

UNI-SLIDE PLUS

STAND-ALONE SYSTEM FOR PULSED-HEAT JOINING PROCESSES

Designed for the Processes:

- *Hot-Bar Reflow Soldering*
- *Heat-Seal Bonding*
- *ACF Bonding*

The Uni-Slide Plus series consists of different models, all of them being stand-alone pulsed-heat hot-bar systems that use a motorized linear slide for the product movement and a motorized bonding head. The bonding force is programmable.

The Uni-Slide Plus is ideal when force levels, product positions, and process settings need to be changed often. This is the case when multiple connections inside one product must be made or when multiple products are being produced on one system. The Uni-Slide Plus can handle large products because of the generous space between the support beams.

Typical product applications are connections of components like an **LCD** display, small size **TFT** display, the glass substrate based **OLED**, polyimide mounted **TCP DRIVER**, a diversity of heat-sensitive components like **CCD** camera chips, kapton based **FLEXFOIL**, the closely related **FPCB** and of course the common **PCB** to each other. These applications can be found in market sectors like the **TELECOM (CELLULAR PHONES)**, **AUTOMOTIVE** electronics like car radios and navigation systems, a diversity of **CONSUMER** products and **MEDICAL** electronics.

Options include:

- Customized product fixtures
- Fine pitch alignment system
- Vacuum injector / pump for holding parts down
- Manual or automatic interposer system feeding kapton, teflon or silicon rubber
- Water cooling for high speed production
- Fume extraction



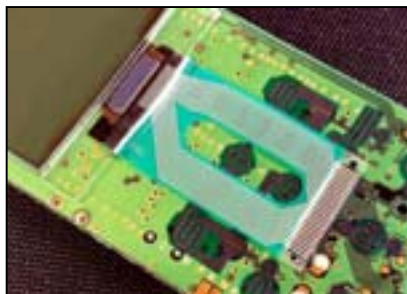
UNI-SLIDE Plus with optional interlayer module and optical alignment

Main Features:

- Uniflow[®] pulse-heated control with graphical data output and remote programming provides targeted heating and precision temperature control.
- High precision motorized operated bonding head ensures consistent process results with even the finest pitch applications (down to 50 microns). Different force ranges up to 1250 N are available.
- Pulse-heated Thermo-Plane thermode (hot-bar) offers uniform temperature and pressure distribution, optimal flatness and ultra fast heating-up and cooling-down.
- Multiple thermode dimensions available.
- Quick Connect Block enables fast and easy thermode changes.
- Two-hand operation for operator safety.
- Open gantry construction can accommodate products up to 400 mm wide.
- CE Approved



HBR Soldering: open windowed flex

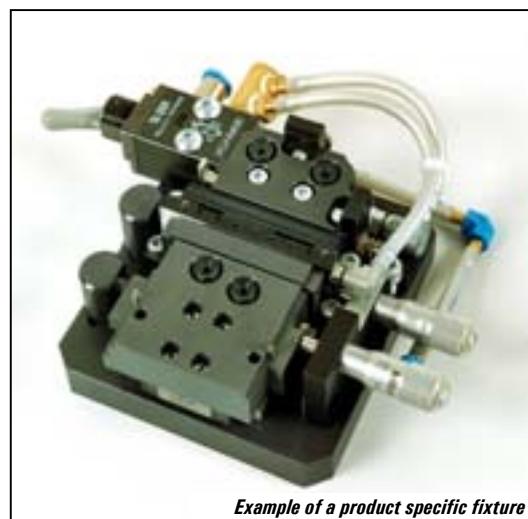


Heat-Seal Bonding



HBR Soldering: TCP driver

SYSTEM SPECIFICATIONS	
Dimensions	860 mm [34.0 Inch] depth 1250 mm [49.0 Inch] width 1550 mm [61.0 Inch] maximum total height 900 mm [35.4 Inch] maximum table height 80 mm [3.2 Inch] table height adjustment
Weight	250 kg [551 Lbs]
Power consumption	240 Vac 50/60 HZ 16 Amp max. (upon request also deliverable in 110 Vac version)
Air supply	6 – 8 bar [60 – 120 psi] , dry & filtered air
Maximum fixture height	50 mm [2.0 Inch]
Gantry open width	420 mm [16.5 Inch]
Fixture assembly base-plate	160 x 160 mm [6.3 x 6.3 Inch]
Starting operation	CE certified 2-hand relay control
Operating temperature	15 – 40 °C [60 – 104°F]
Motorized slide stopping repeatability	0.01 mm [0.0002 Inch]
Programmable slide positions	Fifteen (15) programs, Eight (8) positions per program



Example of a product specific fixture

BONDING HEAD SPECIFICATIONS		
Head module	PH500	PH1250
Head actuation method	motorized	
Force range	30 – 500 N [7 – 112 Lb] [3 – 51 Kg]	200 – 1250 N [44 – 277 Lb] [20 – 127 Kg]
Hot bar stroke	25.0 mm [.98 inch]	
Force generation	Pre-tensioned spring	
Force accuracy	± 2 % or ± 2 N [.44 Lbs] , whichever is greater	
Force repeatability	± 1 % or ± 1 N [.22 Lbs] , whichever is greater	

UNIFLOW PULSED HEAT SPECIFICATIONS	
Weight	26.3 kg [58 Lbs]
Dimensions	319 mm [12.6 Inch] depth x 246 mm [9.7 Inch] width x 411 mm [16.2 Inch] height
Temperature range preheat	60 – 300 °C
Temperature range heat	60 – 600 °C
Time period preheat	0 to 99.9 seconds or continuous (0.1 second increments)
Time period rise time	0 to 9.9 seconds (0.1 second increments)
Time period heat time	0.1 to 99.9 seconds (0.1 second increments)
Temperature accuracy	± 2 % of reading or ± 6 C [10°F], whichever is greater
Temperature repeatability	± 1 % of reading
Heating rate control	Coarse adjustment and fine adjustment via set-up software
Programmable heat profiles	Fifteen (15) non-volatile memory
Dedicated input relays	24Vac / 0.3Amp
Head cool relay	ON / OFF for cooling thermode holder
Solder cool relay	ON @ COOL, OFF @ PREHEAT
Programmable relays	4 each, electromechanical (24 Vac or +24Vdc / 0.3 Amp)
Programmable relay functions	Reflow, preheat, alarm, clean thermode, replace thermode, end reflow, head is up, system ready
Communication ports	RS-232, RS-485

Your local Representative



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