

## VLO 20

Back-End

ConveyorSystems

VLO 300

VLO 20

## Laboratory Vacuum Soldering Systems



The new VLO 20 vacuum soldering system complements the existing range of vacuum soldering furnaces to fulfil the requirements of today's development targets and small production goals using vacuum to achieve voidless soldering joints.

Typical applications are: MCM, IGBT, DCB, Flip Chip, MEMS-Packaging, Opto-Electronics, Glas-Metal-connections, etc..

Like the „big brothers, the VLO180 and VLO300“ the VLO20 provides different process gas atmosphere e.g.: Vacuum, Nitrogen-, Hydrogen-atmosphere and formic acid to achieve voidless connections. Even leadfree solder paste or pre-forms could to be used without any flux.

Because of the system design and the process conditions inside the chamber the contents of voids can be significantly reduced. Where typically about 20% of the soldering area will be affected by voids one can achieve soldering joints showing typically 0,2 to 1% voids of the active surface. The contact area is significantly increased enabling a perfect conductivity and heat transfer.

## Features and Benefits

- Fast ramp-up and cool-down of the substrates
- Short process time because of effective vacuum component dimensions
- Excellent temperature homogeneity cross the process platen
- Exact process control ensures accurate repeatability of process conditions
- Nearly voidless soldering results, depending on process gas atmosphere (H<sub>2</sub> or formic acid)
- Suitable for leadfree and voidfree soldering, even for large substrate surfaces
- Process vacuum down to 0-5 mbar possible (HV-Version only)

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