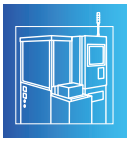
Advanced Dicing Technologies

www.adt-co.com

DICING PERIPHERALS

Range & Solutions

Full Dicing Solutions



Saws

Blades

Peripherals

ADT
DICING PERIPHERALS

ADT offers additional dicing peripheral equipment and accessories, such as auto wafer cleaner, water recycling system, spindle water chiller, semi-auto wafer mounting and more.

Scan to see our image video

ADT'S DICING PERIPHERALS ADVANTAGES

Improve your process stability and accuracy

Reduce manufacturing expenses and conserve energy

Customized solutions for your specific needs

Gain a long lasting partnership and commitment

PRODUCT GROUPS

Complete set of solutions for water recirculation and process stabilization

Complete set of wafer mounting, cleaning and curing solutions

QUALITY STANDARDS

SOLUTION RANGE

Wafer Cleaner

Designed for post-dicing workpiece cleaning and drying. Features a spinning chuck table and a rotating washing/drying arm

Water Recycling System

Closed loop design features ultra-filtration level particles removal with temperature, pressure and flow control for optimized dicing process

Dicing Saw

Auto Wafer Mounter

Engineered for the efficient, hands-free, rapid, uniform, and cost-effective mounting of workpieces onto tapes while maintaining high quality standards

Spindle Chiller

Closed-loop design for a stable flow and temperature spindle cooling water supply to achieve high precision and cutting quality

Manual Wafer Mounter

Designed for manual mounting, supporting various tapes, frames, substrates, and irregular shapes in multi-panel configurations

UV Curing Systems

Designed for post-dicing UV tape curing to reduce the adhesive strength for ease of workpiece removal

CO2 Injector

Designed to prevent particle adhesion and damage caused by ESD during the dicing process

WATER TREATMENT SYSTEMS

AR-927

Water Recycling System

Closed loop design for uniform cutting water supply. The system recycles drain water thru filtering, cooling and pumping to maintain required purification, temperature and flow levels for optimized dicing, cost-saving and environmental care.

Features & Benefits

- Water recirculation - Reducing consumption by 95%
- Efficient cooling system - Reducing power consumption
- Self-Cleaning filter - Saving cost of maintenance
- Low environment impact
- Advanced User Interface (UI) for process monitoring and control

Flow capacity	Up to 20 L/min
Supply pressure	4.5 bar
Filtration level	0.02 µm
Circulation tank	80 Liter
Sediment tank	80 Liter
Water recycling	95% -99%
Temp. Setting range	10-25 °C
Stability	±1 °C
Cooling capacity	1600 W @ 20 °C
Gas (Refrigerant)	R-134A
Dimensions (W x D x H)	620 x 1280 x 1720
Weight (Empty/Full)	350/500

Addable Options

- Conductivity reading
- Surfactant dispenser
- Water deionization (DI) module
- Ultraviolet purification lamp

937-A

Spindle Chiller

Enhance your operational stability with an economical solution. Tailored for the closed-loop provision of spindle cooling water, this system ensures the maintenance of consistent, temperature-controlled water—an essential element in attaining exceptional levels of dicing precision and quality.

Features & Benefits

- Water circulation - Reducing water consumption
- Precise control of water temperature - Mitigating thermal expansion to achieve superior dicing accuracy.
- High pumping capacity - Supporting up to 3 dicing saws simultaneously (low CoO)
- Touch panel LCD - Easy operation
- Unique pumping technology - Quiet operation, compact design and maintenance-free long life

Water flow capacity	Up to 5 L/min
Cooling capacity	1000 W @ 20°C
Setpoint range	8°C – 35°C
Temperature stability	+/-0.1°C
Dimensions (W x H x D)	360 x 590 x 560 mm
Approx. machine weight	58 kg

947, AB-47

CO_2 Injector

High quality processing, contamination-free devices
ADT 947 CO2 Inline Injector is designed to eliminate particle adhesion and device damage caused by electrostatic effects. The units dissolve CO2 gas into de-ionized water (DI) used for dicing or cleaning processes, thus performing consistent control over an optimal level of resistivity.

Features & Benefits

- Online monitoring and alarms
- Resistivity target and range setting
- Resistivity / Conductivity units display
- Dicing Communication

	947	AB-47
Water capacity	3-10 liter/min	7-20 liter/min
Set point range	0.5 MΩ – 1 MΩ	
Line voltage	110/220 V 50 Hz or 60 Hz	
Machine dimensions (W x D x H)	190 x 446 x 365mm	190 x 492x 447mm
Approx. machine weight	10 kg	12 kg

Options:

- Extended resistivity range
- Alarm buzzer

WAFER HANDLING SYSTEMS

967, 967L

Semi Auto Wafer Mounter

Crafted with the primary purpose of automatically affixing wafers onto tape, the ADT 967 Semi-Automatic Wafer Mounting System showcases a harmonious blend of intelligence and user-friendliness. This remarkable product holds significant value and is the ultimate selection for mounting during production processes.

Features & Benefits

- Automatic- Controlled process, hands free operation
- Small footprint – Tabletop design
- Quick and simple to use
- Minimal tape usage
- Flexible design – supports a wide variety of tapes & frames
- Can be customized for multiple substrates (multi-panel) and irregular frames.

	967	967L
Supported tapes	Dicing Blue-tapes / UV tapes	
Max. workpiece size	200mm (8")	300mm (12")
Supported film frames	DTF 2-8-1 ; DTF 2-6-1 350-103 ; 350-104	DTF-2-12 SEMI-G74
Temp Controlled Chuck heater	< 65°c	
Roller pressure	1-6 bar (adjustable)	
Mounting time	25 sec.	35 sec.
Machine dimensions (WxDxH)	655 x 590 x 560 mm	791 x 706 x 557 mm
Approx. machine weight	65 kg	85 kg

Options:

- Non-Contact mounting
- Electro-Static eliminator
- Rectangle frame support
- Auto frame size detector and cutter
- Top wafer surface lamination
- Communication and control features
- Special customized solutions

977, 977L

Wafer Cleaner

Streamlined and effective cleaning solutions to bolster your operations. The ADT 977 Wafer Cleaner Systems are meticulously crafted for the purpose of cleaning workpieces subsequent to the dicing process.

Equipped with adjustable rotating cleaning arm with atomizing or high pressure cleaning nozzles to cope with wide range of cleanliness requirements

Features & Benefits

- Atomizing/ High pressure cleaning
- Automatic lid closing
- Intuitive control panel
- Process monitoring
- Compact design
- Robust, vibration-free
- Environmentally friendly
- Programmable sequence control

	977	977L
Max. workpiece size	Ø 8"	Ø 12" or 12"x12" square
Cleaning method	Atomizing cleaning / High pressure cleaning	
Number of recipes that can be saved	20	
Spinner velocity range	200–3000 rpm	200–2500 rpm
Machine dimensions (WxDxH)	410 x 625 x 946 mm	570 x1250 x 1073 mm
Approx. machine weight	120 kg	200 kg

Options:

- CO2 injection
- Water resistivity monitoring
- Ionizer
- Surfactant additional nozzle and tank
- Tape-less cleaning
- Built in exhaust blower
- Special customized solutions

955, 955L

UV Curing Systems

ADT UV Tape Curing Systems reduce the adhesive strength of all UV-sensitive dicing tapes under controlled environment.

Features & Benefits

- Intuitive control panel
- Enable time control process
- Compact design
- Compliance with the highest safety standards
- Environmentally friendly

	955 (8")	955L (12")
Max. frame diameter	300 mm	400 mm
Exposure area	250 x 250 mm	Ø430 mm
UV wavelength	365 nm	
Number of lamps	6	18
Machine dimensions (WxDxH)	510 x 450 x 120 mm	645 x 526 x 180 mm
Approx. machine weight	20 kg	35 kg

Options:

- Anti-ozone nitrogen diffusion kit
- Alarm buzzer
- Frame shutter

966, 966L

Manual Wafer Mounter

Designed for manual mounting of workpieces on tapes. This system accommodates a wide range of dicing tape varieties and standard frames. It can be tailored to suit diverse substrates (including multi-panel setups) and unconventional frame shapes.

Features & Benefits

Uniform tape tension and bubble-free mounting

- Temperature-controlled chuck heater
- Anti-static roller Reducing electrical charge
- Built-in vacuum holder
- UV back tape collector

	966	966L
Supported tapes	Dicing Blue-tapes / UV tapes	
Max. workpiece size	Ø 200 mm (8")	Ø 300 mm (12")
Supported film frames	DTF 2-8-1 ; DTF 2-6-1 350-103 ; 350-104	DTF-2-12 SEMI-G74
Temp Controlled Chuck heater	< 65°c	
Machine dimensions (WxDxH)	420 x 860 x 370 mm	550 x 1000 x 310mm
Approx. machine weight	45 kg	60 kg

Options:

- Electro-Static eliminator
- Plastic frame support
- Rectangular frame support
- Custom chucks and tailor made solutions

ADT - Advanced Dicing Technologies

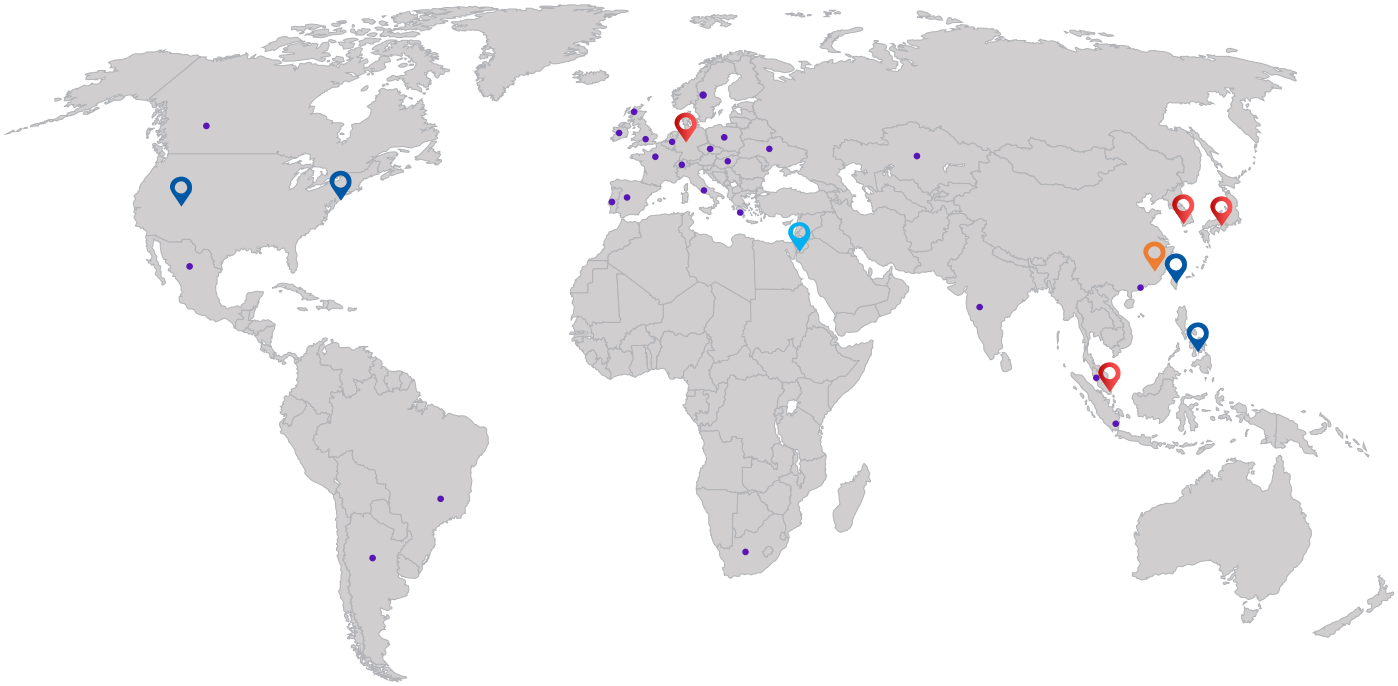
ADT is a one stop shop with end-to-end research, development and production, specializing in the development and manufacturing of **dicing saws, blades and peripherals** for a wide variety of applications: silicon- based ICs, Package Singulation and hard material Microelectronic Components (MEC).
Our R&D department is known for combining deep technological know-how, vast experience and out-of-the-box solutions.

Full Dicing Solutions

Saws | Blades | Peripherals

ADT Worldwide

ADT offers a worldwide network of distributors, sales agents and independent representatives in Asia, USA and Europe, accompanied by a dedicated global service support team.



ADT INTERNATIONAL HQ – Yokneam, Israel

Two main production facilities:
- Dicing Consumables (blades)
- Dicing Equipment (Saw & Peripherals)

Global Marketing & Sales department, Engineering and R&D, Logistics, Maintenance & technical support.

ADT REGIONAL OFFICES

ADT China – Shanghai
ADT Taiwan
ADT Philippines
ADT Singapore & Malaysia
ADT Inc. – East Cost PA, USA
ADT Inc. – West Cost AZ, USA

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Ver. 10/23