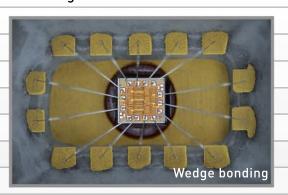


## HB100 Automatic Wedge & Ball Bonder

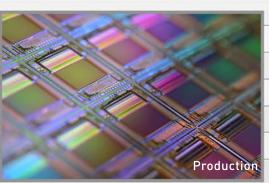
Motorized Z- X- Y- Axis & Bondhead Rotation



The HB100 is a new generation of automatic desktop wire bonders. It is suited for prototyping and small volume productions. It performs wedge- and ball-bonding, ribbon- and bump-bonding with one bond head. The HB100 is very easy to handle with touch-screen and joystick. The software supports the user with process guidance. The bonding technology is based on our popular semi-automatic bonders. It is designed and manufactured in Germany.



- + Wedge, Ball, Ribbon and Bump Bonding with One Bond Head
- + Touch Screen Interface 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
- + Pattern Recognition Option
- + Multi-Picture for Pattern Recognition
- + Copy Package
- + Extended Settings
- + Password Protection
- + Data Backup



## **Technical Specifications**

Bond head capability

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

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 )

Ribbon size max.  $25 \times 250 \mu m$  (  $1 \times 10 mil$  )

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

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

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 / 0,5 μm

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

Motorized X &Y travel 100 mm (3,9")
Max. component width 400 mm (15,7")
X-Y-Z Axis control Joystick

Rotation-Drive Resolution +/- 0,5° Screen size 21" Touchscreen

Software environment Industrial PC with Windows

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 620 mm (24,4") x 750 mm (29,5") x 680 mm (26,7") W D H

Weight Net 72 kg
Industry Standards CE standards

## Accessories:



Heaterstage H22 150mm x 200mm

