



tpt



Wire Bonder

HB05 HB10 HB16 HB30

# HB05 Wedge & Ball Bonder

## Manual Wire Bonder



**Gold-, Aluminium-, Silver- & Copper Wire**  
Wire size 17µm to 75µm, Ribbon max. 20x250µm



**Wedge-, Ball-, Bump- & Ribbon Bonding**  
Simple change between bond modes



**Compact Design & Intuitive Control**  
The practical design makes the bonder very easy to use



**4" TFT Display & Multi Button**  
Fast and easy control of all bond parameters



**Storage for 20 Parameter Sets**  
Easy setting recall for working on different applications



**Deep & Wide Bond Access**  
Ample work space due to special bond head design



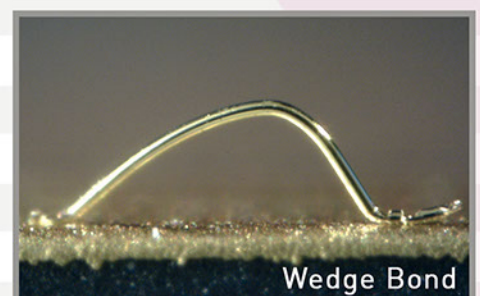
**Electronic Wire Clamp - Up & Down Movement**  
Precise tail length control



**Designed for Extension Kits**  
Pick & Place, Pull Tester, Video Targeting, Copper Ball Bonding



Bond Head



Wedge Bond

# HB10 Wedge & Ball Bonder

Motorized Z- Axis



## Wedge-, Ball-, Bump- & Ribbon Bonding

Simple change between bond modes



## Gold-, Aluminium-, Silver- & Copper Wire

Wire size 17 $\mu$ m to 75 $\mu$ m, Ribbon max. 20x250 $\mu$ m



## Easy Control With 6,5" Touch Panel

Access & storage of all parameters 100 sets capacity



## Automatic Bond Height Adjustment

Z-axis sensor identifies touch down & sets height parameters



## Deep & Wide Bond Access

Ample work space due to special bond head design



## Motorized Wire Spool

For consistent looping



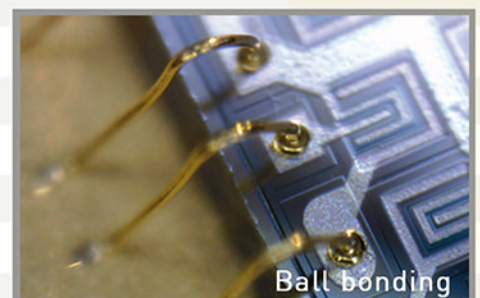
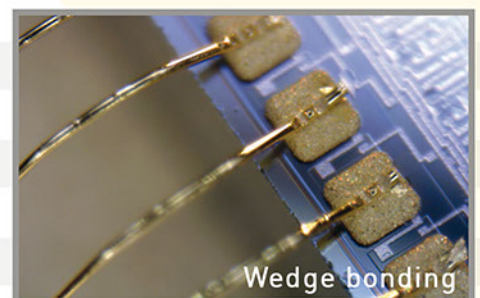
## Electronic Wire Clamp - Up & Down Movement

Precise tail length control



## Designed for Extension Kits

Pick & Place, Pull Tester, Video Targeting, Copper Ball Bonding





# HB16 Wedge & Ball Bonder

Motorized Z- & Y- axis



## Wedge-, Ball-, Bump- & Ribbon Bonding

Simple change between bond modes



## Gold-, Aluminium-, Silver- & Copper Wire

Wire size 17µm to 75µm, Ribbon max. 20x250µm



## Repeatable Loop Profiles

Motorized axis allows precise loop repetition



## Easy Control With 6,5" Touch Panel

Access & storage of all parameters 100 sets capacity



## Simple Loop Programming

Up to 10 steps for individual loop profiles



## Automatic Bond Height Adjustment

Z-axis sensor identifies touch down & sets height parameters



## Deep & Wide Bond Access

Ample work space due to special bond head design



## Electronic Wire Clamp - Up & Down

Precise tail length control



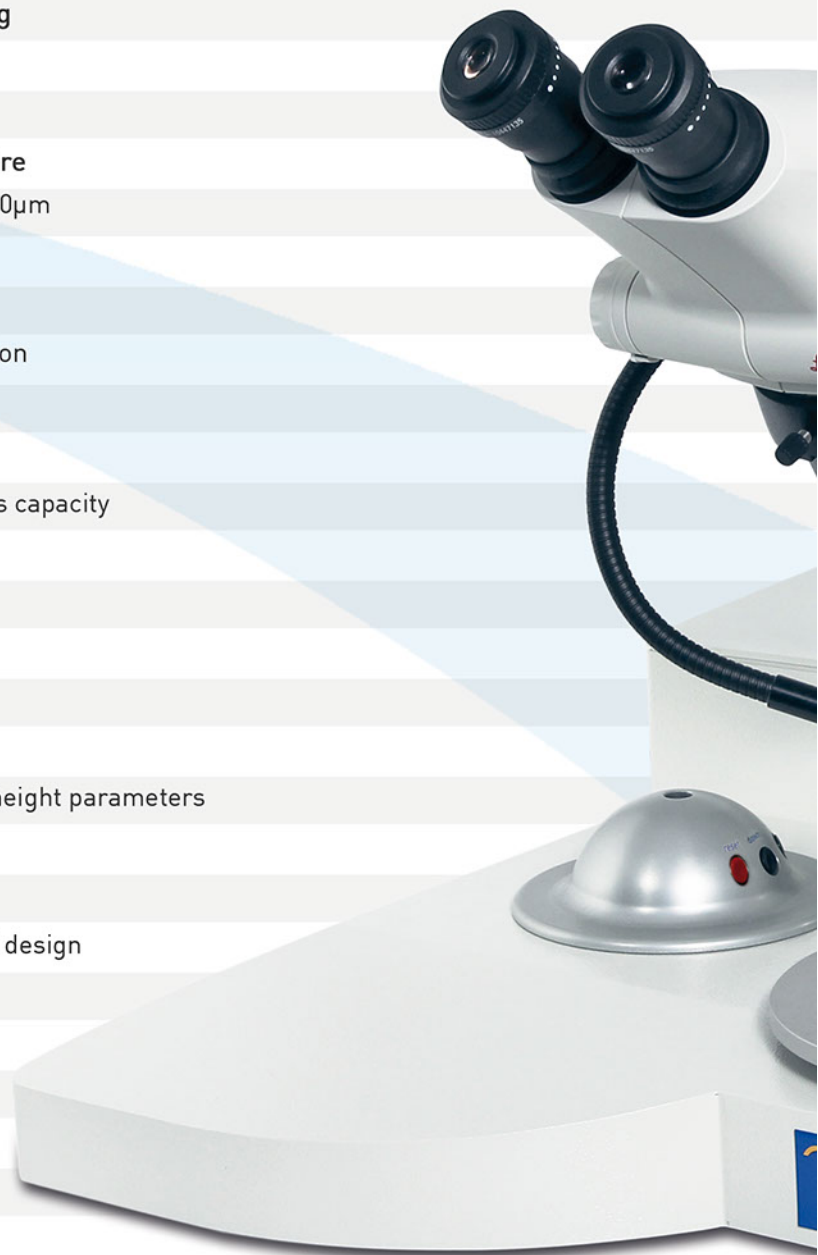
## Motorized Wire Spool

For consistent looping



## Designed for Extension Kits

Pick & Place, Pull Tester, Video Targeting, Copper Ball Bonding



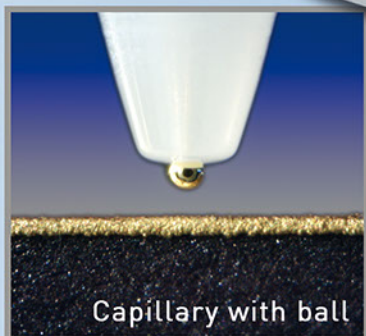
## Wire Bonders “Made in Germany”

Relying on over 20 years wire bonding knowhow, TPT designs and manufactures a complete range of manual and semi automatic wire bonder machines.

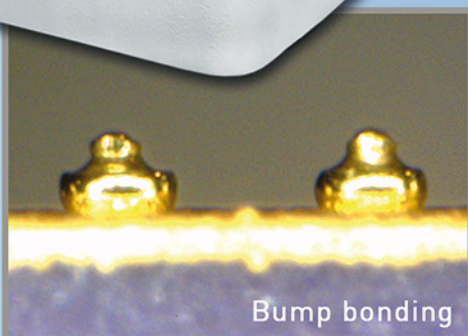
TPT is a privately owned company, with the goal to provide the highest quality wire bonding equipment.

Based in Munich, TPT draws strength from Germany's high technology region.

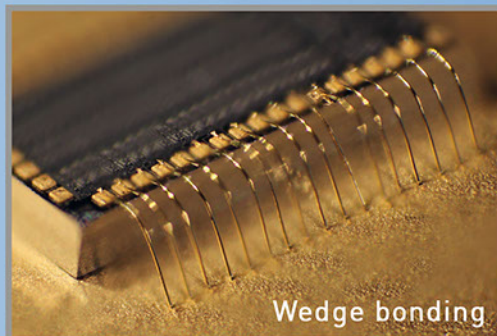
TPT bonders are used in many leading Universities, Institutes and Semiconductor, Aerospace & Medical device companies throughout the world.



Capillary with ball



Bump bonding



Wedge bonding



# HB30 Heavy Wire Bonder

Motorized Z- & Y- Axis



## Aluminum & Copper Wedge Bonding

Wire size 100 $\mu$ m to 500 $\mu$ m, Ribbon with up to 300x2000 $\mu$ m



## Easy Control With 6,5" Touch Panel

Access & storage of all parameters 100 sets capacity



## High Precision Cutting Sequence

Specific wire cutting parameters prevent substrate injury



## Automatic Bond Height Adjustment

Z-axis sensor identifies touch down & sets height parameters



## Repeatable Loop Profiles

Motorized axis allows precise loop repetition



## Deep & Wide Bond Access

Ample work space due to elevated bond head



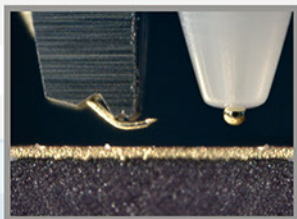
## Vacuum Stage Fixation

Optional function for high power applications



# Kits & Accessories

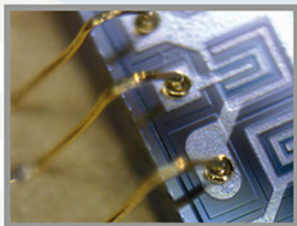
## Bond Starter Kit



All the wire & tools that you require for your first steps in bonding.  
Kit equipped with 25 $\mu$  gold wire, 33 $\mu$  alu wire, bonding tools, unplugging tools, tweezers and bonding samples.



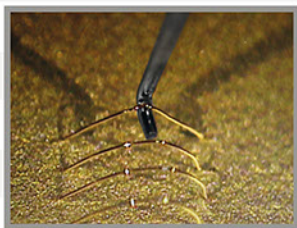
## Video Kit



Live-picture on TFT screen with targeting spot.  
Great support to show bonding applications and to perform picture documentation.  
Kit with camera, 15"-TFT and targeting device.



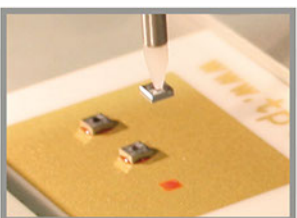
## Pull Tester Kit



Analyse your bonding quality with the mechanical pull tester.  
Great for a rough indication of your bonding strength.  
Kit with pull tester and bond head fixation.  
Manual-Z option required.



## Pick & Place Kit



Perform simple Pick & Place and epoxy stamping on your bonder.  
Great for a quick prototype assembly.  
Kit with vacuum pump, die carrier, epoxy pot and tools.



## Accessories



Manual Z



Spotlight Targeting



Copper Ball Bonding Kit



Wire Spool Holder

## Heater Stages



Ø 60mm



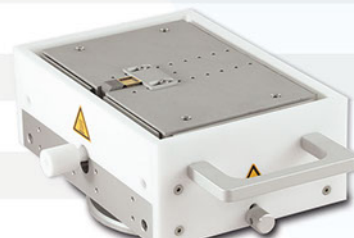
Ø 90mm



rotatable Ø 90mm



100mm x 100mm



100mm x 150mm





# Wire Bonder



Bonder	HB05	HB10	HB16	HB30
Wire Size	17-75µm	17-75µm	17-75µm	100-500µm
Ribbon max.	25x250µm	25x250µm	25x250µm	300x2000µm
Type	Manual	Semi-automatic	Semi-automatic	Semi-automatic
Motorized Axis	-	Z-axis	Z- & Y-axis	Z- & Y-axis
Auto Height Setup	-	Yes	Yes	Yes
Loop Control	-	Height Control	Loop Profile	Loop Profile
Control Panel	4" TFT	6,5" Touch Screen	6,5" Touch Screen	6,5" Touch Screen
Program Storage	20	100	100	100
Ultrasonic Power	10 Watt	10 Watt	10 Watt	20 Watt
max. Bond Force	130 cN	150 cN	150 cN	1800 cN
Bond Time	0-1 sec.	0-10 sec.	0-10 sec.	0-10 sec.
Ultrasonic System	63,3 kHz	63,3 kHz	63,3 kHz	60 kHz
Wire Clamp	motorized	motorized	motorized	-
Wire Termination	clamp	clamp	clamp / table tear	wire cutting
Wirespool Motion	manual 2"	motorized 2"	motorized 2"	manual 4"
Dimesions (LxWxH)	550x450x250mm	680x640x500mm	680x640x500mm	680x640x570mm
Weight	29kg	42kg	42kg	50kg
Electrical Requirements	100-240 V / 6A max.	100-240V / 6A max	100-240V / 6A max.	100-240V / 6A max.
Industry Standard	CE	CE	CE	CE
Pick & Place Option	Yes	Yes	Yes	Yes
Pull Tester Option	Yes	Yes	Yes	-
Copper Bonding Option	Yes	Yes	Yes	-
Video Target Option	Yes	Yes	Yes	Yes
Extended Force Option	-	Yes	Yes	-



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