- In resistance welding, small, current-conducting parts can be connected to each other by short-circuiting.
- The SP1240-75 generator has a maximum power of 75Ws. The power and the welding time (2, 6 or 9ms) can be set as parameters.



Technical data / equipment

Manual microwelding machine		SR/SP10-1012
Technologies		
Hot-bar soldering		Yes
Heat sealing		Yes
Heat stacking		Yes
Resistance welding		Yes
Dimensions		
Manual workstation		
Height	mm	590
Depth	mm	600
Width	mm	700
Weight complete	kg	50
Power supply		
Voltage	V AC	230
Frequency	Hz	50 - 60
Power max.	kVA	3.6
Current max.	A	16
Pneumatic pressure max.	MPa	0.6
Equipment		
Tables		
Manual X-Y table		variant
Manual Y table		variant
Pneumatic Y table		variant
Force measurement		
Hot-bar soldering		spring
Heat sealing		spring
Heat stacking		spring
Resistance welding		spring

Reserved technical changes

Covatec AG
Mattenstrasse 137
CH-2503 Biel / Bienne
Phone +41 32 344 99 70
info@covatec.ch / www.covatec.ch

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