

# HYBOND

*Soft Touch*<sup>™</sup>

## Model 616-005

### THERMOSONIC PEG BONDER

For Insulated Wire, Bare Wire/Ribbon/Mesh, Pin Tab Bonding, Flex on Flex and Ball Coining



#### STANDARD FEATURES:

- ! HYBOND *Soft Touch*<sup>™</sup> energy system.
- ! Motorized vertical (Z) bond head movement.
- ! Bond surface sensor stops Z axis movement on contact with bond site and activates bond cycle.
- ! 1.5 inch vertical bonding window.
- ! Search height adjustable in 0.001 inch increments; indexes from last bonding level.
- ! Bond head vertical movement controlled by push button or electrical footswitch actuation.
- ! Manual or semiautomatic operational modes.
- ! Bond counter on front panel records number of bonds performed by tool.
- ! High/low ultrasonic power selector.
- ! High/low bond time selector.
- ! HYBOND standard work platform with 4:1 manipulator.
- ! Bond head vertical movement controlled in fast or slow speed on manual mode.
- ! Built-in temperature controller.
- ! Wiring for 120VAC 50/60 Hz input.

HYBOND's Model 616-005 thermosonic single channel peg bonder is designed to perform ultrasonic attachment of insulated wire, bare wire/ribbon/mesh, flex on flex, ball coining and pin tab bonding. Applications include hard disk head stack assemblies, microwave/RF tuning circuits and sensor circuits. In special medium to high volume processes, the 616-005 can be fitted with optional custom manual control work platforms, electrically driven work platforms with joy stick control or programmable, motorized, microprocessor controlled X-Y work platforms hard mounted to the bonder's chassis (OP-75 interface module needed for programmable work platforms).

### Partial List of Available Options:

- ! OP-06S6 Leica Stereo Zoom Microscope.
- ! OP-06A Nikon SMZ660 Microscope.
- ! OP-08A Dual Fiber Optic Illuminator.
- ! OP-12 240VAC 50/60Hz Input Wiring.
- ! OP-30 8:1 Ratio X-Y Manipulator.
- ! OP-47 Vacuum Pick, Place and Bond.

- ! WST-15A Heated Workstage, 2.125 in. Top.
- ! WST-19B Heated Workstage, 4 x 4 in. Top.
- ! PT-X.X: Peg tool (size to match application).
- ! Unheated Workstages available in various sizes.

### Specifications for Model 616-005:

Ultrasonics (U/S):	PLL self tuning 62.5 KHz (nominal) system ( $\pm 2.5$ KHz).
U/S Power:	0-2 Watt on low setting and 0-4Watts on high setting.
Bond Time:	10-400mS in low setting and 200-600mS in high setting.
Bond Force:	25gr-200gr.
Bond Head Movement:	True vertical motorized movement with fast and slow speeds in manual mode or search height pause in auto mode.
Bond Actuation:	Bond height sensor activates cycle upon contact with bond surface.
Microscope:	Zoom Stereo-microscope with maximum magnification of at least 60X.
Illumination System:	Illuminator with dual fiber optic "goose necks."
Workstage:	Adjustable height unheated work holder.
Work Platform:	8.5 x 6.0 in. plate; 4:1, 0.9 in. travel X-Y chessman manipulator.
Input Power:	120 VAC 50-60 Hz @ 10 A (max.) Standard.
Bench Space Required:	20.0 x 20.0 in. (50.8 x 50.8 cm).
Unit Weight:	Approximately 45 lbs. (20.4 Kg.).
Shipping Weight:	Approximately 135 lbs. (61.2 Kg.) depending on accessories.



For more information, contact:

**BITA ELECTRONIQUE S.A.**, 45 RTE D'ARLON, LU-1140 LUXEMBOURG VILLE, Luxembourg, Ph. +352 450010, Fx. +352 332643, [www.bita.lu](http://www.bita.lu), [info@bita.lu](mailto:info@bita.lu)