

# **8030** SERIES

## FULLY AUTOMATIC 12" TWIN DICING SYSTEM



- ▶ Blade O.D.: 2"-3"
- ▶ Size: Ø12", 12" X 12"

#### **FEATURE & BENEFITS:**

- Bridge type frame
- Flexibility Supports Hub and Hubless blades up to 3" O.D.
- Dual microscopes, fixed non-contact sensors and two dress stations
- Spindles of 1.8 kW or 2.2 kW high power (for challenging applications)
- Superior vision system with continuous zoom magnification
- Intuitive operation interface using a large 19" touch screen monitor

#### **EASE OF USE:**

• The 8030 operates with the ADT intuitive New graphic User Interface (NUI) and includes two touch - screens: 19" monitor for the main screen and 17" monitor maintenance screen.



#### OTHER KEY FEATURES OF IMPORTANCE:

- Highest dicing process speeds Lowest cost
- Support up to 12" × 12" square products
- Industrial PC based on Win 10 OS
- Air bearing feed axis (X)
- Fast & Simple blade change with a spindle shaft lock mechanism
- 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
- Load port ready for factory automation
- All electronic on top of the cut chamber

#### LEADING APPLICATIONS

- Silicon wafers for Memory and Logic products
- MEMS (micro-electromechanical system)
- CMOS Image Sensors (CIS)
- Packaging (FOPLP, FOWLP, QFN, BGA)

#### **SPECIFICATIONS:**

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Workpiece Size	Ø 8", Ø 12" or 12" x 12" Square
Spindle	Two facing 1.8kW Shaft Lock spindles (Optional 2.2kW) Max. 60,000 rpm
Blade Size	2" - 3"
Y1 / Y2 Axis: Drive Control Resolution Cumulative Accuracy Indexing Accuracy Cutting range	Ball bearing lead screw Linear encoder for each Y axis 0.1 μm 1.5 μm 1.0 μm 350 mm
X Axis: Drive Feed Rate Cutting range	Air Slide Ball bearing lead screw Up to 600 mm/sec (Optional for 1000 mm/sec) 310 mm
Z1 / Z2 Axis:  Resolution  Repeatability  Max. stroke  Ø Axis:	0.2 μm 1.0 μm 50 mm (for 2.188" blade OD)
Drive Repeatability Stroke	Closed-loop, Direct-drive 4 arc-sec 380°
Vision System	USB3 camera, High bright LED illumination (vertical & oblique)
Cleaning Station Spinning speed Cleaning Method	Full rinse and dry cycle 100-3,000 rpm Atomized cleaning capabilities
Wafer Handling system	Slot to slot integrity Inspection drawer
Standard Features	Automatic: Alignment, Kerf check, Y offset and cut verify
User Interface	2 touch screens: 19" monitor as main screen and 17" monitor for maintenance NUI (New Graphic User Interface) and multi language support
Options	UV Station, CO <sub>2</sub> Bubbler, ESD Air Blower Kit, Multiple angle capability Dicing Floor Management (SECS GEM)
Utilities Electrical Air Spindle Coolant (per spindle) Cutting water (per spindle)	200-240 VAC, 50/60 Hz, single phase 500 L/min @ 5.5 bar 1.1 L/min Up to 3 L/min
Dimensions WxDxH Weight	1145mm x 1687mm x 1830mm 1500 kg
Environmental	Room Temperature: $20^{\circ}\text{C}$ to $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ( $77^{\circ}\text{F} \pm 1.8^{\circ}\text{F}$ ) Humidity: Less than 70% relative humidity (non-condensing) Cutting water / Spindle water Temperature: $\pm 1^{\circ}\text{C}$ ( $\pm 1.8^{\circ}\text{F}$ ) from room tempurature Floor must be vibration free









