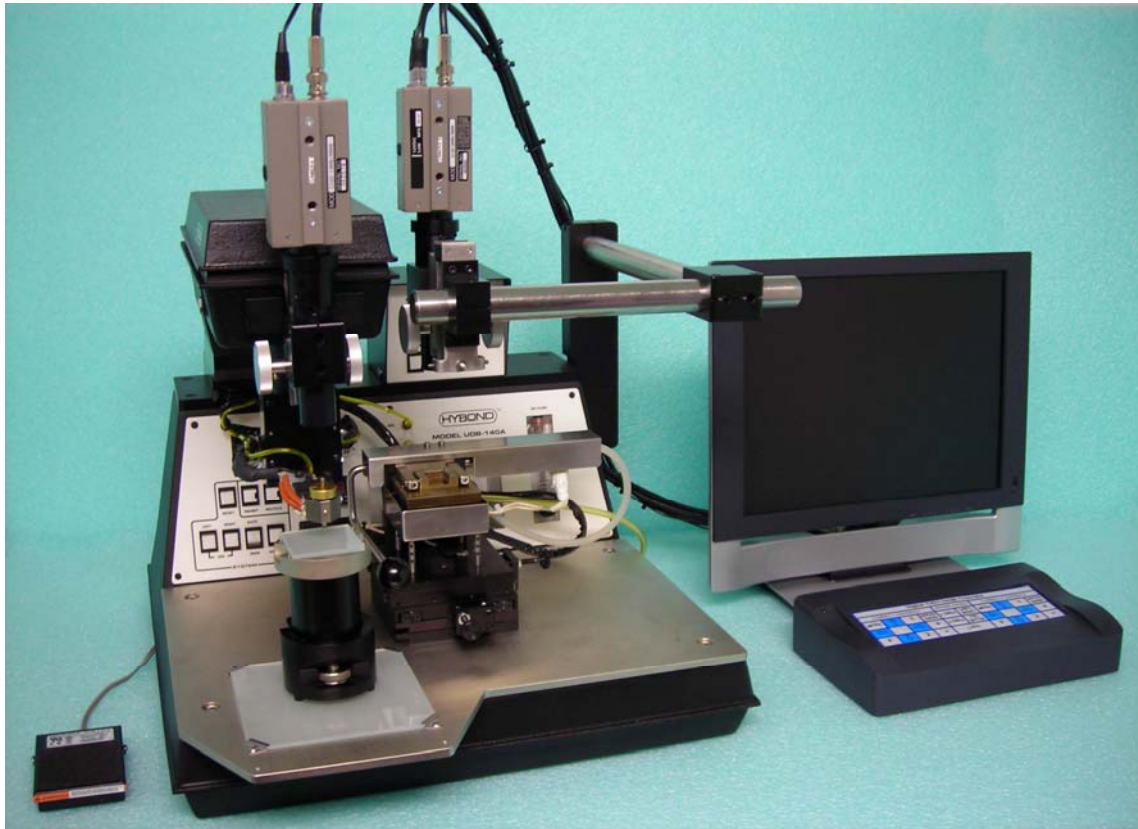


HYBOND

MODEL UDB-140B EUTECTIC/THERMOPLASTIC DIE BONDER



STANDARD FEATURES:

- ! Heated nitrogen cover gas.
- ! Black & white CCTV system (as shown).
- ! Separate preform pick up tool and cycle.
- ! Manual and semi-automatic operation.
- ! Adjustable scrub time.
- ! Single axis scrub.
- ! Manual X-Y alignment stage.
- ! Waffle pack/loose die pick up pedestal.
- ! Pitch and roll adjustment for bond head.
- ! Independent head and stage temperature control.
- ! Adjustable scrub amplitude.
- ! PLC Control.

The UDB-140B is a semi-automatic die bonder for eutectic, thermoplastic, and other die attach media where heat is required at the die pick up tool and/or the package work stage. Precise die placement, quick device change over and versatility are integral with the design. The UDB-140B is rugged enough for continuous production and ideal for small production runs and laboratory applications. Die pick up and placement positions are located with the aid of dual CCTV cameras and a split screen monitor which incorporates a die and package targeting system. Proper positioning is performed with a preform/die pick up system and manually adjustable X-Y stages. The UDB-140B is modular and easily adapted to various modifications. Custom packages and die can be accommodated by designing in suitable fixtures to fit the application.

Partial List of Available Options:

- ! Die ejector systems.
- ! Heated N₂ cover gas package enclosure.
- ! Color CCTV system.
- ! Zoom stereo microscope with swivel base.
- ! Dual fiber optic illumination system.
- ! Custom top plates.
- ! Lead frame indexing systems.
- ! Semi-automatic indexing systems.
- ! Remote pendant controls.
- ! Variable time ramped temperature generator.
- ! Laser diode alignment search height pause.
- ! Customization based on specific application.

Model UDB-140B Specifications:

- ! Scrub System: Single Axis: Magnetic coil @ 50/60 Hz.
- ! Scrub Amplitude: 0 - 25 mils (0 - 635 μ m). Same for X and Y in dual axis scrub.
- ! Bond (Scrub) Time Range: 0 - 15 seconds.
- ! Dwell Time (Before Scrubbing): 0 - 15 seconds.
- ! Bonding Force Range: 15 - 50gr (stacked weights) standard. Up to 500gr optional.
- ! Temperature Range: Stage: Ambient to 500°C. Collet: Ambient to 250°C.
- ! Bondable Die Size Range: 6x6 mils(152x152 μ m) to 100x100 mils(2.5mm x 2.5mm) standard.
- ! Placement Accuracy: \pm 1mil (\pm 25,4 μ m). Less when adding microscope option.
- ! Bondable Preform Alloys: AuSn, AuSi, AuGe, and others.
- ! Bond Head Movement: Motorized, rotational, with fixed pickup and placement points.
- ! Bond Actuation: By opto-sensor at fixed height. Cycle activated by footswitch.
- ! Z Travel/Vertical Bonding Window: 0.5in. (1,20cm)/0.125 to 0.500 in (0,31 to 1,20cm).
- ! Placement Table Motion: Manual, with thumbscrews, standard.
- ! Input Power Requirements: 120 VAC 50/60Hz @ 10A max.
- ! Minimum Bench Space Required: X & Z = 18in. (45cm) Y = 22in. (56cm), without monitor.
- ! Facilities Required (minimum): Vacuum: 23in.Hg (584mmHg).
- ! Inert Gas (if required): 60psi (4,2Kg/cm⁵).
- ! Unit Weight/Shipping Weight: 75lbs (34Kg)/150lbs (68Kg). Shipping weight will vary.
- ! Approximate Units Per Hour (UPH): 90 - 240 depending on options, settings and mode of operation.

For more information contact us:



**330 State Place, Escondido, CA. 92029, USA
Tel. 760-746-7105 Fax. 760-746-1408**

e-mail: mailus@hybond.com or visit us online at: www.hybond.com