

# Debut of Flip Chip Bonding system that meets the needs of your production

TDK, an electronic supplier, has completely evaluated the production to find the needs of users and produced this high-reliable, space-saving, high-speed equipment for your specific needs.



## Upgraded Technical Proposal for Total Solutions

# AFM-15

(Ultrasonic process) (type : 1503,1504)

### Features

1. Excellent mounting tact time 0.75sec/chip (including 0.2sec process time)
2. Excellent mounting accuracy ( $\pm 7 \mu m/3 \sigma$ )
3. Smallest Footprint (0.99m<sup>2</sup>)
4. Low energy connection
5. 12inch wafer capability

## Ultra low-cost and space-saving

# AFM-25

(Heat Compression / C4)

### Features

1. Mounting tact time 2.5sec/chip
2. Excellent mounting accuracy ( $\pm 2 \mu m/3 \sigma$ )
3. Smallest Footprint (0.68m<sup>2</sup>)
4. Modular system for various bond process



## High stable & high accuracy

# MDM-50

(Multi-Dispenser)

### Features

1. Continuous stable amount of dispense
2. Excellent dispense nozzle positioning accuracy ( $\pm 3 \mu m$ )
3. Smallest footprint (0.84m<sup>2</sup>)
4. Dispense monitoring system for traceability control



## ■ Specifications

Model	AFM-15		AFM-25	MDM-50
Type	1503	1504	-	-
Bonding Process	Termosonic		Heat compression (NCP, ACP, NCF, ACF), C4	Glue dispensing
Products	LED, CMOS Sensor, TCXO, SAW, Opto, High Frequency Devices and so on		Module·Opto and so on	All of left products
Chip	MAX: 2.5W×2.5D×1.0Tmm MIN: 0.3W×0.3D×0.1Tmm (Option: Max 7.0W×7.0Dmm)	MAX: 2.5W×2.5D×1.0Tmm MIN: 0.3W×0.3D×0.1Tmm	MAX: 30W×30D×1.0Tmm MIN: 3W×3D×0.1Tmm	-
Substrate	MAX: 180W×120D×3.0Tmm MIN: 50W×50D×0.3Tmm (Option: MAX 8 inch Wafer)	MAX: 170W×105D×3.0Tmm MIN: 50W×50D×0.3Tmm	MAX: 200W×120D×1.6Tmm MIN: 50W×50D×0.4Tmm	MAX: 200W×150D×2.0Tmm MIN: 30W×30D×0.3Tmm
Mounting tact Time	0.8sec/chip (including 0.2sec process time)	0.75sec/chip (including 0.2sec process time)	2.5sec/chip (excluding process time)	-
Accuracy	±7μm/3σ		±2μm/3σ	±3μm
MAX Load	25N(option: 50N, 100N)		372.4N	-
Chip Supply	5,6,8,12inch wafer etc. Wafer magazine auto loading	5,6inch wafer etc. Wafer ring auto loading	2inch tray etc.	-
Size	1,200W×1,450D×1,650Hmm	980W×1,020D×1,860Hmm	750W×910D×1,760Hmm	740W×1,140D×1,650Hmm
Weight	About 1,800kg	About 1,500kg	About 1,100kg	About 600kg
Standard Features	Pre heater table Bond heater table Auto nozzle cleaning Ultrasonic checking Bump collapse height measurement Bump absence detection Bad mark detection Wafer theta axis correction Wafer expansion Hot blow Nozzle surface monitoring LAN Nozzle bonding counter Production management data		Bond heater table Parallelism verification Bonding position verification Temperature calibration Bad mark detection Production management data	Pre heater table Dispense heater table Various dispense features (Line, Dot etc.) Auto needle cleaning Substrate height detection (contact type) Bad mark detection Production management data
Option and Special Features	Magazine Loader/Unloader Hepa-filter Ionizer Profile monitor (US, Load, Bump height) Chip tray supply Map data (between bump bonder etc) Bond nozzle heater Substrate (package) special clamp Bond inspection (Pre, Post) Bond nozzle polishing jig Ultrasonic horn (For large chip)		Magazine Loader/Unloader Hepa-filter Ionizer Pre heater table Post heater table Chip tray supply (3,4 inch) Chip wafer supply (6 inch) Custom tray supply Smaller chip handling Flux dispenser Multi-chip handling	Magazine Loader/Unloader Hepa-filter Post heater table Actual dispense monitoring Substrate height detection (Non-contact type) Various dispense head (Mechanical, Jet, Air etc)

●Contact us for specifications other than the above.

●Specification and design may be changed without prior notice.

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