OVERVIEW 2025

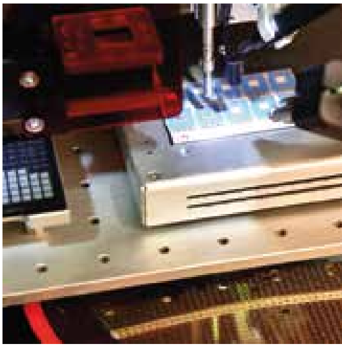
MICRO ASSEMBLY

TRESKY OVERVIEW

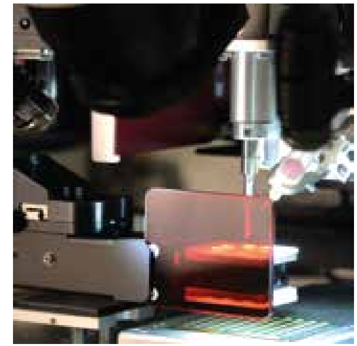
TRESKY Solutions for Microelectronics

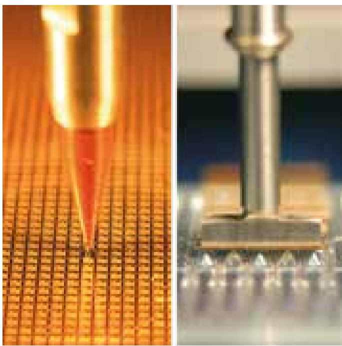
from Manual
to Automated

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

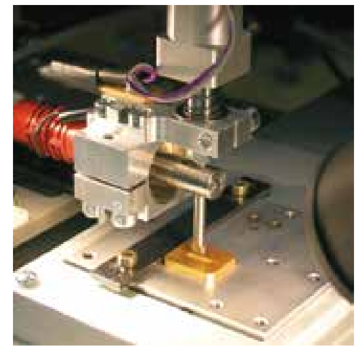

Die Attach

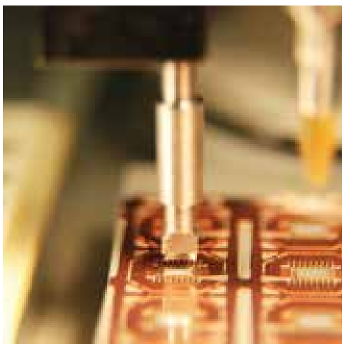
(Pre-) Sintering up to 1000N

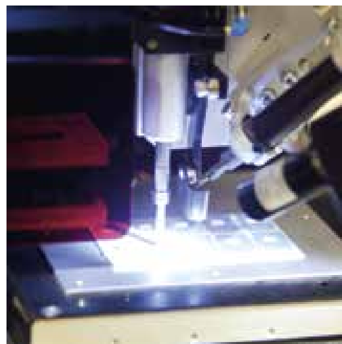

Flip-Chip & 3D Packaging


Die Sorting

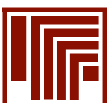
Eutectic Soldering


Ultrasonic & Thermosonic


Dispensing & Stamping


UV Curing

TO Eutectic Bonding



TRESKY

Dr. TRESKY AG
Switzerland
tresky@tresky.com
www.tresky.com

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 , ...

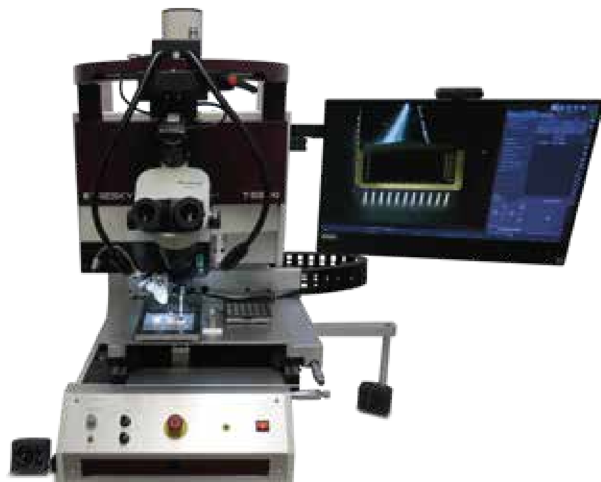
T-5300 & T-5300-W

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 waffle, 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 (100N), Hybrid Bonding, Eutectic Die Attach, Eutectic TO Bonding, Thermosonic & Thermo-compression, Stacking, Adhesives with Bond-line Thickness, UV Curing, ...

T-5500



High Force Multi-Application System

- Motorized Z-Axis, force control (up to 1000N)
- PC control for all bonding-, temperature parameter and vision
- Easy and safe pick-up from waffle, gel-pack, ...
- Integrated Dispenser

Applications:
Flip-Chip Bonding, Pre-Sinter Bonding (1000N), Eutectic, Hybrid Bonding, Die Attach, Eutectic TO Bonding, Thermosonic & Thermocompression, Stacking, Adhesives with Bond-line Thickness, UV Curing, ...

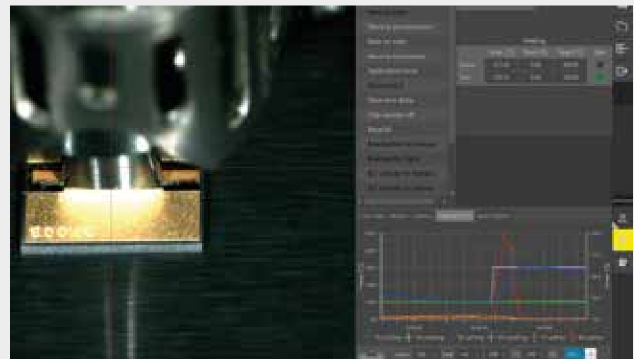
FLIP-CHIP

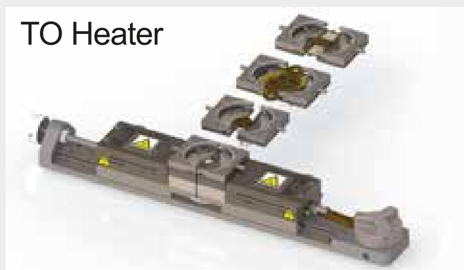
High-resolution placement unit with beam splitter, for ultra-precise Multi Point Alignment at sub-micron resolution. Additional alignment features such as edge detection for top Chip alignment.

- 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 1.25μm or 0.625μm
- 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 encreases the user friendliness and is dedicated for high accuracy alignment on different heights (e.g.: Stacking). On top it is equiped with RGBW-LED illumination.





- 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-5500
XY-Movement 180mm x 180mm	X					
XY-Movement 220mm x 220mm		X	X	X	X	X
XY Fine-Adjustment	X					
XY-Micrometeter Fine Adjustment		X	X	X	X	X
XY-Movement 50mm Motorized within the Manual Stage				O	O	O
Z-Movement Manual 100mm	X					
Z-Movement Manual 125mm		X	X			
Z-Movement Automatic 125mm				X	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-100Kg						X
Z-Active Bond Force Control 20-10000g						X
Z-Active Bond Force Control 20-4000g				X	X	
Z-Lock during Pick & Place Time		X	X	X	X	X
Z-Stop for Pick		X	X	X	X	X
Z-Stop for Place	X	X	X	X	X	X
Z-Bond-Line-Thickness				O	O	O
Wafer with Pneumatic Die Ejector			X			
Wafer with Electronic Die Ejector					X	
Integrated Dispensor	X	X	X	X	X	X
Operated by Embeded PC (Linux)	X	X	X			
Operated by All in One PC (Windows 10/11)				X	X	X
Flip-Chip 1x Man. (MPA 10mmx 30mm)	O					
Flip-Chip 1x Man. (MPA 50mmx 50mm)		O	O	O	O	O
Flip-Chip 2x Man. (MPA 50mmx 50mm)		O	O	O	O	O
Flip-Chip 2x Auto. (MPA 50mmx 50mm)				O	O	O
Flip Station		O	O	O	O	O
Tool Heating with external Temp. Controller	O	O	O			
Tool Heating with internal Temp. Controller				O	O	O
Substrate Static Heating w. external Temp. Contr.	O	O	O			
Substrate Static Heating w. internal Temp. Contr.				O	O	O
Substrate Dynamic Heating w. external Temp. Contr.	O	O	O			
Substrate Dynamic Heating w. internal Temp. Contr.				O	O	O
Forming Gas flushing (Cold and Manual)	O	O	O			
Forming Gas flushing (Cold and Software controlled)				O	O	O
Forming Gas flushing (Heated and Software controlled)				O	O	O
Stamping	O	O	O	O	O	O
Stamping with Motorized Container		O	O	O	O	O
Ultrasonic 40W, 100W or 200W (Software controlled)		O	O	O	O	O
UV Curing				O	O	O
High Precision Dispenser (Musashi)				O	O	O

X Standard included   O Option

Note: All specifications are subject to change without notice

Represented by

Headquaters

Dr. TRESKY AG
Boenirainstr. 13
CH-8800 Thalwil
Switzerland
Tel.: +41 44 772 1941
tresky@tresky.com

TRESKY Corporation
704 Ginesi Drive, Suite 11A
Morganville, NJ 07751
USA
Tel.: +1 732 536 8600
sales@tresky.com

www.tresky.com