

OVERVIEW 2024

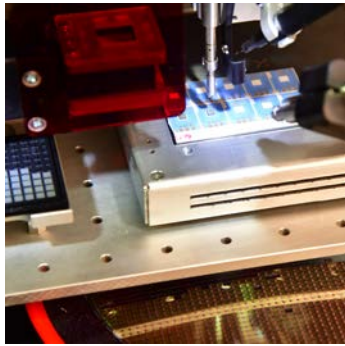
TRESKY Solutions for Microelectronics



from Manual
to semi Automated

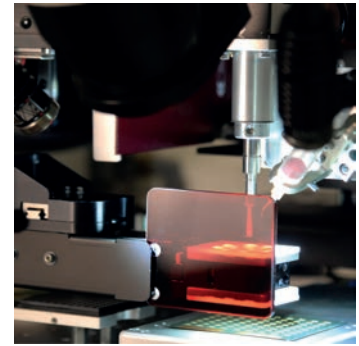


MICRO ASSEMBLY



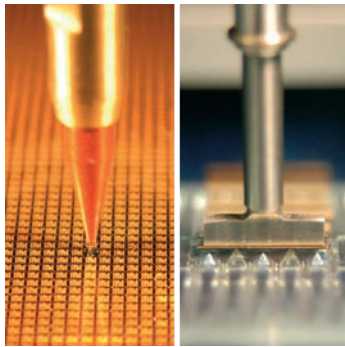
Die Attach

Sub-Micron Bonding
Full Process Control
Bond Force Control
True Vertical Technology™
Intuitive and Ease of Use

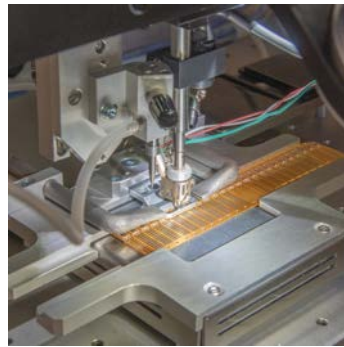


Flip-Chip & 3D Packaging

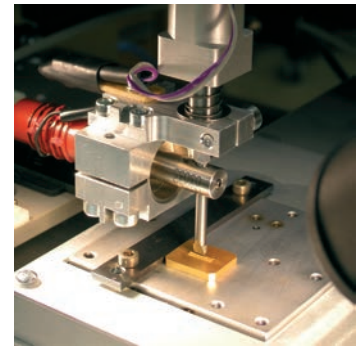
TRESKY OVERVIEW



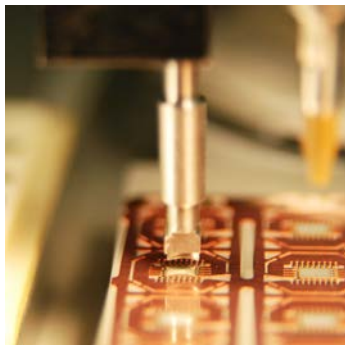
Die Sorting



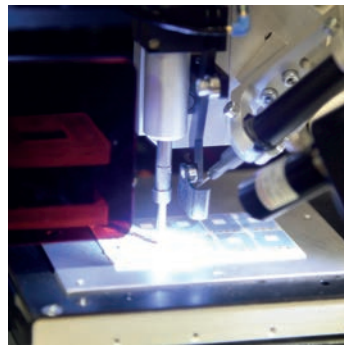
Eutectic Soldering



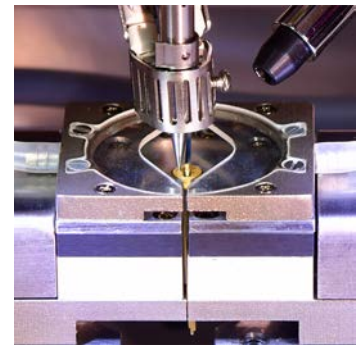
Ultrasonic & Thermosonic



Dispensing & Stamping



UV Curing



TO Eutectic Bonding



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T-4909-AE



Budget sensitive die attach system

- Manual Z-Axis with digital bond force display
- Integrated Dispenser

Applications:

Flip-Chip Bonding, Eutectic, Die Attach, ...

T-5100 & T-5100-W



High Accuracy Multi Application System

- Manual Z-Axis with digital bond force display
- Integrated Dispenser
- Easy and safe pick-up from wafer, on T-5100-W

Applications:

Sub-Micron Bonding, Flip-Chip Bonding, Eutectic Die Attach, Eutectic TO Bonding, Thermosonic, ...

T-5300 & T-5300-W



High Accuracy Multi Application System

- Motorized Z-Axis, active force control
- PC control for all bonding-, temperature parameter and vision
- Easy and safe pick-up from wafer, gel-pack, ...
- Integrated Dispenser
- Easy and safe pick-up from wafer, on T-5300-W

Applications:

Sub-Micron Bonding, Flip-Chip Bonding, Pre-Sinter Bonding, Eutectic Die Attach, Eutectic TO Bonding, Thermosonic & Thermocompression, Stacking, Adhesives with Bond-line Thickness, UV Curing, ...

T-3000-PRO-HF & T-3002-PRO-HF



High Force Multi Application System

- Motorized Z-Axis, force control (up to 500N)
- PC control for all bonding-parameter and vision
- Integrated Dispenser
- Easy and safe pick-up from wafer, on T-3002-PRO-HF

Applications:

Flip-Chip Bonding, Pre-Sinter Bonding, Eutectic, Die Attach, Eutectic TO Bonding, Thermosonic & Thermocompression, Stacking, Adhesives with Bond-line Thickness, UV Curing, ...

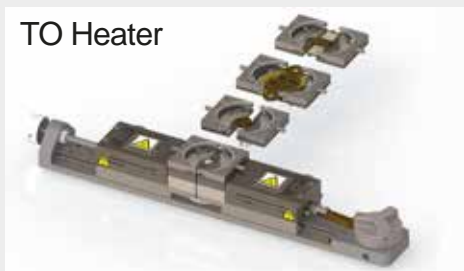
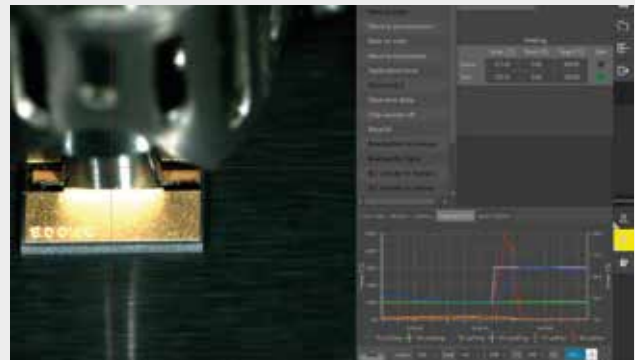
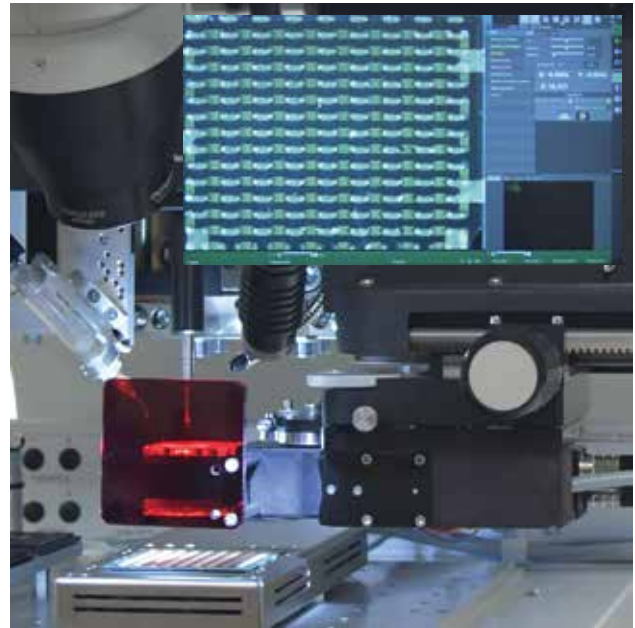
FLIP-CHIP

High-resolution placement unit with beam splitter, for ultra-precise Multi Point Alignment at sub-micron resolution. Additional alignment features such as edge detection for top Chip alignment.

- High precision beam splitter with 1x or 2x high resolution optic
- 400x digital zoom Ultra HD camera
- Multi-Point alignment (with various ranges) for high accuracy
- Optical Resolution of 1.25 μ m or 0.625 μ m
- Field of view 1,2x0.9mm – 6,5x4.9mm or 0,6x0.5mm – 3,3x2.5mm
- LED illumination (up, down and coax)

FLIP-CHIP 2X AUTO.

XYZ motorized / programmable version of the standard Flip-Chip option. It increases the user friendliness and is dedicated for high accuracy alignment on different heights (e.g.: Stacking). On top it is equipped with RGBW-LED illumination.



TO Heater

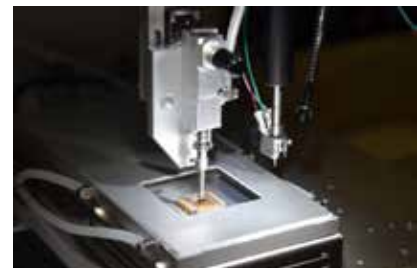
- **Hot plates** for static temperature or for ramping / cooling (up to 450°C)
- flooding with cold or heated forming gas
- **Tool heating** for static temperature or for ramping / cooling (up to 450°C)
- Software to manage various temperature profiles



Scrubbing motion or Ultrasonic bonding action



Stamping unit for adhesive application



2nd spindle for preform pick-up

T-COMPARISON



	T-4909-AE	T-5100	T-5100-W	T-5300	T-5300-W	T-3000-PRO-HF	T-3002-PRO-HF
XY-Movement 180mm x 180mm	X						
XY-Movement 220mm x 220mm		X	X	X	X	X	X
XY Fine-Adjustment	X						
XY-Micrometeter Fine Adjustment		X	X	X	X	O	O
Z-Movement Manual 100mm	X						
Z-Movement Automatic 100mm						X	X
Z-Movement Manual 125mm		X	X				
Z-Movement Automatic 125mm				X	X		
Z-Bond Force Monitored on screen 20-1000g	X	X	X				
Z-Bond Force Control 20g-10Kg (Middle Force)				X	X		
Z-Bond Force Control 20g-50Kg (High Force)						X	X
Z-Active Bond Force Control 20-4000g				X	X		
Z-Lock during Pick & Place Time		X	X	X	X	X	X
Z-Stop for Pick		X	X	X	X	X	X
Z-Stop for Place	X	X	X	X	X	X	X
Z-Bond-Line-Thickness				O	O		
Wafer with pneumatic die ejector			X				X
Wafer with electronic die ejector					X		
Integrated Dispenser	X	X	X	X	X	X	X
Operated by Embedded PC (Linux)	X	X	X				
Operated by All in One PC (Windows 10)				X	X	X	X
Flip-Chip 1x Man. (MPA 10mmx 30mm)	O					O	O
Flip-Chip 1x Man. (MPA 45mmx 50mm)		O	O	O	O		
Flip-Chip 2x Man. (MPA 45mmx 50mm)		O	O	O	O		
Flip-Chip 2x Auto. (MPA 45mmx 50mm)				O	O		
Flip Station		O	O	O	O	O	O
Tool Heating with external Temp. Controller	O	O	O			O	O
Tool Heating with internal Temp. Controller				O	O		
Substrate Static Heating w. external Temp. Contr.	O	O	O			O	O
Substrate Static Heating w. internal Temp. Contr.				O	O		
Substrate Dynamic Heating w. external Temp. Contr.	O	O	O			O	O
Substrate Dynamic Heating w. internal Temp. Contr.				O	O		
Forming Gas flushing (Cold and Manual)	O	O	O			O	O
Forming Gas flushing (Cold and Software controlled)				O	O		
Forming Gas flushing (Heated and Software controlled)				O	O		
Stamping	O	O	O	O	O	O	O
Stamping with Motorized Container		O	O	O	O	O	O
Ultrasonic (manual controlled)						O	O
Ultrasonic (software controlled)		O	O	O	O		
UV Curing				O	O	O	O
High Precision Dispenser (Musashi)				O	O	O	O

X Standard included O Option

Note: All specifications are subject to change without notice

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