Specifications

**Concept**
DC-motor driven Z-linear-axis, Single-board-PC, internal 40GB hard disk, menu-controlled Teach-In, Operating and menu access via shuttle-wheel with Enter function

**Bondprocess:**
Wedge-Wedge, Ball-Wedge or Bumping, Ribbon

**Wire-types**
- Ballbonding: Au-wire: 17.5...50 µm on 2" spool (opt. ½ “)
- Wedgebonding: Alu / Au-wire 17.5 – 75 µm
- Ribbon size: 30 / 12.5 – 250 / 25 µm

**Bondhead**
- Contactless electronic Touchdown-Sensor
- Negative Flame-Off (NEFO)
- US-Generator: 0...5 W programmable,
- US frequency: 60 kHz standard, other freq. optional
- Bondforce: programmable from 5 until 150 cN
- Capillaries: 9 – 16mm length, Bondtools: ⅜ or 1 inch
- Step resolution of Z-axis : 1 µm

**Display**
6,5” TFT Color-Display, 640x480 Pixel (VGA)

**Working area**
- Bondhead linear Z travel: 60 mm;
- Manipulator in X and Y: 18 x 18 mm , Respond reduction: 1:7

**Substrate-holder**
Digitally controlled heated stage, up to 360°C
- Standard: Ø 60 mm for bondsamples up to 2” x 2”, (with mechanical clamping)
- Optional: 4” x 4”, 80 mm and 95 mm Ø optional, (also available with vacuumfixture)

**Operation-modes:**
- Manual-, Semi-automatic- and Productionmode
- Programmline-Step for parameter optimization

**Loop-types:**
- Standardloop, Reverseloop, Stitchbond
- all with programmable Loopheights

**Dimensions**
H/W/D: 400mm/ 630mm/580mm, weight approx. 30kg

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**53XX BDA**
Ball + Deep Access Wedge Bonder

This 53XX BDA bondhead is the ultimate universal bondhead version. It can be used as a Ballbonder and as well as DA Wedge-Wedge- or DA Ribbon Bonder. You just have to change the bondtools and start the desired application software. The motor driven Z-topclamp is fully programmable and enables the machine to cut the wire after 2nd bond and also to feed a reproducible tail for the next 1st bond. The 60 mm motion of the Z-axis will help you to bond tricky applications and also you can easily bond samples mounted into deep packages without any mechanical changes.

Deep Access area: Ballbonding 12mm, Wedge/Wedge until 20mm (with 1” Tool). Settings can be saved as a bond-programm to the internal harddisk. This will help to get repearable bondresults- also after a long time. The handling, supported by a colour display and the input with an shuttle-wheel make the programming of the machine very easy. You can create different kind of loops with the manipulator system. Only a minimum of training is required, making the 53xx manual ball bonder the ideal choice for prototype, rework and small-scale production.

The 53xx is perfect suited for complex bond- tasks. It delivers highest quality at the most favourable price. This machine is the right choice for your sophisticated applications.

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**Version** E/2007
Connections: 100...230 VAC, single-phase, Air pressure / vacuum Ø 6 mm USB – plug (for printer)

Option
TB0000.92.000
heated
Ø 60mm, mechanical clamping

Option
TB0000.87.000
heated
Ø 80mm, mechanical clamping and vacuum

Option
4-0402-210-0
heated
4x4", mechanical clamping and vacuum