

Specifications

Mechanics

<i>X, Y table</i>	Working area 100 x 100 mm Resolution 0.25 µm, repeatability < 2 µm
<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>	Wedge-Wedge Thin-Wire (Au/Al) Axis of rotation ± 360°

<i>Ultrasonic system</i>	60KHz / 100kHz optional 140KHz
<i>Wire size</i>	17,5µm up to 75µm

Control

<i>Heating-controller</i>	Integrated in machine 0 - 250°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>Work holder</i>	ø 60mm or optional 4"x4"
<i>Heated work holder</i>	ø 60mm, optional ø 80mm and optional 4"x4" (mech. / vacuum) (Attention: 4x4" up to 200°C)

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5630

Automatic and Semi-automatic Wedge-Wedge-Bonder

The automatic and semi-automatic Wedge-Wedge Bonder 5630 fills the gap between the manual Wedge-Bonders series 53xx and 54xx from F&K Delvotec Semiconductor to the automatic-Bonder from F&K Delvotec.

He is on basis 5600-series 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 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 5630 can also be used as Gold Wire or Alu Heavy Wire as well as pull/shear tester by simply replacing the bond head and loading the appropriate software.

change over time: approx. 5 minutes.
Ask us for more information !

F&K Delvotec Semiconductor GmbH
Industriezeile 49a
A-5280 Braunau am Inn, Austria
Tel.: +43-7722-67052-8270, Fax:
+43-7722-67052-8272 Email:
info@fkdelvotec.at
Internet: www.fkdelvotec.at

F&K Delvotec Bondtechnik GmbH &
Co.KG
3 International Business Park
#04-05 Nordic European Centre
Singapore 609927
Tel. +65-6890-6020, Fax +65-6890-6021

F&K Delvotec, Inc.
27182 Burbank Ave,
Foothill Ranch, CA 92610 USA
Tel. +1-949-595-2200, Fax +1-949-595-2207

Other features

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

Work holders



for components up to \varnothing 60 mm
mechanical clamping



for components up to 4" x 4"
vacuum and mechanical clamping

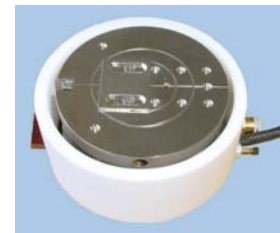
Heated work holders optional



for components up to \varnothing 60 mm
mechanical clamping + vacuum
heated



for components up to 4" x 4"
vacuum and mechanical clamping
heated



for components up to \varnothing 80 mm
vacuum and mechanical clamping
heated

More Work holders available on request.

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, 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

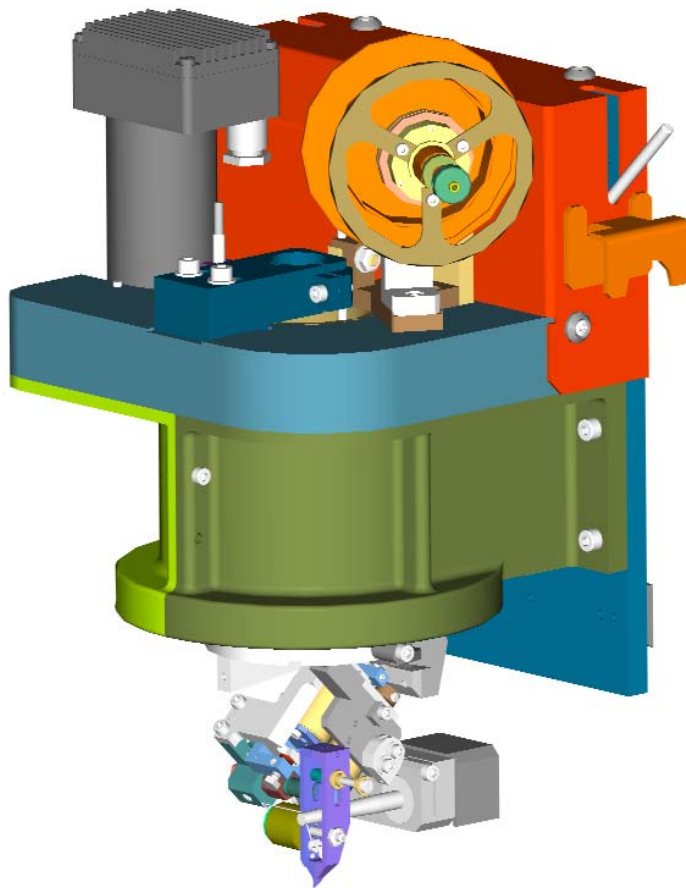
Bondhead 5630

Bond tools 1“

Wire size (Au or Al) 17,5 – 75 µm

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

optional motorized wire spool



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