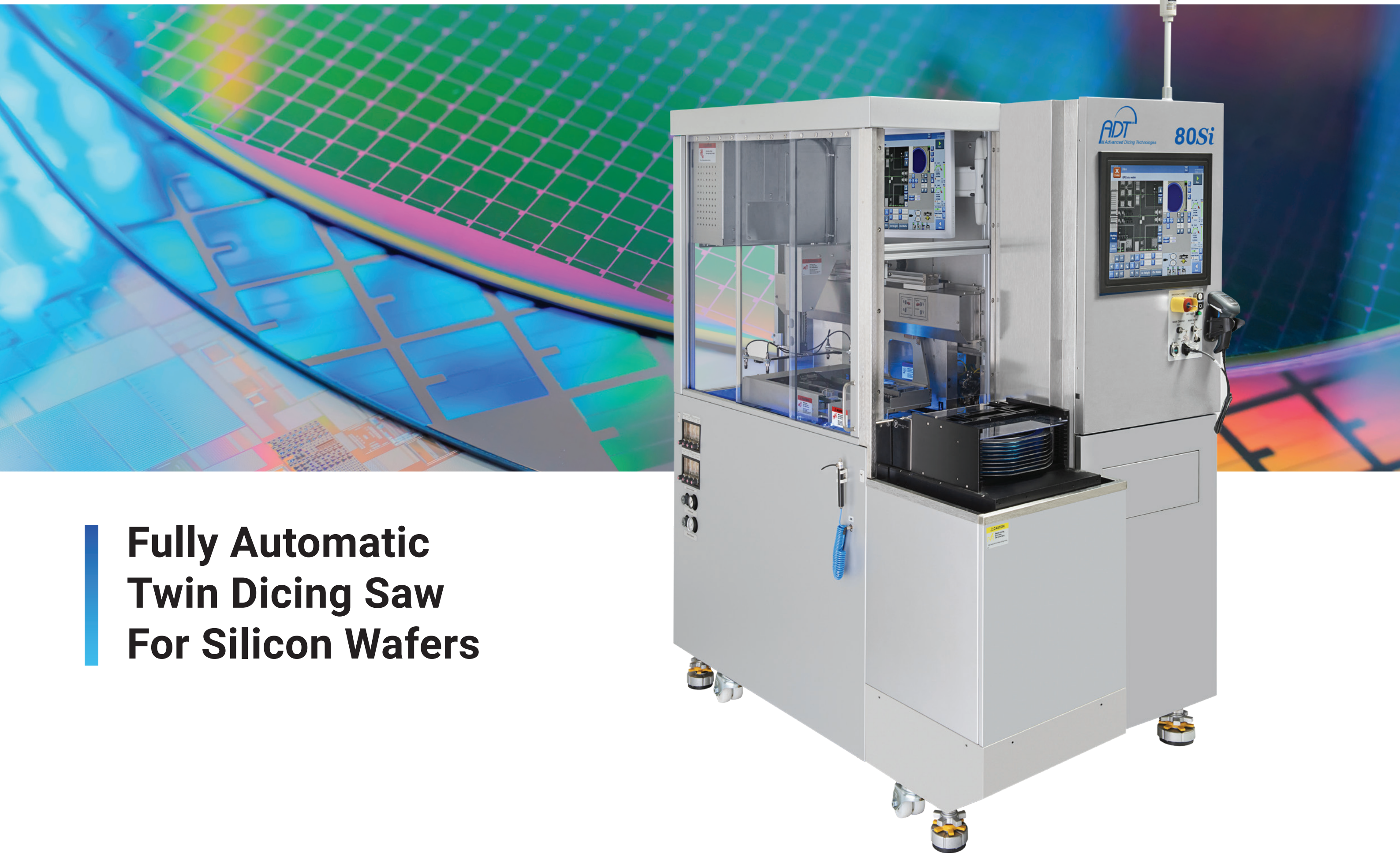
Advanced Dicing Technologies

80Si Dicing Saw



Fully Automatic Twin Dicing Saw For Silicon Wafers

Configuration

- Blade O.D.: 2”
- Frame Size: Ø6", Ø8”, Ø12"

Features and Benefits

- Dual microscopes, fixed non-contact sensors
- Spindles of 1.8 kW
- Superior vision system with continuous zoom magnification
- Built-in CO_2 Bubbler
- Integrated ESD kit

Ease of Use

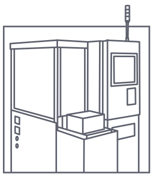
The 80Si operates with the ADT intuitive New Graphic User Interface (NGUI) and includes two touch - screens: a 19” monitor for the main screen and a 17” monitor for the maintenance screen.

Other Key Features of Importance

- High dicing process speeds
- Industrial PC based on Win 10 OS
- Air bearing feed axis (X-axis)
- Fast & Simple blade change
- Fast automatic alignment and cut positioning for increased throughput
- Automatic Kerf inspection and quality analysis for maximum precision
- Process data logging and statistical analysis
- SECS / GEM platform ready
- All electronics on top of the cut chamber

Leading Application

- Silicon wafers



80Si Fully Automatic Twin Dicing Saw

Specifications

Workpiece Size	Ø 6", 8", Ø 12"
Spindle	Two facing spindles 1.8 kW, max. 60,000 rpm
Blade Size	2"
Y1 / Y2-Axis:	
Drive	Ball bearing lead screw
Control	Linear encoder for each Y-Axis
Resolution	0.1 µm
Cumulative Accuracy	1.5 µm
Indexing Accuracy	1.0 µm
Cutting range	350 mm
X-Axis:	Air Slide
Drive	Ball bearing lead screw
Feed rate	Up to 10000 mm/sec
Cutting range	420 mm
Z1 / Z2 Axis:	
Drive	Ball bearing lead screw
Resolution	0.2 nm
Repeatability	1.0 µm
Max. stroke	50 mm (for 2.188" blade OD)
θ Axis:	
Drive	Closed-loop, Direct-drive
Repeatability	4 arc-sec
Stroke	380°
Vision System	USB3 camera, High bright LED illumination (vertical & oblique)
Cleaning Station:	Full rinse and dry cycle
Spinning Speed	100-3,000 rpm
Cleaning Method	Atomized cleaning capabilities
Wafer Handling system	Slot-to-slot integrity Inspection drawer
Standard Features	Automatic alignment Automatic Cut verify Automatic Kerf inspection Automatic Y offset correction
User Interface	Two touch screens: 19" monitor as main screen and 17" monitor for the maintenance NGUI (New Graphic User Interface) Multilanguage support Win 10 OS
Options	Barcode reader UV station USB3 camera with continuous digital magnification from x70 to x290 Dress station Geometric Model Finder (GMF) Dicing Floor Management
Utilities:	
Electrical	200–240 VAC, 50/60 Hz, single phase
Air	500 L/min @ 5.5 bar
Spindle Coolant (per spindle)	1.1 L/min
Cutting water (per spindle)	Up to 3 L/min
Dimensions:	
WxDxH	1145 mm × 1687 mm × 1830 mm
Weight	1500 kg
Environmental	Room Temperature: 20°C to 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) The floor must be vibration-free

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Note: Specifications are subject to change without notice.

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