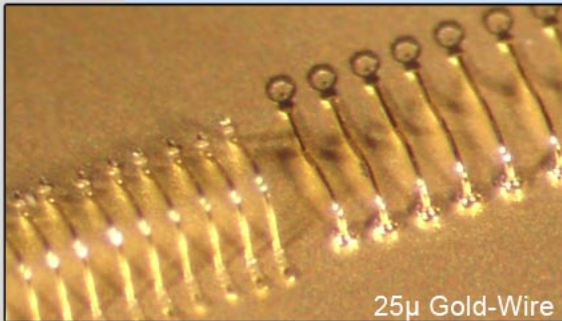




# HB16D Wire & Die Bonder



## Wire Bonding

- + Wedge and Ball Bonding
- + 17µ to 50µ Wire and 25µ x 200µ Ribbon
- + Loop Profile Programmable
- + Stitch bonding and Bump bonding
- + Electronic ball size control
- + Motorised Wire Clamp
- + Motorized 2" Wire Spool Holder



## Die Bonding

- + Placement accuracy +/- 25µ
- + Substrat Size max. 100x 100 mm
- + Die Size max. 10 x 10 mm
- + Die Size min. 0,3 x 0,3 mm

# HB16D Thermosonic Wire Bonder for Wedge & Ball & Die Bonding

The HB16D is a bench top size wire bonder, easy to operate and ideal for laboratories.

pilot and pre-production runs and small scale production lines.

One Bond head for bonding in Ball/Wedge or Wedge/Wedge bonding mode and Die Bonding Mode.

No hardware change necessary. Easy operation with TFT Touch Panel Operator System.

Direct access and simple adjustment to all bond parameters and programs.

## Standard

6,5" TFT Touch panel operation System  
90° Bonding Deep-access Bond Head  
Digital self tuning Ultrasonic generator  
Large bonding area  
Bond arm length 165 mm  
100 Program storage capacities  
USB to store Bonding programs  
Built in Dual Fiber Optic illuminator  
Built in Heater stage Controller  
Motorised Z & Y  
Semi-automatic, Step and manual bonding

## Options

H10 Zoom Stereo-Microscope Leica S6 20x  
H21 100 x 100 mm Adjustable height heated work stage  
H26 Adjustable height heated work stage surface 60 mm ø  
H26-WAF Wafepack Holder for H26  
H29 Adjustable height heated work stage surface 90 mm ø  
H40 Tool Heater and Temperature Controller with LCD Display  
H50 Spot light targeting System  
H51 Manual Z control  
H60-XX Bonding tool for Wedge bonding 25µ wire  
H61-XX Bonding tool for Ball Bonding 25µ wir  
H70 Gold-Wire 25µ, 60 Meter, 2" Spool  
H74 Aluminium -Wire 25µ, 60 Meter, 2" Spool  
H76 Vacuum Pump  
H80 -1XX Die Bonding Tool  
H80-ESU Epoxy Stamping Unit

## Technical Spezifications

|                         |   |
|-------------------------|---|
| Ultrasonic system       | digital self tuning 60 kHz transducer             |
| Ultrasonic power        | 0 - 2 watt  |
| Bond time               | 15 - 2000 msec.                                   |
| Bond force              | 15 - 100 grams                                    |
| Bonding Tool            | 1,58 Dia. X 19 mm length (0,0624" Dia. x 0,75")   |
| Gold wire diameter      | 17 to 50µ ( 0,7 to 2 mil )                        |
| Aluminium wire diameter | 17 to 50µ ( 0,7 to 3 mil )                        |
| Gold ribbon             | up to 20 x 200µ (1 x 8 mil)                       |
| Motorised Wire Spool    | 50,8 mm ( 2 inch )                                |
| Wire termination        | table tear or clamp tear                          |
| Wire feed angle         | 90° for Wire and Ribbon                           |
| Motorized Y travel      | stepback up to 7 mm (0,27")                       |
| Motorized Z travel      | 15 mm (0,6")                                      |
| Throat depth            | 165 mm ( 6,7")                                    |
| Fine Table motion       | 10 mm (0,55 ")                                    |
| Mouse ratio             | 6:1   |
| Temperature controller  | up to 250°C +/- 1°C                               |
| Electrical Requirements | 100 - 240V +/-10% 50/60 Hz 10A max.               |
| Physical Dimensions     | 680 mm ( 27")W x 640 mm (25") D x 490 mm ( 19") H |
| Weight                  | Shipping 60 kg (125 lb) Net 31 kg (69 lb)         |
| Industry Standards      | CE standards                                      |



TPT GbR  
Lärchenweg 59a  
D-85757 Karlsfeld  
Tel.: +49 (0) 8131 / 58604  
Fax: +49 (0) 8131 / 58654  
www.tpt.de