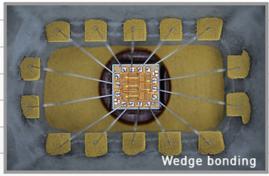


HB100 Automatic Wedge & Ball Bonder

Motorized Z- X- Y- Axis & Bondhead Rotation



The HB100 is a new generation of automatic desktop wire bonders. It is suited for laboratories and small volume productions. It performs wedge- and ball-bonding with one bond head. The HB100 is very easy to handle with touch-screen and joystick. The software strongly supports the user with process guidance and bond assist features. The bonding technology is based on our popular semi-automatic bonders. It is completely engineered and manufactured in our German factory.



Ball bonding

- + Wedge and Ball Bonding with One Bond Head
- + Touch Screen Interface with 21" and Joystick Controller
- + Linear Motor Axis System
- + Deep and Wide Bond Access with large Working Area
- + Bond wires from 17µm to 75µm
- + Dual Camera System
- + Crash Prevention System for Z-Axis Touch Down
- + Broad range of Accessories like Heater Stages & Top Plates

HB100 Automatic Wire Bonder for Wedge & Ball Bonding

Technical Specifications:

Bonding Method Wedge-Wedge, Ball-Wedge & Ribbon- bonding

Bond head capability One head for Wedge & Ball bonding, only tool change required

Speed 1 Wire in 3 sec

Gold wire diameter $17 - 75\mu m (0,7 - 3 mil)$ Aluminium wire diameter $17 - 75\mu m (0,7 - 3 mil)$

Ultrasonic system 63,3 kHz Transducer PLL Control (110kHz option)

Utrasonic power 0 - 10 Watt
Bond time 0 - 5 sec.
Bond force 10 - 200 cNm

Bonding tool 1,58 Ø 19 mm length (0,0624" x 0,750")

Wire spool size 2"

Clamp Design Deep Access 90° wire feed angle, 14mm immersion depth

Wire termination Bond Head Tear or Clamp Tear

Clamp movement Motorized, Up & Down

Ball size control Negative EFO, Software controlled

Dual camera Detail View & Overview at the same time / 150 times magnification

Z-Drive & Resolution Lead Screw Motor / 0,5µm

Motorized Z travel 100 mm (3,9")
X-Y Drive & Resolution Linear motors / 0,1 µm
Motorized X 8 X travel 20 mm (3,5")

Motorized X &Y travel 90 mm (3,5")

Max. component width 400 mm (15,7")

X-Y-Z Axis control Joystick

Screen size 21" Touchscreen

Software environment Industrial PC with Windows 7

Heater Stage 90mm Ø surface / mechanical & vacuum clamping (other sizes available)

Temperature controller up to 200°C +/- 1°C

Electrical Requirements 100 - 240V +/-10% 50/60 Hz 10A max.

Machine Size Desktop Design for quick installation and easy portability Dimensions 620mm (24,4") x 750mm (29,5") x 680mm (26,7") W D H

Weight Net 72 kg Industry Standards CE standards

Accessories:





Vacuum Pump