

# WEST·BOND. INC.



**5430E – 5630E – 5730E SERIES (High Frequency)**

**SEMI-AUTOMATIC WIRE BONDERS**

*Continuing a Tradition of Quality*

# 5430E · 5630E · 5730E Series Semi-Automatic Bonders

**545730E - Three-Way Convertibility, 45° Wire Feed, 90° Wire and Ribbon Feed, or Ball Bonder**

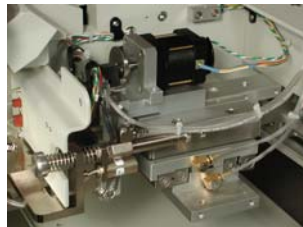
**545630E - Two-Way Convertibility, 45° Wire Feed, or 90° Wire and Ribbon Feed**

**5730E - Single Ball or Ball-Wedge Bonder**



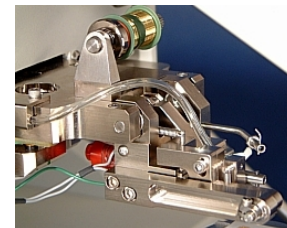
**WEST-BOND'S** Model 545730E brings forward the new advances of the "E" Series, notably the placement of all machine mechanism above the work plane to allow unlimited access, and the setting of axis brakes to lock on target. In this model the tool, rather than the work, is moved, both for alignment and for bonding, with the work pre-rotated. The machine bonds aluminum or gold wires ranging from 0.0007 in. to 0.002 in. and aluminum or gold ribbon ranging from 0.0005 in. x 0.002 in. to 0.001 in. x 0.010 in. Bonds are made by the wedge-wedge or ball-wedge technique using ultrasonic energy and work piece heat

**CONVERTIBILITY** for angled and vertical wire feed wedge bonding is easily accomplished with a simple change of clamping mechanisms, both of which are included with Model 545630E. Model 545730E expands convertibility with a tool head and Negative EFO assembly for single ball or ball-wedge bonding. All program variables and bond settings for each configuration are retained in memory between conversions.



**PROGRAMMING** for thirty different device types may be entered into separate buffers. Each device wire may have up to 21 stitch bonds with individual ultrasonic power, time, force, (high or low) and Z-Axes elevation control data. Program values, action prompts, and fault diagnostics are exhibited on the easy to read 4 lines, 40 characters LCD sequentially with machine operation.

**ADDITIONAL FEATURES** include 110 kHz ultrasonics (110Khz Available), orthogonal X-Y-Z axes with pure vertical Z motion, pneumatic braking of X-Y-Z axes during bonding, and built-in tool heat. Available with the base and work platform for tabletop applications, or without base and work platform for mounting above any work handling system.



## STANDARD SPECIFICATIONS

CONTROL LOGIC: Motorola 68000 microprocessor  
DATA ENTRY: Keypad -12 keys  
DISPLAY: 4 line, 40 character LCD  
DEVICE STORAGE: Battery Backup RAM  
TOOL Z STROKE: 0.5 inch  
MOTORIZED Z RESOLUTION: 0.000208 inch per micro-step  
MANUAL Z ENCODER RESOLUTION: 0.001 inch  
FORCE RANGE: Adjustable, 10-250 grams,  
BOND FORCE: High / Low Programmable  
TRANSDUCER: Full wave, 110 kHz (nominal)  
ULTRASONICS: Built-in, 8 bit, 3 watts  
ESD PROTECTION: Protection against Electrostatic Discharge  
BALL FAULT DETECTION: Ball bonder

TAIL AND PULL STROKES: Programmable  
ANGLED FEED TOOL LENGTH: 0.828 inch  
VERTICAL FEED TOOL LENGTH: 0.828 inch  
BALL CAPILLARY LENGTH: 0.750 inch  
WIRE RANGE: 0.7 to 2 mils, ½ x10 mil gold ribbon (vertical feed)  
WIRE SPOOL MOUNT: 0.5 inch with ball bearing roller  
MICROMANIPULATOR: Counterbalanced, single lever X-Y-Z  
RADIANT TOOL HEAT: Built-in  
WORK PLATFORM: Fixed height. Adjustable height priced separately  
MICROSCOPE: Selection available (ESD types available)  
ILLUMINATOR: Selection available (ESD types available)  
WORK HOLDERS: Selection available (ESD types available)  
DIMENSION: W=24.218" x D=22.297" x H=11.000"  
WEIGHT: 75 lbs uncreated, or 110 lbs accessorized and created

[www.westbond.com](http://www.westbond.com)

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