ADT 7900 Uno Dicing Series

(Model 7910)
7900 Uno (Model 7910)
Automatic, Single-Spindle Dicing System

Configuration
- Spindle: 2"
- Size: 8"

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

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
- Silicon wafers / Discrete devices
- 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)
- MEC – Micro Electronic Components
### 7900 Uno (Model 7910)

#### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workpiece Size</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Spindle</td>
<td>60,000 rpm / 1.2 KW</td>
</tr>
<tr>
<td>Blade Size</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Y Axis Drive</td>
<td>Ball bearing lead screw</td>
</tr>
<tr>
<td>Control</td>
<td>Linear encoder</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.2 µm</td>
</tr>
<tr>
<td>Cumulative Accuracy</td>
<td>1.5 µm</td>
</tr>
<tr>
<td>Indexing Accuracy</td>
<td>1.0 µm</td>
</tr>
<tr>
<td>Cutting Range</td>
<td>200 mm</td>
</tr>
<tr>
<td>X Axis Drive</td>
<td>Air slide</td>
</tr>
<tr>
<td>Feed Rate</td>
<td>Ball bearing lead screw</td>
</tr>
<tr>
<td>Cutting Range</td>
<td>Up to 600 mm/sec</td>
</tr>
<tr>
<td></td>
<td>410 mm</td>
</tr>
<tr>
<td>Z Axis Drive</td>
<td>Ball bearing lead screw</td>
</tr>
<tr>
<td>Control</td>
<td>Rotary encoder</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.2 µm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>1.0 µm</td>
</tr>
<tr>
<td>Stroke</td>
<td>30 mm</td>
</tr>
<tr>
<td>Ø Axis Drive</td>
<td>Closed-loop, Direct-drive</td>
</tr>
<tr>
<td>Control</td>
<td>Linear encoder</td>
</tr>
<tr>
<td>Repeatability</td>
<td>4 arc-sec</td>
</tr>
<tr>
<td>Stroke</td>
<td>350°</td>
</tr>
</tbody>
</table>

#### Vision System
- Digital camera, high bright LED illumination (vertical and 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, Intuitive GUI (Graphic User Interface)
- Multilanguage support, Keyboard & Mouse (optional)

#### Optional
- BBD (Broken Blade Detector), Barcode reader, High power spindle (2.4 KW)
- Dress station, DFM (Dicing Floor Management)

#### Utilities
- Electrical: 200-240V AC, 50/60 Hz, single phase
- Spindle Coolant: 260 L/min @ 5.5 bar
- Cutting Water: 1.1 L/min
- Up to 3 L/min

#### Dimensions
- Weight: 875 x 975 x 1450 mm
- 830 Kg

#### Environmental
- Temperature: Typical room temperature: 20 °C - 25 °C
- Humidity: ± 70% (relative, non-condensing)
- Floor: Must be vibration free

Note: Specifications are subject to change without notice.
ADT 7900 Uno Dicing Series

- Supports dicing 8” wafers (Competitor is 6”)
- Optical Height to monitor blade wear
- Integrated Dressing Station – Allows blade dressing from a dedicated station
- Vision System – included with LED illumination and Digital Firewire camera with 9 levels of magnification.
- Flexible.
- Software – Most advanced software features in market and all Inclusive with the system
- 2” Low Vibration spindle – Front mounted and operates at 0-60krpm
- Service, Parts, Support – Local in USA in Tempe, AZ and Horsham, PA
- Training – Included with the purchase of the system
- Maintenance – We offer training classes and can provide PM contracts to maintain your system.
7910 UNO

As part of the growing market and the ongoing demand to lower the cost of production per unit (CoO), ADT has responded with a single spindle system model 7910 Uno.

The 7910 Uno system provides a perfect solution for standard silicon wafers up to 8" and for low cost discrete devices.

Further to the automatic vision and easy Graphic User Interface (GUI), ADT is offering a machine at small footprint for saving cost on the production floor.

7910 Series Advantages:
- Up to 8" wafer
- Fast automatic alignment and cut positioning increase throughput
- Automatic Kerf inspection increase yield
- Automatic Y offset correction ensures maximum precision
- Single low vibration spindle enable superb cut quality
- Friendly and intuitive GUI
- Touch screen user interface
- Easy to load and unload
- Easy to maintain
- Small footprint reduces cost of ownership
- Price

CONTACT US

Contact

Headquarters

Name

Phone

E-mail

RELATED DOCUMENTS

- 7900 Duo & Uno 1.6 Mb
- 7900 Brochure 451.6 Kb
- Product Specifications 1.8 Mb