DB 600 Adhesive Die Bonder

The DB600 is a manual adhesive die bonder, equally suitable for the prototype process assemblies and routine production work. It is ideal for the hybrid applications and for handling workpieces up to 102mm square, offering functions such as die eject, pressure dispense and offset printing.

DIE HANDLING AND PLACEMENT

The pick-up and dispense heads are mounted on precisions Z-slides with manual control to aid precision placement to an accuracy of +/- 25 microns.

Die presentation options include waffle tray or mirror tray pedestals and a die ejects system for wafers up to 152mm diameters. A multiple component handling capacity is achieved by using a rotary pick-up head carrying four manually selected toolholders.

An optional heated workholder for temperatures of up to 250° Centigrade is available for use with thermoplastic adhesive materials.



EPOXY DISPENSE

In its simplest form the DB600 can be used for picking and placing die or components on to prescreened substrates, but may be upgraded into a full dispense system with throughput rates of up to 300 units/hour.

The standard dispense method is from a low volume reservoir nozzle, with dot size being controlled by time, pressure and needle size down to 0.15mm diameter.

When large amounts of adhesive are required, standard cartridge holders are available up to 50cc. The optional pressure dispense system is generally used for smaller dice and multiple dispense nozzles are available for larger dice.

OFFSET PRINTING

The offset printing option enables consistent printing of larger areas, including irregular shapes, eliminating multiple dot dispensing.

A rotating reservoir contains the adhesive, the thickness of which is controlled by an adjustable knife blade which leaves a thin and uniform layer into which the transfer tool is lowered. Print tools are easily interchanged.