# MEI 1204B HYBRID BALL BONDER

The MEI1204 Series wire bonders provide users the SIMPLICITY and RELIABILITY MEI products are known for and the process control required in today's marketplace. The 1204 Series of assembly equipment builds on MEI's years of experience providing assembly equipment to the MICROWAVE, HYBRID, CHIP ON BOARD, and SEMICONDUCTOR industries.

### Standard features include:

- Front panel control for all bonding parameters
- Front panel status indicators
- Both Z-arm and Search modes
- Unique tool contact sense
- Bond arm velocity control

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MARPET ENTERPRISES INC.

## MEI 1204B MANUAL BALL BONDER

#### **APPLICATIONS**

The 1204B is designed for thermosonic and thermocompression ball bonding of ICs, hybrids, microwave, laser diodes and other devices using gold wire from 0.7 mil (18 microns) to 3 mils (76 microns) in size. In the manual Z mode, the 1204B is ideal for difficult applications that demand a high degree of flexibility and low volume repair work. The push-button-Z mode provides faster bonding for medium and high volume production. The 1204B is available with a wide range of options, permitting it to be configured for almost any possible ball bonding application.

#### STANDARD FEATURES

Front panel controls for all standard bond parameters, including:

- A-bond and B-bond force
- A-bond and B-bond search height
- Bond head velocity
- Loop height
- Reset height
- Digital temperature control

Built-in diagnostics — Front panel LEDs show every step in the bonding process

6:1 Micropositioner permits fast and accurate bond targeting

Digital LED readout heat control for workstage, with solid state relay

Proprietary MEI capillary contact sensing

UTHE dual channel ultrasonic generator and transducer. Time and power for each channel is controlled by front panel dial controls

Spool holder for 1/2" wire spools

ESD protection to eliminate potential static electricity

Electronic flameoff, for any of the following: 0.7 mil, 1 mil, 2 mil, 3 mil, 0.7 and 1 mil, 0.7 and 2 mil, 1 and 2 mil, or 2 and 3 mil wire.

### **AVAILABLE OPTIONS**

Deep access capability

Negative EFO, for 0.7-2 mil wire or 2-3 mil wire. Hydrogen flameoff also available

Auto stepback, for rapid movement from A bond to B bond location

Spotlight target

Stitch bonding

Heated transducer (Tip to 180 degrees Centigrade) for TS bonding

Mini-heater (Tip to 450 degrees Centigrade) for TC bonding

2" Wire spool assembly

4" Diameter workstage rotor

Lighting: High intensity gooseneck, fluorescent ring, or fiber optics

Microscopes: Cambridge Instruments (B&L) EV-73 with 15X eyepieces standard; Nikon, Wild, and other Cambridge Instruments microscopes available

#### Workholders include:

- 1.75"×1.75" substrate workholder with vacuum holddown
- 1.75"×1.75" substrate workholder with mechanical clamp
- Universal workholder, for TO-5, TO-8, TO-18 and similar headers, .300/.600/.900 DIPs, and 1.75"×1.75" substrates, with dual mechanical clamp
- Indexers for parts on belts, boats,
- Custom workholders

#### **SPECIFICATIONS**

Dimensions:

Length: 18.0" (45,7 cm)

Width: 18.5" (47,0 cm)

Height: 21.5" (54,6 cm) Weight: 55 lbs (25 kg)

Services:

Electric: 110V, 60Hz, 5A or 220-240V,

50Hz, 2.5A

Vacuum: >20" (510mm) Hg

Air: 60 PSI (180 kPa), if required

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