

# WEST·BOND, INC.



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

**SEMI-AUTOMATIC WIRE BONDERS**

*Continuing a Tradition of Quality*

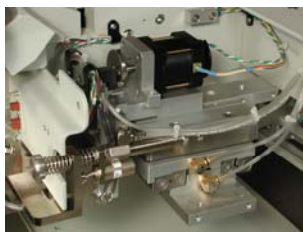
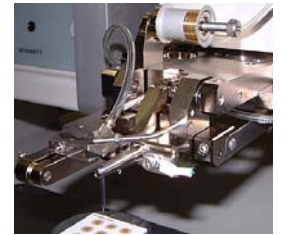
# 5430E - 5630E Series Semi-Automatic Bonders (High Frequency)

**5430E - 45° Wire Feed Wedge Bonder**  
**5630E - 90° Wire and Ribbon Feed Wedge Bonder**



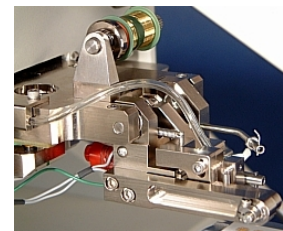
**WEST-BOND'S** Model 545630E brings forward the new advances of the "E" Series, notably the placement of all machine mechanism above the work plane to allow unlimited access, and the setting of axis brakes to lock on target. In this model the tool, rather than the work, is moved, both for alignment 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 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. All program variables and bond settings for each configuration are retained in memory between conversions. The tool head is built around a 63 kHz ultrasonic transducer and provide full two-way convertibility.



**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 63 kHz ultrasonics (110Khz Available), orthogonal X-Y-Z axes with pure vertical Z, motion slaved Z encoder, 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  
MEMORY: 256KB RAM  
DATA ENTRY: Keypad - 12 key  
DISPLAY: 4 line, 40 character LCD  
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: Two levels, adjustable  
TRANSDUCER: ½ wave, 63 kHz (nominal)  
ULTRASONICS: Built-in, 8 bit, 5 watts  
ESD PROTECTION: Protection against Electrostatic Discharge

TAIL AND PULL STROKES: Programmable  
ANGLED FEED TOOL LENGTH: 0.750 inch (5400E)  
VERTICAL FEED TOOL LENGTH: 0.750 inch (5600E)  
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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