

# HYBOND

*Soft Touch™*

## Model 616-001 ULTRASONIC PEG BONDER

For Insulated Wire,  
Wire/Ribbon/Mesh,  
Flex on Flex and

Bare  
Pin Tab Bonding,  
Ball Coining



### STANDARD FEATURES:

- ! HYBOND *Soft Touch™* 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.
- ! Anti-static equipment enclosure.
- ! Wiring for 120VAC 50/60 Hz input.

HYBOND's Model 616-001 ultrasonic 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 616-001 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-06S6T: Leica Stereo Zoom Microscope.
- ! OP-06A: Nikon SMZ660 Microscope.
- ! OP-08A: Dual Fiberoptic 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, 4x4in. Top.
- ! Unheated Workstages available in various sizes.
- ! PT-X.X: Peg tool (size to match application).

### **616-001 Specifications:**

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



For more information, contact:

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