

DESKTOP SERIES

PULSED HEAT THERMODE TECHNOLOGY FOR REFLOW SOLDERING AND HEAT-SEAL BONDING

The Unitek Eapro Desktop Series are standard table top Hot-Bar Systems using Pulsed Heat Technology (Uniflow power supply), the SH500 pneumatic bonding heads and the standard Quick Connect Blocks with Thermo-Plane Thermodes. All modules are mounted on a stiff but simple adjustable frame construction. The Desktop series includes different product handling features, like left-right and front-rear slides as well as rotary tables.

UNI-BASE SYSTEMS



Uni-Base DT-150-PH

The **DT-150-PH** System is the base model in the Desktop Series line. The **DT-150-PH** utilizes the SH500 and Uniflow modules in the gantry construction. Gantry width is 520 mm.

The bonding head can be adjusted in the X-Y-Z axis', which makes the system very flexible for a variety of applications.

Standard available is:

DT-150-PH SH500, Uniflow

UNI-SLIDE SYSTEMS WITH FRONT-REAR SLIDE



Uni-Slide DT-250-PH

This group of four Desktop Uni-Slide Systems have a product handling slide in front-rear direction. The slide modules operate either manually or pneumatically and have the option for two or three stop positions. Using a third stop position is designed for two bonding locations on a single PC board, as in a flex to LCD and PCB process.

Standard available are:

DT-250-PH SH500, Uniflow, 2-position manual slide
DT-260-PH SH500, Uniflow, 3-position manual slide
DT-350-PH SH500, Uniflow, 2-position pneumatic slide
DT-360-PH SH500, Uniflow, 3-position pneumatic slide

UNI-SLIDE SYSTEMS WITH LEFT-RIGHT SLIDE



Uni-Slide DT-270-PH

The **DT-270-PH** Uni-Slide System has a manually operated Left-Right slide with two stop positions.

This Uni-Slide System offers maximum output, when compared to a Front-Rear Slide, due to simultaneous loading/unloading and bonding of the product.

The stroke left-right is 180 mm and the maximum product dimensions are, like the other Uni-Slide systems, 160 x 160 mm.

Standard available is:

DT-270-PH SH500, Uniflow, 2-position manual slide

UNI-TURN SYSTEMS



Uni-Turn DT-450-PH

This group of two Desktop Uni-Turn Systems use either manual or pneumatic rotary tables. The pneumatic rotary table requires the use of a PLC controller which is included in the System.

These Uni-Turn Systems offer maximum output due to the simultaneous loading/unloading and bonding of the product.

The loading position is always located in front of the operator making these systems ergonomically friendly.

The rotary table diameter is 380 mm and the maximum product dimension is 160 x 160 mm

Standard available are:

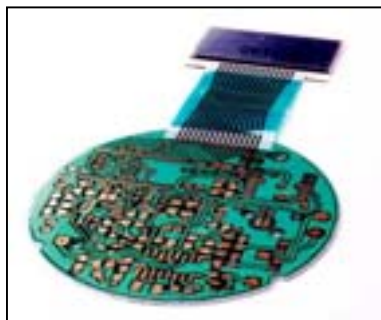
DT-440-PH SH500, Uniflow, manual rotary

DT-450-PH SH500, Uniflow, PLC controlled pneumatic rotary

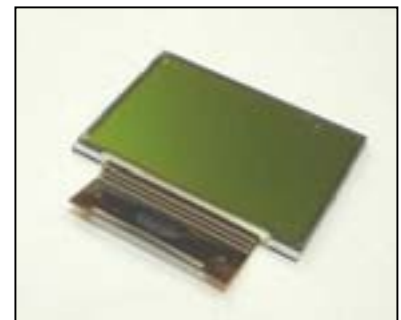
Additional Modules for the Desktop Series: Optical Alignment Modules, Kapton Feeder Modules, Water-cooling Modules, Interposer Modules and Customized Product Jigs



HBR Soldering



Heat-Seal Bonding



ACF Bonding

SYSTEM SPECIFICATIONS	
Dimensions	600 mm [23.62 Inch] depth x 550 [21.65] width x 510 [20.04] height
Weight	40 kg [88 Lbs]
Power consumption	100 to 240 Vac, 50/60 HZ, 16 Amp max.
Air supply	4 – 8 bar [60 – 120 psi] , dry & filtered air
Maximum fixture height	80 mm [3.15 Inch]
Gantry open width	520 mm [20.47 Inch]
Fixture assembly baseplate	160 x 160 mm [6.30 x 6.30 Inch]
Starting operation	Two hand control
Operating temperature	15 – 40 °C [60 – 104°F]
Operating humidity	93% @ 40 °C [93% @ 104°F]

BONDING HEAD SPECIFICATIONS	
Force range	Standard head: 30 – 500 N [7 – 112 Lb] [3 – 51 KgF] @ 6 Bar [88.2 Psi] Optional light force head: 8 – 80 N [2 – 18 lb] [0.8 – 8 KgF] @ 6 bar [88.2 Psi]
Hot bar stroke	25.0 mm [.98 inch]
Force accuracy	± 2 % or ± 2 N [.44 Lbs] , whichever is greater
Force repeatability	± 1 % or ± 1 N [.22 Lbs] , whichever is greater
Actuation type	Pneumatic
Force generation	Pre-tensioned spring

UNIFLOW PULSED HEAT SPECIFICATIONS	
Weight	26.31 kg [58 Lbs]
Dimensions	319 mm [12.6 Inch] height x 246 [9.7] width x 411 [16.2] height
Temperature range preheat	60 – 300 °C [140 – 572 °F]
Temperature range preheat	60 – 600 °C [140 – 1112 °F]
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

MODEL SPECIFIC SPECIFICATIONS	
Desktop DT – 250 – PH (manual 2 – position slide)	Stroke between front and bonding position : 200 mm. Fixed [7.88 Inch]
Desktop DT – 260 – PH (manual 3 – position slide)	Stroke between first and second bonding position : 0 – 50 mm. [0.39 – 1.97 Inch]
Desktop DT – 270 – PH (manual 2 – position left / right slide)	Stroke between left and right bonding position : 180 mm. fixed [7.08 Inch]
Desktop DT – 350 – PH (automatic 2 – position left / right slide)	Stroke between front and bonding position : 200 mm. Fixed [7.88 Inch]
Desktop DT – 360 – PH (automatic 3 – position left / right slide)	Stroke between first and second bonding position : 0 – 50 mm. [0.39 – 1.97 Inch]
Desktop DT – 440 – PH (manual 2 – position turntable)	Turntable diameter : 380 mm. [14.96 Inch]
Desktop DT – 450 – PH (automatic 2 – position turntable)	Turntable diameter : 380 mm. [14.96 Inch]
	Turntable movement time : < 1.0 seconds

Your local Representative



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