OVERVIEW 2022

TRESKY Solutions for Microelectronics

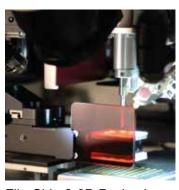


from Manual to semi Automated

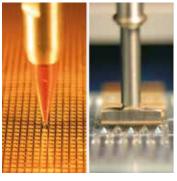


Die Attach

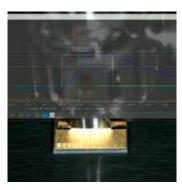
Sub-Micron Bonding Full Process Control Bond Force Control True Vertical Technology™ Intuitive and Ease of Use



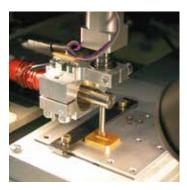
Flip-Chip & 3D Packaging



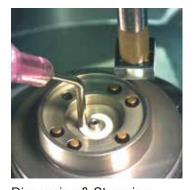
Die Sorting



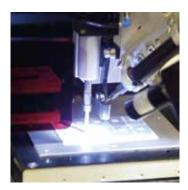
Eutectic Soldering



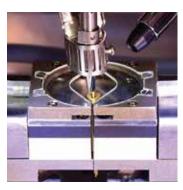
Ultrasonic & Thermosonic



Dispensing & Stamping



UV Curing



TO Eutectic Bonding





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, ...



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, ...



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, Eutectic Die Attach, Eutectic TO Bonding, Thermosonic & Thermocompression, Stacking, Adhesives with Bondline 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, Eutectic, Die Attach, Eutectic TO Bonding, Thermosonic & Thermocompression, Stacking, Adhesives with Bond-line Thickness, UV Curing, ...

FLIP-CHIP

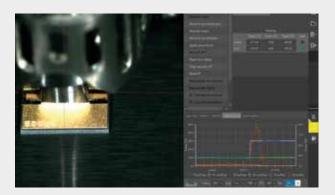
High-resolution placement unit with beam splitter, for ultra-precise Multi Point Alignment at sub-micron resolution. Additional alignment features such as edge detection for top Chip alignment.

- 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 1.25µm 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)

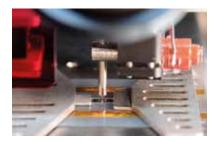








- Hot plates for static temperature or for ramping / cooling (up to 450°C)
- flooding with cold or heated forming gas
- Tool heating for static temperature or for ramping / cooling (up to 450°C)
- Software to manage various temperature profiles



Scrubbing motion or Ultrasonic bonding action



Stamping unit for adhesive application



2nd spindle for preform pick-up

						些	<u>L</u>
T-COMPARISON	Щ		>		>	Т-3000-РКО-НЕ	T-3002-PRO-HF
	T-4909-AE	0	T-5100-W	0	T-5300-W	9-P)2-P
	490	T-5100	510	T-5300	530	300	300
VV/ II	<u>⊢</u> X	ı <u>'</u>	ı <u>'</u>	ı <u>-</u>	r <u>i</u>	r <u>i</u>	Ė
XY-Movement 180mm x 180mm	X	V	V	V	· ·	V	· ·
XY-Movement 220mm x 220mm		Х	Х	Х	Х	Х	Х
XY Fine-Adjustment	X	V	V	V	V		
XY-Micrometeter Fine Adjustment		X	X	X	X	0	0
Z-Movement Manual 100mm	X					· ·	· ·
Z-Movement Automatic 100mm			\ \			X	X
Z-Movement Manual 125mm		Χ	Х				
Z-Movement Automatic 125mm	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Х	Х		
Z-Bond Force Monitored on screen 20-1000g	X	Х	Х				
Z-Bond Force Control 20g-50Kg (High Force)						Х	Χ
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		Χ	X	Х	Х	Х	Х
Z-Stop for Place	X	Χ	Х	X	X	Χ	Χ
Z-Bond-Line-Thickness				0	0		
Wafer with pneumatic die ejector			Х				Х
Wafer with electronic die ejector					Χ		
Integrated Dispensor	X	Х	X	Х	Χ	X	X
Operated by Embeded PC (Linux)	X	Χ	Χ				
Operated by All in One PC (Windows 10)				Х	Χ	Х	Χ
Flip-Chip 1x Man. (MPA 10mmx 30mm)	0					0	0
Flip-Chip 1x Man. (MPA 45mmx 50mm)		0	0	0	0		
Flip-Chip 2x Man. (MPA 45mmx 50mm)		0	0	0	0		
Flip-Chip 2x Auto. (MPA 45mmx 50mm)				0	0		
Flip Station		0	0	0	0	0	0
Tool Heating with external Temp. Controller	0	0	0			0	0
Tool Heating with internal Temp. Controller				0	0		
Substrate Static Heating w. external Temp. Contr.	0	0	0			0	0
Substrate Static Heating w. internal Temp. Contr.				0	0		
Substrate Dynamic Heating w. external Temp. Contr.	0	0	0			0	0
Substrate Dynamic Heating w. internal Temp. Contr.				0	0		
Forming Gas flushing (Cold and Manual)	0	0	0			0	0
Forming Gas flushing (Cold and Software controlled)				0	0		
Forming Gas flushing (Heated and Software controlled)			0	0		
Stamping	0	0	0	0	0	0	0
Stamping with Motorized Container		0	0	0	0	0	0
Ultrasonic (manual controlled)						0	0
Ultrasonic (software controlled)		0	0	0	0		
UV Curing				0	0	0	0
Volumetric Dispenser				0	0	0	0
X Standard included				-		-	
O Option							
O Option	-						

Represented by

Headquaters

www.tresky.com

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



Note: All specifications are subject to change without notice