

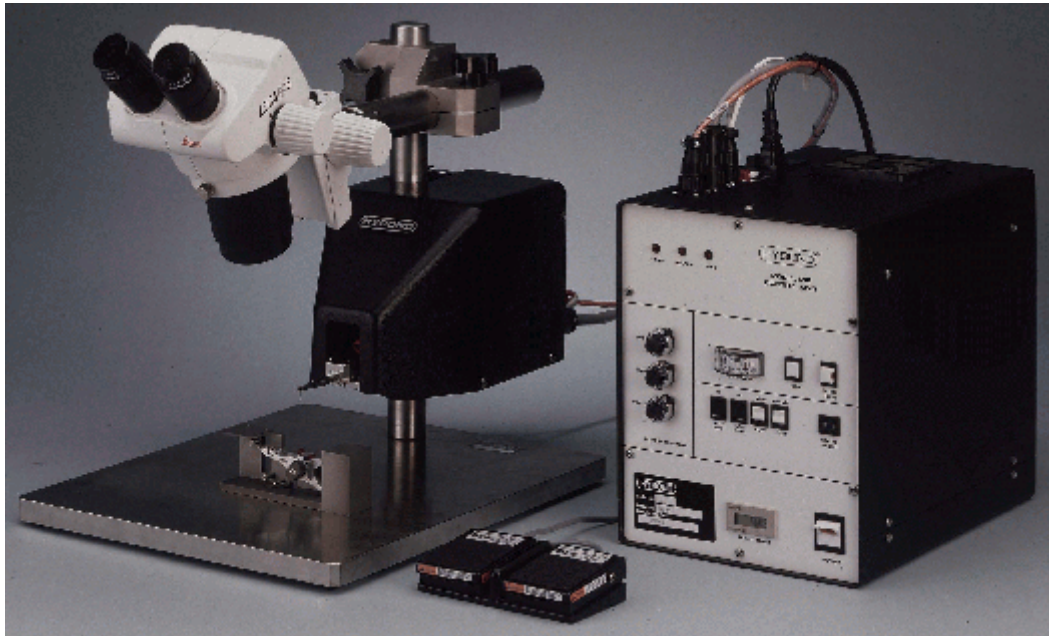
# HYBOND

*Soft Touch*™

## Model 616-003

### ULTRASONIC PEG BONDER

For 0.5 - 2.0 mil (12.5 - 50 micron) dia. insulated wire, 0.5 - 3.0 mil (12.5 - 75 micron) dia. bare wire and up to 1 x 20 mil (25 x 500 micron) gold or aluminum ribbon/gold plated copper leads



#### STANDARD FEATURES:

- ! HYBOND *Soft Touch*™ bond force system.
- ! Motorized vertical (Z axis) control.
- ! 0.75 inch vertical bonding window.
- ! Variable height bonding within 0.75 inch.
- ! Search height adjustable in 0.001in. increments.
- ! Hi/Lo U/S power selector (PLL generator).
- ! Hi/Lo bond time selector.
- ! Vacuum pick and place in BLDB configuration (OP-47).
- ! Wiring for 120VAC 50/60 Hz @ 10 A max.
- ! Bond counter records number of bonds performed by bonding tool.
- ! Dual footswitch control for bond head vertical movement.
- ! Bond head vertical movement can be controlled in fast or slow speeds on manual mode.
- ! Bond level sensor system stops Z axis movement upon contact with bond surface and activates bond cycle.
- ! Deep access when using 0.750in. Wedge.

HYBOND's Model 616-003 ultrasonic single channel peg bonder is designed for ultrasonic bonding of interconnects in applications that do not require the bonder to feed wire. Applications include "tacking" tuning ribbons, insulated wire bonding, flex on flex bonding, pin tab bonding, mesh bonding and ball coining. When fitted with WP-280 and OP-75, the 616-003 becomes a semiautomatic machine for medium to high volume production.

### Partial List Of Available Options:

- ! OP-06S6T: Leica Stereo Zoom Microscope.
- ! OP-06A: Nikon SMZ660 Microscope.
- ! OP-08B: Dual Fiberoptic Illuminator.
- ! OP-12: 240VAC 50/60Hz input wiring.
- ! WST-15A: Heated Workstage, 2.125 in. Top.
- ! WST-19B: Heated Workstage, 4x4 in. Top.
- ! WP-102A: Manual X-Y table.
- ! Motorized X-Y tables for automation available.
- ! OP-100: Base Plate & Post (as shown in photograph) for mounting the bond head when not used as a retrofit for pre-existing table.
- ! OP-101: Microscope Boom Arm & Clamping Block for mounting the microscope to the post (as shown in photograph).
- ! PT-X.X: Peg Tool (size to match application).

### 616-003 Specifications:

- 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 0-4 Watts 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 bond 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:** Unheated standard stages or custom stage to match application.
- Work Platform:** None (WP-102A or motorized X-Y tables Optional).
- Input Power:** 120 VAC 50-60 Hz @ 10 A (max.) Standard.
- Dimensions:** Bond Head: 13.4 x 6.75 x 6.75 in. (34 x 17.2 x 17.2 cm).  
Control Unit: 14 x 9.5 x 11.5 in. (35.6 x 24.1 x 29.2 cm).
- Unit Weight:** Approximately 37 lbs. (16.8 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.bitalu.lu](http://www.bitalu.lu), [info@bitalu.lu](mailto:info@bitalu.lu)