



Forming & Testing System Clickquick 30 [CQ30]

Automated system for forming and testing bimetal-snap-action-discs with the following functions:

- Forming – Pre-aging – 100% Testing – Selection
- Adaptive control loop for the forming process
- Complete functionality and result monitoring
- Connectivity to QS-systems

Specification

Standard version

Automatic forming, testing and selection machine with the following components:

- Unwinding device for coils with pre-punched bimetal strips
- Thermostat with temperature control
- Holder to mount a retooling set
- Forming, ageing, 100% testing, good and bad part selection
- Monitoring TOS / TUS
- Complete function and result monitoring
- Connectivity to QS-systems
- Cutter for the strip
- CE-compliant protective cover (protective hood) with locking and monitoring

Options & Accessories

- Automatic readjustment of the embossing parameters
- Bin changer (rotary table with several Bins)
- Adhesive tape release device
- On request, the protective hood can be omitted (not CE-compliant!)

Capacity

Up to 4,000* pieces / hour
(= 1.11 pieces / second .. or 0.9 seconds / piece)
*Specification without taking setup times into account.

Process input

- Bimetal strip with pre-punched and re-pressed discs
- Bandwidth: max. 40mm
- Diameter bimetal disc max. 33mm
- Tape wound on coil (with or without paper liner)

Process flow and details

The bimetal strip with the pre-punched discs is automatically unwound and fed to the forming insert (retooling set for CQ30). In the temperature-controlled forming insert, the pre-punched disks are pressed out of the bimetal strip and formed, aged and then measured in accordance with the parameterization. This is followed by a selection in good and bad parts, which are either collected in bulk in bins or stored in a tube magazine. The excess bimetal strip is cut off and collected in a collecting container.

- Forming temperature: + 30°C to + 145°C
- Reject rate: max. 5%*

*Note: The reject rate depends on the bimetal strip, the upper (TOS) and lower (TUS) snap temperature, the difference between the snap temperatures (TOS-TUS) and the maximum permissible deviation of the snap temperatures.

Process output

- Bimetall-snap-action-disc
- Snap temperatures: -50°C to + 250°C
- Accuracy of snap temperatures: +/- 1.5°C to +/- 10°C
- Selected in good and bad parts
- Bulk material or in magazine

Interfaces

- Mains voltage: 3x400V+N+PE, 50 / 60Hz AC
- Electrical power: approx. 3.5 kW
- Compressed air: 6.5 - 10 bar. 300 liters / minute. Free from oil, water and dust.
- Other line voltages and frequencies on request.

Environmental conditions

- Industry standard. Indoor.
- Temperature: + 18°C to + 30°C
- Relative humidity: < 70% non-condensing

Dimensions and weight

- Automat (Width x High x Depth): approx. 2,300 x 2,300 x 2,100mm
- Space requirements (Width x High x Depth): approx. 2,800 x 2,300 x 2,300mm
- Net weight: depending on the options between 500-540kg

