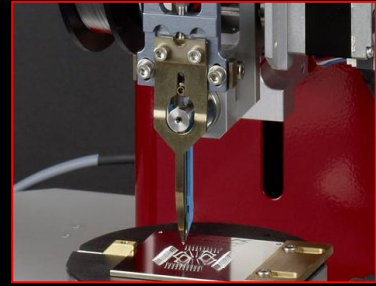


BONDING THE STARS



5350 Manual Heavy Wire Bonder

Our new **manual bonder 5350 for heavy wire** is ideally suited for R&D labs, prototype and pilot production and repair facilities who only have limited budgets but need highest bond quality.

Its most outstanding feature is a full-blown **automatic wire cutting unit** which guarantees perfectly reproducible wire cuts at single-micron precision without any risk of component damage. Thanks to a motorized Y-axis of 4 mm travel in addition to the motorized Z axis, it also offers perfectly identical bond tails through a programmable, automatic step-back.

Even complicated loop forms including **reverse loops** or **stitch bonds** are easily executed with minimum operator influence. Uncommonly for a manual bonder, all parameters are programmed and saved on the internal hard disk, supported by a large colour display and our popular shuttle wheel which is quick and intuitive to handle.

The 5350 software allows several operating modes from a fully manual step-by-step mode to a production mode where the operator only has to move to the bond positions and then pushes a single button. Only a **minimum of training** is required.

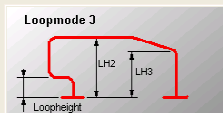
Hard- and software of the 5350 are very similar to the 5330 and 53XX BDA thin-wire bonders from the 5300 family. This keeps training and maintenance cost extremely low. At the same time, the bond head is almost identical to that of the fully automatic bonders from F&K Delvotec, ensuring bonds of the **highest quality** and making **scale-up** to larger production volumes trouble-free.

Mechanical System

<i>Wire types</i>	Aluminium wire 100 ... 500 µm on 4" spool
<i>Bond head</i>	Wedge-wedge for heavy wire Standard wedges of 2" length 90° wire guide with patented self-adjusting quick-change wireguide and quick-change cutter Bond force programmable 100 to 1000 cN; voice-coil bond force system
<i>Ultrasonic System</i>	proprietary 60 kHz system
<i>Mechanics</i>	Programmable linear Z-axis with 60 mm travel; step resolution 1 µm Programmable linear Y-axis with 4 mm travel; step resolution 2 µm
<i>Manipulator</i>	in X and Y, working range 18x18 mm stepdown reduction 1:7

BONDING THE STARS

Clamp closes at LH
Loop Mode 3




US Generator
 Low Power(2.5W)
 High Power(5W)
 Low Frequency(60 kHz)
 High Frequency(100 kHz)

Move Speed max = 10mm/s
 Loop Speed max = 10mm/s
 TD Speed max = 1mm/s

Reverselength 100 cnt
 EFO Force 2000 cnt
 Def. Bondforce 190 g/cN

TD Threshold 50 d.
 SW Touchdown

 Exit

Tailheight 300 µm
 Taillength 300 cnt
 Cutheight 645 µm

Tearheight 100 µm
 Tearlength 200 cnt
 Tearcount 1 cnt

Press <Enter> to store Press <Home> to Leave  Exit

Control System

Hardware

Single-board PC with Windows operating system
 TFT color display 6,5" (640x480 pixel)
 simple and rapid operation and programming through
 shuttle-wheel with push-button

Control modes

manual, semi-auto production mode
 program line-step for testing by shuttle wheel

Loop types

Standard rectangular, reverse, stitch, all programmable

Substrate Handling

Manipulator

in X and Y, working range 18x18 mm
 stepdown reduction 1:7

Substrate holder

working height 70 mm above base plate
 standard 80 mm Ø for parts up to 2"x2"
 optionally 4"x4" and 95 mm Ø, also with vacuum

General

Dimensions

Width 630 mm, depth 580 mm; height 400 mm,
 weight ca. 40 kg

Supplies

100...240 VAC, single-phase, 50/60 Hz, max. 230 VA
 Ø 6mm standard vacuum tubing

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