



## Heavy Ribbon Wedge-Wedge Bonder 5650HRi

### Bond System

<b>Wire types</b>	Aluminium Ribbon up to 2000 x 300 µm on 3,5" spool Copper wire 300 - 500 µm on 4" spool
<b>Bondhead</b>	Wedge-Wedge for heavy ribbon or copper wire Standard Wedges of 2" Length, (up to 90mm) Motorized wire spool (optional) Programmable Voice-oil bond force system 0 up to 1.800 cN (amplifiable up to 4.000 cN)
<b>Ultrasonic System</b>	F&S Generator 60 kHz (optional 40, 90, 120kHz)

### Bonder Base

#### Axes

- Working area X/Y-axis 100 x 100 mm
- Step resolution 1 µm programmable
- Programmable Z-axis with 60mm stroke

#### Hardware

- Dual-Core PC with Windows OS Ethernet
- USB 2.0/3.0, LCD Color display 22"
- GigE-CMOS-Color camera
- Network compatible with program archiving

#### Software

- Single bonds up to complex programs
- Loop shapes can be saved in libraries
- Optional pattern recognition

**Placement accuracy:** +/- 5 µm @ 3 sigma, incl. Tool / no wire on F&S BONDTEC standard substrate

**Repeatability:** +/- 3 µm @ 3 sigma, incl. Tool / without wire on F&S BONDTEC standard substrate

**Loop height accuracy:** +/- 5 µm @ 3 sigma, for thin wire 5630i with 25 µm aluminum wire on F&S BONDTEC standard substrate

### Die 56xxi Series:

The semi-automatic Wedge-Wedge Bonder 5650iHR fills the gap between the manual Wedge-Bonder series 53xxi to the automatic bonder.

On basis of the 56xxi-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 5650i can also be used as an Au Wire or Al Thin Wire Bonder as well as pull-/shear tester by simply replacing the bond head and loading the appropriate software.

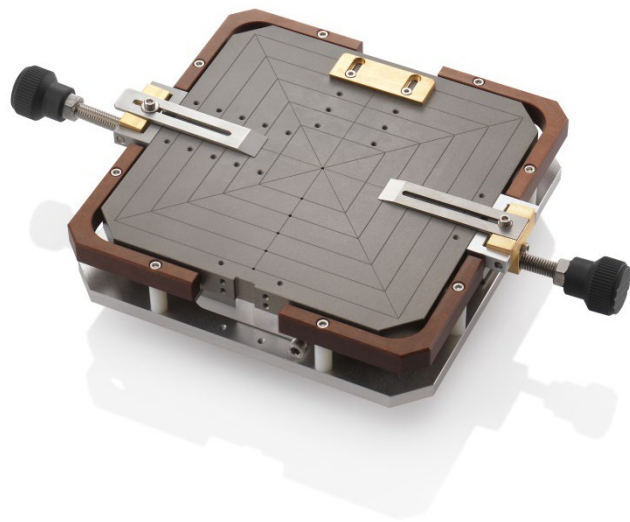
Set up time: ~3 minutes.

Ask us for more information!

- Speed** 1 wire / 3 seconds
- Dimensions** W x D x H – 70 x 65x 70 cm, weight approx. 75 kg
- Connections** 100-240 VAC, 1 Phase, 50/60 Hz, max 500 VA  
Ø 6mm standard vacuum tubing
- Heater controller** Integrated in the machine 0-250C°

## Workholder

Standard-Workholder  
for parts up to 6x 6"  
with Vacuum und mechanical clamping



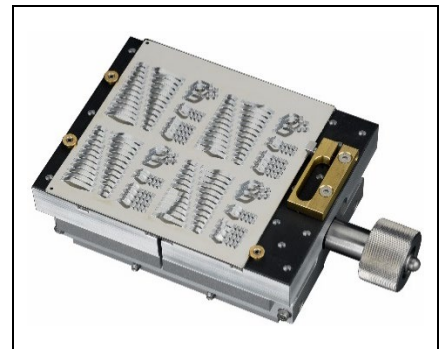
## Optional:



workholders up to 4x4"  
with mechanical clamping



TO workholder with  
mechanical clamping



**4x4" workholder** with .  
rubberized surface and  
mechanical clamping

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