

## Specifications

### Mechanics

<i>X, Y table</i>	Working area 100 x 100 mm Resolution 0.25 $\mu$ m, repeatability < 2 $\mu$ m
<i>Z-axis</i>	60 mm
<i>Speed</i>	All axes programmable from 0.2...16 mm/s 30 wires / min.
<i>Bond head</i>	Gold Ball-Wedge Negative flame-off unit F & K 60 KHz US standard, 100 KHz optional Wire diameter 17.5 ... 50 $\mu$ m

### Control

<i>Heating</i>	Integrated in machine 0-300°C
<i>Computer</i>	Single-Board PC, 600 MHz Pentium processor, 256 MB RAM, ethernet, USB 4x + 4x frontside
<i>Monitor</i>	15" TFT flat screen
<i>Operation system</i>	Windows 2000
<i>Printer</i>	All Windows-compatible printers can be installed All bonding parameters can be printed
<i>Software options</i>	Deformation Limit Control (DLC) and Pattern Recognition Unit (PRU)
<i>Heated work holder</i>	$\varnothing$ 60mm, optional $\varnothing$ 80mm and 4x4" (Attention: 4x4" up to 200°C)

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# 5610

## Automatic and Semi-automatic Gold Ball Bonder

The automatic and semi-automatic Gold Ball-Bonder 5610 fills the gap between the manual and semi-automatic Ball Bonder series 5410 and the fully automatic Ball Bonders from F&K Delvotec. The 5610 is fully PC controlled and allows any number of bonds and bumps to be programmed. Pre-programmed adjust points are targeted through the camera's cross hair targeting system and the programmed bonds or bumps are executed automatically. Two operating modes are available: Single bond for repair of various bond samples and making single bonds (manual-automatic) and multi wire for teaching and bonding chips or various bond samples (semi and fully automatic). The 5610 can also be used as Thin Wire Wedge Wedge or Heavy Wire as well as pull/shear tester by simply replacing the bond head and loading the appropriate software. Set-up time: approx. 5 minutes.

Ask us for more information.

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## Other features

### Programming

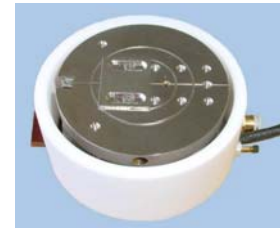
Automatic bonding of hybrids or COB with programmable X/Y table

## Work holders

*Standard*

*optional*

*optional*



for components up to 60 mm Ø  
mm Ø

mechanical clamping  
heated

for components up to 4" x 4" for components up

vacuum and mechanical clamping  
heated

to 80

vacuum and mechanical clamping  
heated

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## Head Parking System

For storing of temporary not required bondhead or pull- and shear-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 Leica S6, other microscopes optional

### Lighting

20 W halogen spot light and LED direct light

### 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

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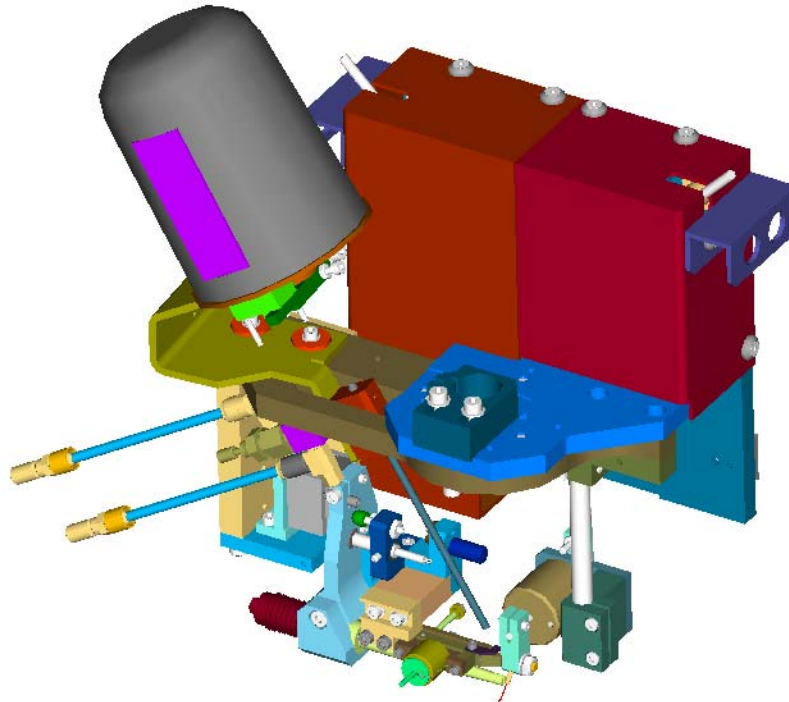
Retro-fit-head 56xx

Bondhead 5610

Wire size Au 17,5 - 50  $\mu\text{m}$

Bonding Capillaries up to 16 mm usable

Ball-Wedge / Stud-Bumping



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