

HYBOND

Soft Touch™

PROGRAMMABLE THERMOSONIC WIRE & RIBBON WEDGE BONDER

For 0.5 to 3.0 mil (12,5 to 75µm) dia. wire and up to 1x12 mil (25x304µm) ribbon



STANDARD FEATURES:

- ! Motorized Z control in auto and manual modes (fast & slow speeds for manual).
- ! Bond schedules programmable in non-volatile memory.
- ! Selectable/adjustable Reset Heights (Constant or Adaptive).
- ! 1-2-2; 1-2-1 & 1-1-2 auto stitch or manual continuous stitch in manual & auto modes.
- ! Sensor bond actuation for variable bond height bonding.
- ! 0.740 inch max. vertical bonding window.
- ! Vertical deep access of 0.53 inch when using 0.750 inch wedge tool.
- ! Horizontal reach of 6.5 inches.
- ! Programmable loop and search heights.
- ! Built-in digital temperature controller.
- ! High/low power PLL ultrasonic generator.
- ! Swing away wire/ribbon clamps.
- ! 2 inch and 0.5 inch inertial spool holders.
- ! Z control by foot-switches or manipulator.

Model 676 is a Deep Access, Long Reach Thermosonic Wedge Bonder for wire diameters from 0.5 to 3.0 mil (12 to 76µm) and ribbon up to 1.0 x 12.0 mil (25 x 300µm) featuring HYBOND's unique Soft Touch™ energy system. The 676 was specifically designed for applications that require bonding at extreme height differences between 1st and 2nd bond and bonding wires to sensitive devices such as gallium arsenide FET's and LED's. Model 676's motorized wire feed and wire/ribbon clamping system provide superior wire/ribbon control and also allow the operator to increase or decrease tail length in 1 mil (25µm) increments at a touch of a switch. The amount of clamp "pull-back" required to break the wire at final bond may also be varied in relation to wire elasticity allowing the use of softer wires (higher elongation) than conventionally used in wedge bonding. 676 shows actual units for set up of bond parameters.

Partial List of Available Options:

- ! OP-06S6 Leica Stereo Zoom Microscope.
- ! OP-06A Nikon SMZ-660 Microscope.
- ! OP-08A Dual Fiber Optic Illuminator.
- ! OP-30A 8:1 X-Y Manipulator.
- ! OP-31 Tool Heater and Temp. Controller.

- ! OP-84 Heated Transducer for Tool Heat.
- ! WST-15A Heated Workstage, 2.125 in. Top.
- ! WST-19A Heated Workstage, 4 x 6 in. Top.
- ! WST-65 Heated Workstage, 10 x 6 in. Top.
- ! Wire and wedge tool as ordered per application.

Specifications for Model 676:

- ! Ultrasonic (U/S) System: PLL self tuning. 62.5KHz (nominal) system (± 2.5 KHz).
- ! U/S Power Range: 0-0.2 Watt on low setting and 0-2 Watts on high setting.
- ! Bond Time Range: 0mSec. to 900mSec.
- ! Bond Force Range: 12gr. to 250gr.
- ! Temperature control Range: Ambient to 250 degrees Celsius.
- ! Bondable Wire Diameters: 0.5 to 3.0 mil (12,7 to 75Fm) diameter.
- ! Bondable Ribbon Dimensions: Up to 1x12mil (25,4 x 300Fm).
- ! Bondable Wire/Ribbon Materials: Gold, aluminum and gold coated copper.
- ! Bond head movement: Motorized (servo). Activated by manipulator mounted switches or footswitches.
- ! Bond actuation: By sensor at bond surface contact.
- ! Z Travel/Vertical Bonding Window: 0.750in. (1,90cm)/0.740in. (1,87cm)
- ! Table Motion: 4:1, manual.
- ! Input Power Requirements: 90 - 260VAC 50/60Hz @ 10A max.
- ! Minimum Bench Space Required: 20.0 x 25.0 in. (50,8 x 63,5cm).
- ! Unit Weight/Shipping Weight: 70lbs (31,8Kg)/150lbs (68,2Kg). Shipping weight may vary.
- ! Industry Standards: CE.

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