The Most Accurate Manual Scribing System Available

Handy Wafer Scriber

Features

- Suitable for scribing InP, Glass, GaAs, Si, SiO2, Sapphire and SiC wafers up to 3 inches in diameter
- Predetermined scribing angle for optimal results
- Select tool: Secure wafer and scribe
- Two-part design with non-slip surface holds wafers firmly while scribing
- Unique pen design enables uniform scribing pressure

Instructions

1. Assemble
2. Sandwich wafer between plates
3. Scribe the wafer along the guide

Scan QR code for more info (Link to 1min video)

TECDIA Diamond Scribing Tools

TECDIA CO., LTD.
www.tecdia.com

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**Wafer Scribing Tools**

### Benefits

1. **Best in Class Tool**
   Each tool is meticulously crafted and inspected to only the highest standards for shank uniformity, diamond positioning and cutting angles.

2. **High Yield Potential**
   Our standard shank is designed to work with most commercially available scribing platforms. Although not recommended for best performance, our tools can be used in hand scribing applications.

3. **Design**
   Tecdia scribe tools are designed for longevity and maximum wafer singulation yield. Diamonds are bonded to the shank through a proprietary method that yields extremely accurate alignment geometries.

4. **Custom Tools**
   Custom designed tools available based on your applications and specific needs to produce the optimal results.

### Selection Guide

<table>
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<tr>
<th>Material</th>
<th>4 points</th>
<th>3 points</th>
<th>2 points</th>
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<tbody>
<tr>
<td>SIC GaN Sapphire</td>
<td>TD-420</td>
<td>TD-3YP</td>
<td>TD-2P</td>
</tr>
<tr>
<td>Si GaAs InP</td>
<td>TD-4PSS</td>
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<tr>
<td>ZnO</td>
<td>TD-410</td>
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- **4 point tools** - medium width scribe lines for a wide range of materials and thicknesses. Ideal for applications requiring scribe quality.
- **3 point tools** - wide scribe lines suited for "thick and hard" wafer materials. It has the most scribe strength.
- **2 point tools** - narrow scribe lines best for trench scribing applications.

### Lineup

- **4 Point Tool (Toe)**
  - P/N: TD-4PSS
  - Number of cut points: 4
  - Ridge line angle: 35°
  - Recommended scribing angle: 54° to 65°
  - Characteristics: With the cutting point at the tip, toe point tools yield a sharp and narrow scribe line which is ideal for softer wafer materials that only require minimal scribing pressure.

- **4 Point Tool (Heel)**
  - P/N: TD-410, TD-420
  - Number of cut points: 4
  - Ridge line angle: 35°
  - Recommended scribing angle: 52° to 55°
  - Characteristics: Unlike the toe point, the triangular heel point has a wide cut line making it ideal for thicker and softer materials which also helps to reduce chipping.

- **3 Point Tool (Toe)**
  - P/N: TD-3YP
  - Number of cut points: 3
  - Ridge line angle: 22.5°
  - Recommended scribing angle: 48° to 72°
  - Characteristics: The curved ridges surrounding the cutting point allow for maximum downward force yielding a wide and deep scribe line. This tool type is commonly used for hard and thick wafer materials.

- **2 Point Tool (Toe)**
  - P/N: TD-2P
  - Number of scribing points: 2
  - Ridge line angle: 35°
  - Recommended scribing angle: 54° to 65°
  - Characteristics: A sharp and narrow cut point allows for scribing deep trench, bump or mesa structures without touching the trench edges. The cutting point is similar to 4 point toe tools but much thinner for clearance.