

Specifications

Mechanics

X, Y table Working area 100 x 100 mm
Resolution 0,25 µm, repeatability < 2 µm

Z-axis 60 mm

Speed All axes programmable from 0, 2...16 mm/s
≤ 30 wires / min.

Bond head Wedge-Wedge Al - Heavy wire
Axis of rotation ± 360°
90° quick-change wire guide and cutter
Bondforce programmable 100 to 1000cN

Ultrasonic system 40KHz

Wire size 100 to 500 µm

Loop Forms Triangular, rectangular, reverse, stitch bond
programmable

Controls

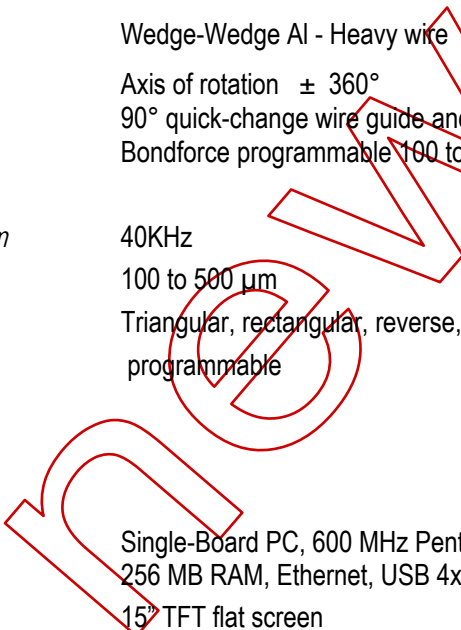
Computer Single-Board PC, 600 MHz Pentium processor,
256 MB RAM, Ethernet, USB 4x, CD-ROM

Monitor 15" TFT flat screen

Operation system Windows 2000

Printer All Windows-compatible printers can be installed
All bonding parameters can be printed

Work holder 2"x2" standard with mechanical clamping
4"x4" optional, as well with vacuum



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5650

Semi-automatic Heavy Wire-Wedge- Bonder

The semi-automatic Wedge-Wedge Bonder 5650 fills the gap between the manual Wedge-Bonders series 54xx from F&K Delvotec Semiconductor to the automatic bonder from F&K Delvotec.

On basis of the 5600-series the bonder is fully PC controlled and allows any number of bonds to be programmed.

Pre-programmed adjust points are targeted through the camera's cross hair targeting system and the programmed bonds are executed automatically.

Two operating modes are available: Single bond for repair of various samples in order to perform a single bond.(manual-automatic) Multi wire for teaching and bonding of single chips or various samples (semi and fully automatic).

The 5650 can also be used as a Au Wire or AL Thin Wire Bonder as well as pull/shear tester by simply replacing the bond head and loading the appropriate software.

change over time: approx. 3 minutes.
Ask us for information !

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Other features

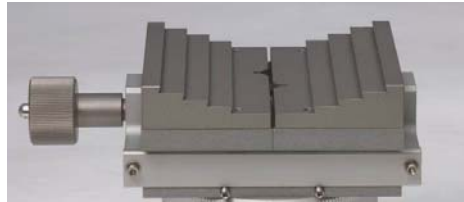
Programming:

Automatic bonding of hybrids, power modules or others with programmable X/Y table

Work holders



for components 2" x 2"
mechanical clamping



for components 4" x 4"
mechanical clamping



for components 4" x 4"
mechanical clamping and vacuum

Customised work holders are available on request.

Head Parking System

For storing of temporary not required bondheads or pull-, shear-, peel- and tweezer heads.
Can be mounted on the left or right side of the machine

General

Camera

With cross hair targeting for positioning of bonds

Microscope

Stereoscope Motic, other microscopes e.g. Leica optional

Lighting

20 W halogen spot light, optional LED direct light
Incident light optional

Dimensions

Height 70 cm, width 70 cm, depth 65 cm; approx. 70 kg

Supplies

100...240 VAC, single-phase, 50/60 Hz, max. 500 VA

Connections

Air 6 bar, vacuum - 0,7 bar \varnothing 6 mm

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Retrofit-head 56xx

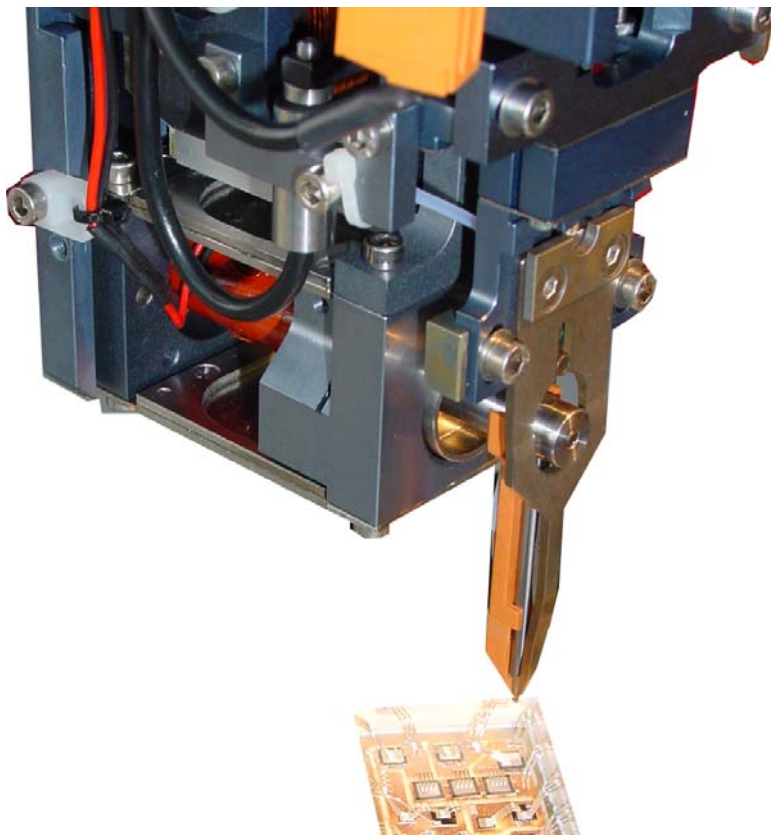
Bondhead 5650

Bond tools 2"

Cutter system Front- or Backcut

Wire size (Al) 100 – 500 µm

Wedge/Wedge Axis of rotation $\pm 360^\circ$



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