



# ADT = Dicing

Advanced Dicing Technologies

## 7900 Uno (model 7910)

Automatic, Single-Spindle Dicing System

### Configuration

- Spindle: 2"
- Size: 200mm

### Features & Benefits

- **Single spindle**
- **Low cost-of-ownership**
- **Small footprint and compact (short height)**
- **High reliability**
- **Easy to use, intuitive, touch screen based GUI**
- **Easy to maintain**
- High accuracy (enhanced by advanced error mapping correction)
- Advanced vision automation
- Comprehensive, optimized dicing cycle
- Yield enhancement and cost saving capabilities
- Kerf inspection and quality analysis
- Blade wear monitoring and projection
- Spindle load monitoring
- Process data logging and statistical analysis
- Compatible with ADT 7900 Twin Spindle Dicing System

### Optional Capabilities

- Advanced continuous magnification vision system
- Broken blade detector
- Integrated dressing station
- Variety of porous ceramic chucks (4", 5", 6" and 8")
- High power spindle
- Bar code reader
- Dicing Floor Management system (DFM)

### Leading Applications

- LED packages and wafers
- Discrete device wafers
- Power device wafers
- Glass wafers

### The Ultimate Dicer for

- Universities and research institutes
- IC back-end plants (for 2"-8" wafer dicing production lines)
- LED beginners (for process development, pilot production, R&D)

# ADT = Dicing

Advanced Dicing Technologies

## 7900 Duo (model 7900)

Automatic, Twin-Spindle Dicing System

### Configurations

- Spindle: 2"
- Size: 150mm or 200mm

### Features & Benefits

- Two facing spindles
- Low cost-of-ownership
- Small footprint
- High accuracy, high throughput, high productivity
- Advanced vision automation
- Comprehensive, optimized dicing cycle
- High reliability and maintainability
- Easy to use, intuitive, touch screen based GUI
- Yield enhancement and cost saving capabilities
  - Kerf inspection and quality analysis
  - Blade wear monitoring and projection
  - Spindle load monitoring
  - Process data logging and statistical analysis
  - Workpiece distortions compensation
  - Multi-panel handling
  - Blade dressing

### Optional Capabilities

- Partial wafer recognition
- Tape surface detection
- Advanced continuous magnification vision system
- Off-chuck dressing station
- Dicing floor management system (DFM)
- Special configurations
  - Variety of chucks
  - High power spindle

### Leading Applications

- LED wafers
- LED packages
- Discrete device wafers
- Imaging sensors and lenses

# 7900 Duo (model 7900)

## Specifications

Model	7900	7900 LA
<b>Workpiece Size</b>	Up to 8" X 8"	Up to 12" X 10"
<b>Spindle</b>	Two facing each other (blade to blade) 60,000 rpm / 1.2 KW	
<b>Blade Size</b>	2" - 3"	
<b>Y1 / Y2 Axis</b> Drive Control Resolution Cumulative Accuracy Indexing Accuracy Cutting Range	Ball bearing lead screw Linear encoder 0.2 µm 1.5 µm 1.0 µm 205 mm (per Spindle)	310 mm (per Spindle)
<b>X Axis</b> Drive Feed Rate Cutting Range	Air slide Ball bearing lead screw Up to 600 mm/sec 205 mm	310 mm
<b>Z Axis</b> Drive Control Resolution Repeatability Stroke	Ball bearing lead screw Rotary encoder 0.2 µm 1.0 µm 35 mm	
<b>Ø Axis</b> Drive Control Repeatability Stroke	Closed-loop, Direct-drive Linear encoder 4 arc-sec 350°	
<b>Vision System</b>	Digital camera, High bright LED illumination (vertical and oblique) Continuous digital magnification from X70 to X280 or from X35 to X140 (optional)	
<b>Standard Features</b>	Automatic alignment, Automatic Kerf inspection, Automatic Y offset correction	
<b>User Interface</b>	Flat 17" touch screen, Intuitive GUI (Graphic User Interface), Multilanguage support, Keyboard & Mouse	
<b>Optionals</b>	BBD (Broken Blade Detector), Barcode reader, High power spindle up to 2.4KW, Dress station, SECS-GEM host communication	
<b>Utilities</b> Electrical Air Water Spindle Cooling	200-240 VAC, 50/60 Hz, single phase 260 L/min @ 5.5 bar  1.1 L/min (per Spindle) Up to 4 L/min (per Spindle)	
<b>Dimensions</b> W x D x H Weight	875 mm x 975 mm x 1,450 mm 900 kg	
<b>Environmental</b> Temperature Humidity Floor	Typical room temperature: 20°C - 25°C < 70% (relative, non-condensing) vibration free	

Note: Specifications are subject to change without notice.



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Design: STUDIO BAHIR

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# 7900 Uno (model 7910)

## Specifications

<b>Workpiece Size</b>	Up to 8" X 8"
<b>Spindle</b>	60,000 rpm / 1.2 KW
<b>Blade Size</b>	2" - 3"
<b>Y Axis</b> Drive Control Resolution Cumulative Accuracy Indexing Accuracy Cutting Range	Ball bearing lead screw Linear encoder 0.2 µm 1.5 µm 1.0 µm 205 mm
<b>X Axis</b> Drive Feed Rate Cutting Range	Air slide Ball bearing lead screw Up to 600 mm/sec 205 mm
<b>Z Axis</b> Drive Control Resolution Repeatability Stroke	Ball bearing lead screw Rotary encoder 0.2 µm 1.0 µm 35 mm
<b>Ø Axis</b> Drive Control Repeatability Stroke	Closed-loop, Direct-drive Linear encoder 4 arc-sec 350°
<b>Vision System</b>	Digital camera, High bright LED illumination (vertical and oblique) Continuous digital magnification from X70 to X280 or from X35 to X140 (optional)
<b>Standard Features</b>	Automatic alignment, Automatic kerf inspection, Automatic Y offset correction
<b>User Interface</b>	Flat 17" touch screen, Intuitive GUI (Graphic User Interface), Multilanguage support, Keyboard & Mouse (optional)
<b>Optionals</b>	BBD (Broken Blade Detector), Barcode reader, High power spindle (2.4 KW) Dress station, DFM (Dicing Floor Management)
<b>Utilities</b> Electrical Air Water Spindle Cooling Cutting	200-240 VAC, 50/60 Hz, single phase 260 L/min @ 5.5 bar  1.1 L/min Up to 4 L/min
<b>Dimensions</b> W x D x H Weight	875 mm x 975 mm x 1,450 mm 830 Kg
<b>Environmental</b> Temperature Humidity Floor	Typical room temperature: 20°C - 25°C < 70% (relative, non-condensing) vibration free

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