

7900 DUO SERIES



ADT = Dicing
Advanced Dicing Technologies

The ADT 7900 series Dicing Saws has two facing spindles that can simultaneously dice wafers or packages at high throughput. ADT 7900 series is a high accuracy system that can dice product at high performances and low cost of operation.

Basic machine models:

- ▶ 7900 Duo up to 8" wafer
- ▶ 7920 Duo up to 10" X 10"
- ▶ 7930 Duo up to 12" X 10" or 12" round

Features and Benefits

- Flexibility - Supports Hub and Hubless up to 3-inch OD's
- Spindles of 2.4 kW high power (for challenging applications)
- Superior vision system with continuous zoom magnification
- Intuitive operation interface using a large 17" touch screen monitor

Other Key Features of Importance

- Highest Dicing Process Speeds – Lowest Cost
- Air bearing feed axis (X)
- Fast automatic alignment and cut positioning for increased throughput
- Automatic Kerf inspection and quality analysis for maximum precision
- Process data logging and statistical analysis

- Fast & Simple Blade Change
- SECS GEM platform ready
- Full access to any area of the system for easy maintenance access
- Low cost of ownership
- Small foot print

Leading Applications

- Silicon wafers / discrete devices
- Silicon carbide (SiC)
- MEMS
- SAW devices
- Glass wafer
- Packaging (QFN, LED...)

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Specifications

Machine Model	7900 Duo	7920 Duo	7930 Duo
Workpiece Size	up to 8" X 8"	up to 10" X 10"	up to 12" X 10" and 12" round
Spindle	Two facing spindles 60,000 rpm / 1.2 KW / 0.25 Nm Rated torque		
Blade Size	2" - 3"		
Y1 / Y2 Axis			
Drive	Ball bearing lead screw		
Control	Linear encoder		
Resolution	0.1 µm		
Cumulative Accuracy	1.5 µm		
Indexing Accuracy	1.0 µm		
Cutting range	200mm	250 mm	300mm
X Axis			
Drive	Air Slide		
Feed Rate	Ball bearing lead screw		
Cutting range	Up to 600 mm/sec 410 mm		
Z1 / Z2 Axis			
Drive	Ball bearing lead screw		
Resolution	0.2 µm		
Repeatability	1.0 µm		
Max. stroke	40mm		
Ø Axis			
Drive	Closed-loop, Direct-drive		
Repeatability	4 arc-sec		
Stroke	350°		
Vision System	Digital camera, High bright LED illumination (vertical & oblique) Continuous Digital Magnification from x70 to x280 or from x35 to x140 (optional)		
Standard Features	Automatic alignment, Automatic Kerf inspection, Automatic Y offset correction		
User Interface	Flat 17" touch screen, GUI (Graphic User Interface), Multilanguage support, Keyboard & Mouse, Win 7 OS		
Options	BBD (Broken Blade Detector), High power spindle up to 2.4KW, Barcode reader, Dress station, High Definition Optics, Geometric Model Finder (GMF), Dicing Floor Management (SECS/GEM), Customization		
Utilities			
Electrical	200-240 VAC, 50/60 Hz, single phase		
Air	260 L/min @ 5.5 bar		
Spindel Coolant (per spindle)	1.1 L/min		
Cutting water (per spindle)	Up to 3 L/min		
Dimensions			
WxDxH	875 x 975 x 1450 mm		
Weight	900 kg		
Environmental	Room Temperature: 25 C ± 1 C (77 F ± 1.8 F) Humidity: Less than 70% relative humidity (non-condensing). Cutting water / Spindle Water Temperature ± 1 C (± 1.8 F) Floor must be vibration free		

Note: Specifications are subject to change without notice.



www.adt-co.com



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