

hot-bar systems

Uni-Turn Plus

Semi-Automatic
High Precision Bonding System

This Stand-Alone Heat-Sealing workstation is designed for large products, applications with multiple connections, numerous products per process cycle and simultaneous product loading and bonding double output.

The Uni-Turn Plus systems are used for fluxing, Hot-Bar Reflow Soldering and ACF Bonding as well as combined ACF Laminating and final Heat-Seal Bonding in one machine.

- LCD to Flex, LCD to PCB
- Mobile Phones, Laptop Computers
- Automotive Applications and Consumer Electronics



Key Features

- Highly accurate pneumatic bonding heads, with force ranges up to 500N ensure consistent process results with even the finest pitch applications (down to 50 microns)
- Quick Connect Block enables fast and easy thermode changes, ideal for high product mix environments
- Pulse-heated Thermo-Plane Thermode offers uniform temperature distribution, optimal flatness and fast heating and cool-down
- Multiple thermode dimensions and positions available
- Manual interposer modules
- Uniflow Pulse-heated control with graphical data output and remote programming provides temperature control
- Motorized rotary table with 2, 3, 4, and 6 stop positions
- PLC controller
- Light beams safety protection and a start button
- Ergonomically designed adjustable table height

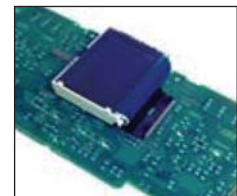
The system can be customized by exchanging main modules

- Motorized bonding heads offer programmable force and speed profiles
- Force ranges up to 1250N
- PC controller with Windows® NT platform

Options include:

- Water cooling for high volume production
- Automatic interposer module
- Customized product fixtures
- Vision inspection system
- Fine pitch alignment system

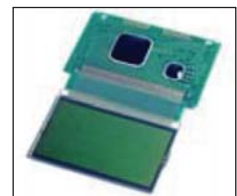
TYPICAL APPLICATIONS



Automotive



Household



Telecom

SYSTEM SPECIFICATIONS

Dimensions Inches (mm) D x W x H	41.0 x 69.0 x 73.0 (1050 x 1750 x 1850)
Weight Lbs. (kg)	1213 (550)
Power Consumption	380 Vac, 3-Phase, 50/60Hz, 16 Amp max (upon request also available in 110 Vac version)
Air Supply	60-120 psi (6-8 bar) dry and filtered air
Maximum Fixture Height Inches (mm)	2.0 (50)
Table Diameter Inches (mm)	27.3 (700)
Travel Speed	1 second per step
Accuracy Inches (mm)	0.001 (0.05)
Starting Operation	CE certified 2-hand relay control
Operating Temperature	60-104°F (15-40°C)

BONDING HEAD SPECIFICATIONS

Head Module	SH500	PH500	SH1250	PH1250
Head Actuation Method	pneumatic	motorized	pneumatic	motorized
Force Range Lbs. (N)	7-112 (30-500) [3-51 Kgf]		56.2-281 (250-1250) [25.5-127.5 Kgf]	
Hot Bar Stroke Inches (mm)	.98 (25.0)			
Appropriate Thermodes	Thermo-Plane (to suit application)			
Maximum Thermode Length Inches (mm)	1.7 (Up to 50)		3.94 (Up to 100)	
Thermocouple Type	K-type			
Force Generation	Pre-tensioned spring			
Force Accuracy Lbs. (N)	± 2% or ± .44 (2), whichever is greater			
Force Repeatability	± 1% or ± .22 (1), whichever is greater			
Head Programmable	No	Yes	No	Yes

Weight Lbs. (kg)	58 (26.31)
Dimensions Inches (mm) D x W x H	12.6 x 9.7 x 16.2 (319 x 246 x 411)
Temperature Range Preheat	140-572°F (60-300°C)
Temperature Range Preheat	140-1112°F (60-600°C)
Time Period Preheat	0-99.9 seconds or continuous (0.1 second increments)
Time Period Rise Time	0-9.9 seconds (0.1 second increments)
Time Period Heat Time	0.1-99.9 seconds (0.1 second increments)
Temperature Accuracy	±2% or reading or 10°F (6°C), 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 (24Vac or 24Vdc/0.3 Amp)
Programmable Relay Functions	Reflow, preheat, alarm, clean thermode, replace thermode, end reflow, head is up, system read
Communication Ports	RS-232, RS-485

Your Local Representative



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