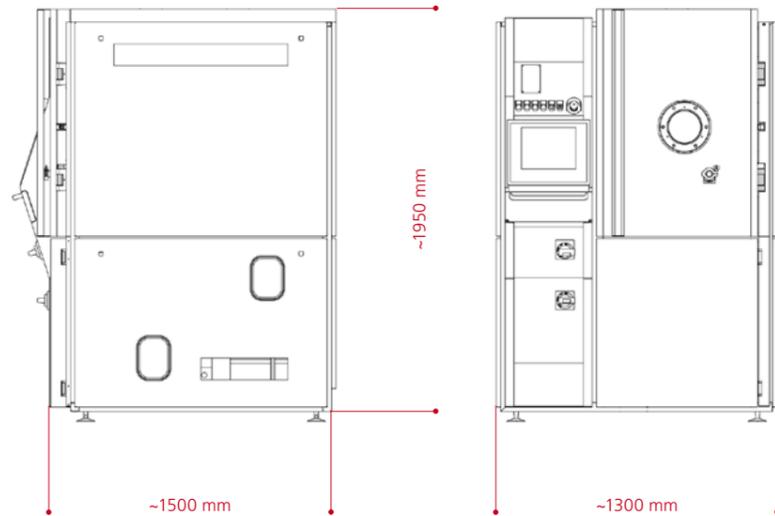


VLO 180 | VLO 300

Vacuum Soldering System
for high volume production

Dimensions



Key Data

Model	VLO 180	VLO 300
Field of application	High volume production	
Plate size	540 x 410 mm ²	
Heating system	3 heating plates	5 heating plates
Max. substrate height	100 mm	
Max. load per plate	15 kg	
Possible process gases	N ₂ , H ₂ up to 100%, N ₂ /H ₂ 95/5, HCOOH	
Power supply*	3~/N/PE 230/400V 50 Hz	
Cooling water	15 l/min @ 15 – 25 °C	
Max. heat up ramp	40 K/min	
Max. cool down ramp	150 K/min	
Vacuum level	max. 0,1 mbar	
Vacuum pump	40m ³ /h or 65m ³ /h	
Process temperature	up to 450 °C	up to 750 °C
System weight	1200 kg	1500 kg

* optional: 3~/N/PE 277/480V 60Hz

Options

- 100% H₂ gas line with safeguard level 2
- Integrated HCOOH bubbler with safeguard level 1
- 6 thermocouples for surface temperature recording
- High temperature option for VLO 300 [up to 750°C]

centrotherm thermal solutions GmbH & Co. KG reserves the right to make changes in the product specifications at any time and without notice | Z | H | VLO 180 | VLO 300 | 03 | E | 11 | 03 | © centrotherm 2011

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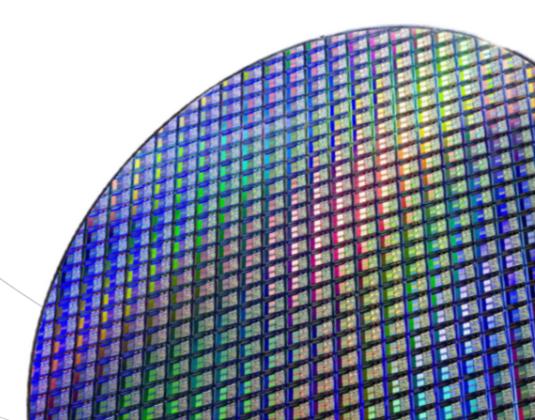


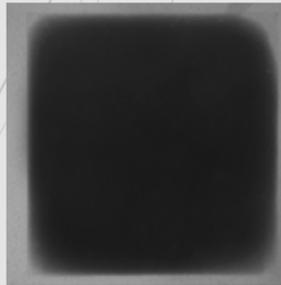
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Equipment
Process
Solutions

VLO 180 | VLO 300

Vacuum Soldering System
for high volume production

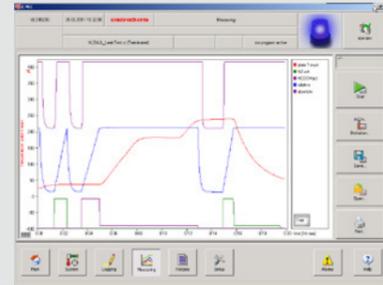




Void rate below 2%



Door with viewport



User-friendly software

VLO 180 | VLO 300

Vacuum Soldering System
for high volume production

Description

The centrotherm VLO 180 or VLO 300 vacuum soldering systems are ideally suited for high volume production facilities with various materials up to 750 °C.

The integrated heating and cooling plates can be individually controlled. With VLO 180 or VLO 300, the soldered area affected by voids can be reduced to less than 2% while typical reflow soldering systems range at 20%.

The system is ideally suited for production facilities which run fluxless and voidless soldering processes with various gas atmospheres [N₂, H₂ 100, N₂/H₂ 95/5]. Chemical activation with HCOOH for ultra clean soldering joints is optionally available. Even lead free paste or pre-forms can be used without additional flux.

The process control computer comes with a user-friendly touch screen for operating, process profile editing and recipe storing. Accessibility through Ethernet and USB interfaces allows connection with printers, external storage devices and remote access.

Typical Applications

- Advanced Packaging
- Power Semiconductors
- Hybrid Microelectronic Assemblies
- Optoelectronic Packaging
- Hermetic Package Sealing
- Wafer Level Packaging
- UHB LED Packaging
- MEMS Package Sealing

Customer Benefits

- Process temperature up to 450 °C
- Optional: VLO 300^{HT} for high-temperature processes up to 750 °C
- Excellent temperature uniformity
- Vacuum level up to 0,1 mbar
- Very short cycle times
- centrotherm soldering laboratory for soldering tests
- Remote access for service

