

Soft Touch<sup>TM</sup>

# **MODEL 626 MULTIPURPOSE**

## DIGITAL THERMOSONIC WIRE BONDER

Ball Bonder, Wedge Bonder, Bump or Stud Bonder, Peg Bonder and more



#### **STANDARD FEATURES:**

- ➤ Motorized Z control in auto and manual modes (fast & slow speeds for manual).
- ➤ 75 bond schedules programmable in non-volatile memory.
- ➤ Selectable/adjustable Reset Heights (Constant or Adaptive).
- ➤ 1-2-2, 1-2-1 and 1-1-2 auto stitch or manual continuous stitch in manual & auto modes.
- > Touch sensor bond actuation for variable bond height bonding.
- > Audio and visual bond indicators.
- > Static dissipative enclosure.

- > 0.740in (18,8mm) max. vertical bonding window.
- ➤ Vertical deep access of 0.53in (13,5mm) when using a 0.750in. (19mm) capillary.
- ➤ Horizontal reach of 6.5 inches (165mm).
- > 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.
- ➤ Ball, Wedge, Bump or Peg bond capable.
- ➤ Electronic ball size control 0 4 x wire diameter.

Model 626 is a Deep Access, Long Reach Wire Bonder that **can operate as a Ball, Wedge, Bump or Peg bonder**. It can be used for wire diameters from 0.7 to 3.0mil (18 to 76μm) gold wire when in Ball/Bump bonder configuration, or wire diameters from 0.5 to 3.0 mil (12,7 to 76μm) and ribbon up to 1.0 x 20.0mil (25,4 x 510μm) for Wedge or Peg bonding configuration. The 626 was specifically designed for applications that require bonding at extreme height differences between 1<sup>st</sup> and 2<sup>nd</sup> bond and for bonding wires to sensitive devices such as gallium arsenide FET's, MMICs and LED's. Model 626's motorized wire feed and wire/ribbon clamping system provide superior wire/ribbon control and allow the operator to increase or decrease tail length in 1 mil (25μm) increments at a touch of a switch. The 626 shows actual units for set up of bond parameters. The change over from Ball bonder to Wedge bonder requires only a press of a button to turn EFO power to zero and a change from capillary to wedge tool. So versatile it can also be fitted with OP-54 for programmable motorized X-Y. For pick, place and bond feature add OP-47A.

## **Partial List of Available Options:**

➤ **OP-06B:** Nikon SMZ745 Stereo Microscope.

> CCTV-XX: Microscope, Camera, Monitor, etc.

➤ **OP-08A-LED:** Dual Fiber Optic Illuminator.

➤ **OP-08R1-LED:** White LED Ring Illuminator.

> **OP-30A:** 8:1 X-Y Manipulator

➤ **OP-31:** Tool Heater and Temp. Controller.

➤ **OP-47A:** Beam Lead/Die Pick, Place & Bond.

➤ **OP-54:** Motorized X-Y and Y Step Back.

➤ WST-15A: Heated Work Stage, 2.125 in. top.

➤ WST-19A: Heated Work Stage, 4 x 6 in. top.

➤ WST-65: Heated Work Stage, 10 x 6 in top.

➤ Wedge & Ball Tool as ordered per application.

### **Specifications for Model 626:**

➤ Ultrasonic (U/S) System: PLL self tuning 62.5KHz (nominal) system (±2.5KHz).

➤ 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: Ball configuration 0.7 to 3.0 mil (18 to 76µm), Wedge or Peg

configuration 0.5 to 3.0 mil (12,7 to  $76\mu m$ ).

> Bondable Ribbon Dimensions: Up to 1 x 20 mil (25,4 x 510μm) in Wedge or Peg bonder mode.

➤ Bondable Wire/Ribbon Materials: Ball bonding mode: Gold and Platinum wire. Wedge bonding

mode: Gold, Aluminum, Copper, Silver, Platinum.

➤ Bond Head Movement/Reach: Motorized (servo). Activated by manipulator mounted switches or

foot switches. / Horizontal reach up to 6.5in (165mm).

➤ Bond Actuation/Bond Height Detect: By sensor at bond surface contact.

➤ Z Travel/Vertical Bonding Window: 0.750 in. (19,0mm)/0.740 in. (18,7mm).

➤ Table Motion: 4:1 manual manipulator, Standard.

➤ Input Power Requirements: 90 – 260VAC 50/60Hz @ 10A max.

Minimum Bench Space Required: Width: 25in., Depth: 30in. (63,5 x 76,2cm).

➤ Unit Weight/Shipping Weight: 70 lbs. (31.8Kg)/150 lbs. (68,2Kg). Shipping weight may vary.

➤ Vacuum Requirement: Vacuum = 20 inHg min. (only for use with work stage if needed).

➤ Industry Standards: CE.

#### For more information contact us:



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