

Model 4522

Multi-Process Ball Bonder

The Model 4522 Multi-Process Ball Bonder for gold wire is especially designed for R&D and small production lots where unique processes are used.

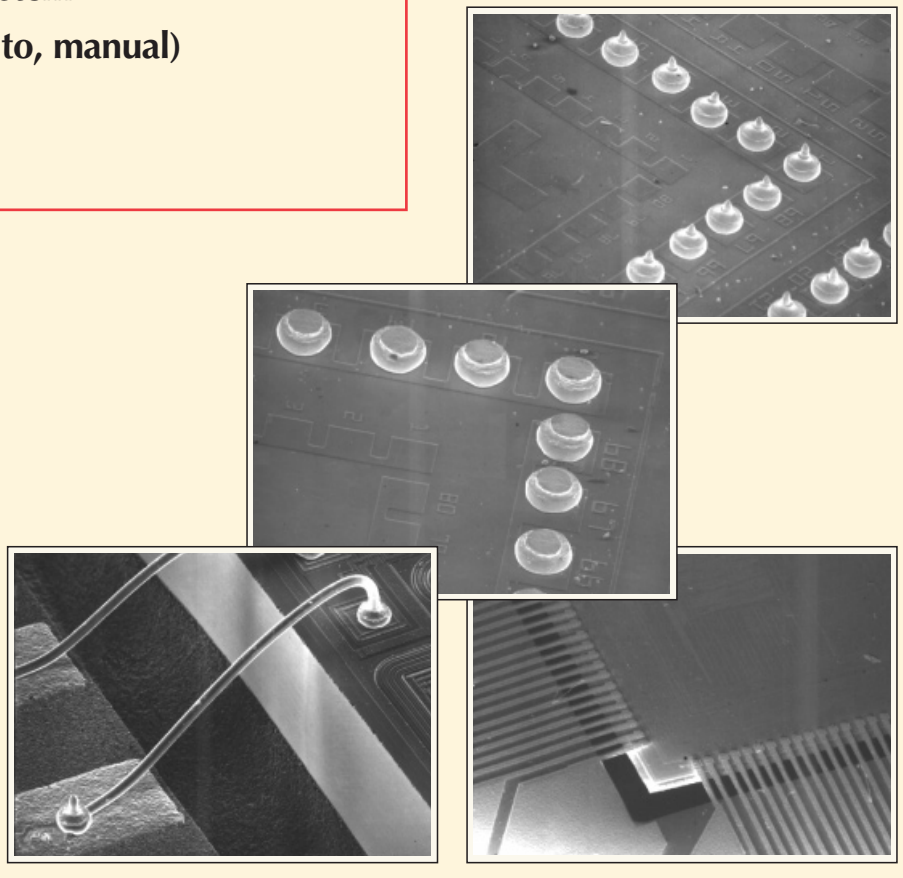
Single Point TAB, Ball Bumping, and Coining, together with standard Ball Bonding, offer process flexibility and versatile capabilities.

Semi-auto and manual operation modes, individual bond parameter control and a wide range of wire dia. make it ideal for a variety of applications.

The built-in programmable Negative Electronic Flame-Off system provides consistency and fine control of ball size.

Here's Why

- Consistent ball size
- Missing ball detector system
- Easy operation (semi-auto, manual)
- Large bonding area
- Deep access option



Ball Bonding

Single Point TAB

Ball Bumping

Coining

Security Bonding

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Model 4522
Multi-Process Ball Bonder

Technical specifications

Wire
Gold ..... 18 to 76 µm (0.7 to 3 mil)
Spool ..... 50.8 mm (2 inch)

Machine Specifications
Bonding area .. 152 x 152 mm (6 x 6 inch)
Throat depth ..... 143 mm (5.6 inch)
Gross table motion ..... 140 mm (5.5 inch)
Fine table motion ..... 14 mm (0.55 inch)
Mouse ratio 6:1
"Z" motion system ..... DC servo/ LVDT control
"Z" travel: ..... 9.1 mm (360 mil)
Ultrasonic sys. .. high Q 60 kHz transducer .... PLL ultrasonic generator
Low ultrasonic power ..... 1.3 W
High ultrasonic power ..... 2.5 W
Bond time:
Ball Bonding/Bumping ..... 20-200 mSec
Single Point TAB ..... 20-1000 mSec
Bond force ..... force coil 10-160 gr.
Wire termination ..... clamp tear
Modes of operation ..... Semi-Auto, Manual "Z", Ball Bonding, Ball Bumping, Single Point TAB, Coining
Ball formation system ..... Negative E.F.O
Missing ball system ..... indication and auto-stop
Temperature controller .. up to 250°±0.5°C

Options
- Microscopes and eyepieces
- Fiber optic illumination and spotlight target
- Deep access kit for 500 mil (12.5 mm) "Z" travel
- Manual height-adjustable, heated workholders
- Spot light target
- Motorized index workholders
- 3rd channel kit
- Heated capillary kit
- Motorized "Y" table for tight loop control
- Height-adjustable rotary table

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

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

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

Industry Standards
Complies with UL and CE standards

Other specifications required by customer are possible.
Specifications are subject to change without prior notice.

A focus on customer support

K&S equipment is backed by a worldwide Customer Support organization whose responsibility to customers continues after delivery and installation.

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- Customized Contracts

To Order or Schedule Services
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