

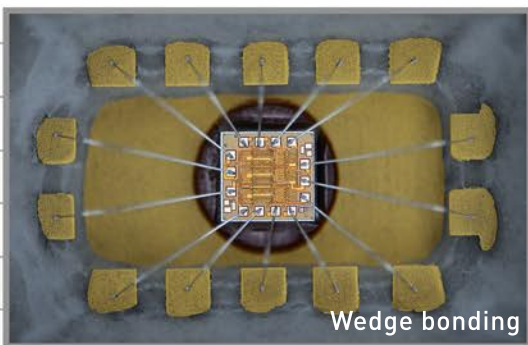


HB100 R&D Wire Bonder

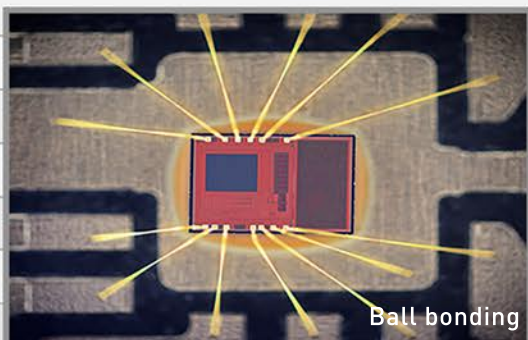
for institutes and universities



The HB100 R&D is a new generation of automatic desktop wire bonders. It is suited for laboratories in institutes, universities and R&D facilities. 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 with 21" and Joystick Controller
- + Linear Motor Axis System
- + Deep and Wide Bond Access with large Working Area
- + Bond wires from 17 μ m to 75 μ m
- + Dual Camera System
- + Crash Prevention System for Z-Axis Touch Down
- + Broad range of Accessories like Heater Stages & Top Plates
- + Pattern Recognition Option



HB100 R&D Wire Bonder

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 μm (0,7 - 3 mil)
Aluminium wire diameter	17 - 75 μm (0,7 - 3 mil)
Ribbon size	max. 25 x 250 μm (1 x 10 mil)
Ultrasonic system	63,3 kHz Transducer PLL Control (110 kHz option)
Ultrasonic power	0 - 10 Watt
Bond time	0 - 5 sec.
Bond force	10 - 200 cN
Bonding tool	1,58 \emptyset 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 \emptyset 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:

H19 Set Flexarm with Microscope

Heaterstage
H21 100mm x 100mm



Heaterstage H22 150mm x 200mm



H69-7 Bond Starter Kit

Specifications are subject to change without prior notice



TPT Wire Bonder GmbH & Co.KG
Einsteinstr. 10 D-85757 Karlsfeld
Tel.: +49 (0) 8131 / 7573 50
www.tpt.de / info@tpt.de

Made in Germany