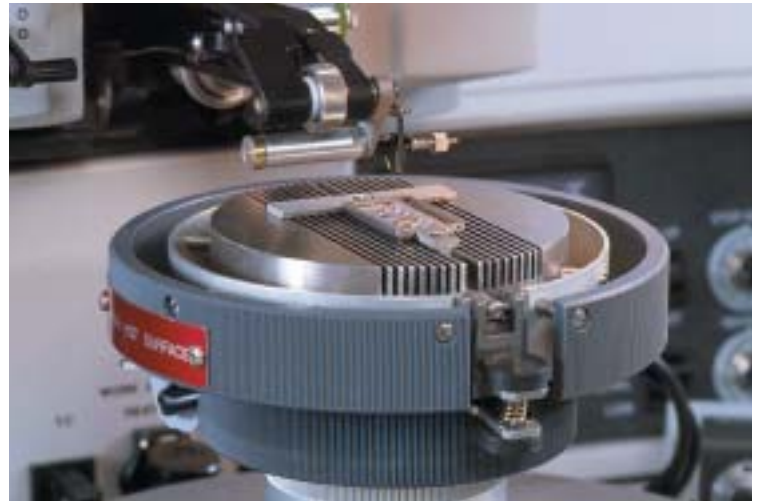


4523

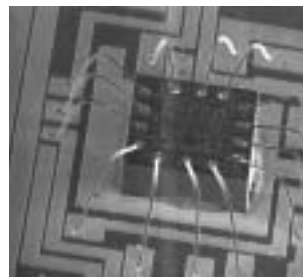
Manual Wedge Bonder



For process development, production, research or added manufacturing support, K&S 4523 Series Manual Wedge Bonder provides highly versatile capability at an exceptionally economical price to address various wedge bonding applications including Hybrid/MCMs, Chip On Board, Microwave, Laser, Opto-Type products and Discrete devices.

Wedge Bonder Offers Versatile Production Capabilities

Designed for aluminum wire, gold wire and ribbon, the Model 4523 Manual Wedge Bonder offers the versatility to bond simple discrete devices up to complex hybrid, microwave devices. A bonding head with a deep access option and tail adjust system supports deep cavity microwave applications where tight control over the tail length is essential. With its small wire diameter capability of 0.0007" (18 microns), the Model 4523 also enables the creation of short wires with low loops to support RF devices. A manual Z mode allows operator control over looping and wire length, providing excellent results for tight spaces or unusual loop requirements. Offering capacity for a wide range of wire diameters, easy implementation, individual bond parameter and loop height control, the Model 4523 is ideal for use in various wedge bonding applications including Hybrid/MCM, Chip On Board, Microwave and Discrete devices.



- Large 5.3" x 5.3" (134 mm x 134 mm) bonding area
- One bond head for deep access & standard bonding
- Consistent tail length with real-time fine adjust on operator panel
- Built-in temperature controller
- Wide range of work stage options
- Ergonomic design with choice of left or right-hand mouse options
- Olympus or Leica microscope for precise viewing
- Complies with UL and CE standards

Machine Specifications

XYTABLE

Bonding Area
134 mm x 134 mm (5.3" x 5.3")

Throat Depth
143 mm (5.6")

Gross Table Motion
140 mm (5.5")

Fine Table Motion
14 mm (0.55")

Mouse Ratio
6:1

Z Motion System
DC servo/LVDT control

Z Travel: Low Reset
6.6 mm (260 mil)

Z Travel: High Reset
12.7 mm (500 mil)

Ultrasonic System
High Q 60 kHz transducer,
PLL Ultrasonic Generator
Separate 1st and 2nd
Bond Controls

PARAMETERS

Low Ultrasonic Power
1.3 W

High Ultrasonic Power
2.5 W

Bond Time
10-100 mSec/10 - 1000 mSec

Bond Force (no springs used)
Force Coil 10 - 160 grams
Counterweight to 50 grams
Separate 1st and 2nd
Bond Controls

Wire Feed Angle
30°, 38°, 45°
90° option
• Round Wire
• Ribbon
30°, 38°, 45° ribbon option

Temperature Controller
250°C ± 5°C maximum

PROCESS CAPABILITY

Wire Diameter Range
Gold: 18 to 76 µm (0.7 to 3 mil)
Aluminum: 20 to 76 µm
(.8 to 3 mil)
Gold Ribbon: Option Up to
25 x 250 µm (1 x 10 mil)

Spool
Std: 1/2 "
Option: 2" x 1" Double Flange
Each is available for standard
and deep access

FACILITY REQUIREMENTS

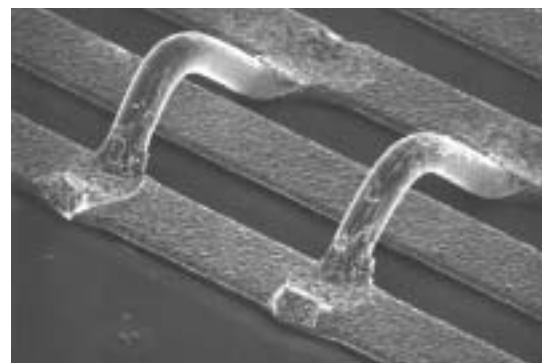
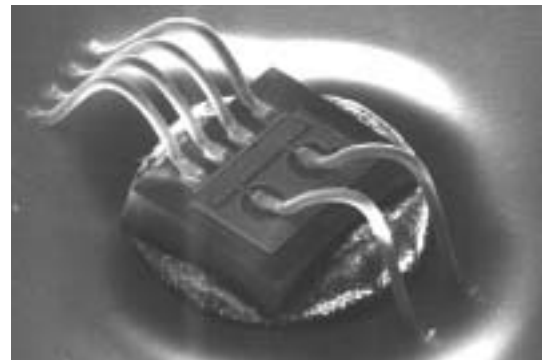
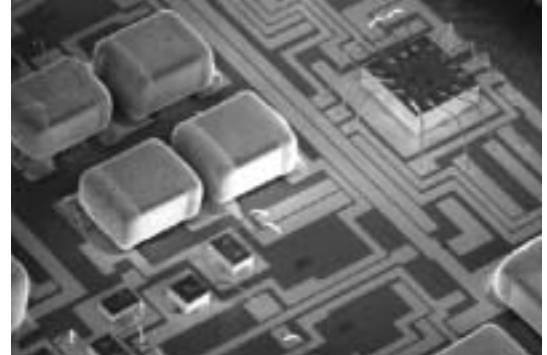
Electrical
100 - 120/220 - 240V + 10%
50/60 Hz 250 VA max.

Dimensions
680 mm (27") W x 700 mm
(27.5") D x 530 mm (21") H

Weight (basic model)
Shipping: 55 kg (122 lb)
Net: 31 kg (69 lb)

OPTIONS

- Leica and Olympus Microscopes and eyepieces
- LED ring illumination
- Spotlight target
- 90° feed angle kit for deep access wire or ribbon bonding
- Manual adjustable height, heated workholders up to 6" x 6" and 4" or 6" wafer type
- Mini-heater kit for heated wedge process
- Left or right mouse (no charge option)
- ESD protection kit for static sensitive work
- CCTV color monitor kit
- Electronic crosshair kit



For sales, service and
manufacturing locations, visit:

www.kns.com

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ID# MED-014, Revision 02/05