**Automating high-speed, high-accuracy gross leak test**

**LZ-3000**

*Leak test system for air-tightly sealed micro electronics devices*

SMD crystal devices are becoming smaller and smaller. The LZ-3000 is a series of automatic leak test systems developed for high-speed processing in gross leak tests on micro electronics products such as air-tightly sealed SMD crystal devices. It improves production efficiency and provides optimum system for quality management.

**Testing on 2.0 x 1.6 mm parts is possible**

Installing Cosmo’s LS-1881(ZS) differential pressure air leak tester for micro volume parts realizes gross leak test on extremely small parts such as 2.0 mm x 1.6 mm.

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**Parts (Works) to be tested**

- Micro air-tightly sealed electronic devices

**Processing capacity**

- Up to 60 parts (Works)/minute (1 part (Work)/1.0 second)

**Method for gross leak test**

- Micro volume detecting air leak test

**Number of air leak tester pneumatic units**

- 8

**Air leak tester specification**

<table>
<thead>
<tr>
<th>Pneumatic unit model number</th>
<th>LUV-880-KX03</th>
<th>LUV-880-KX05</th>
<th>LUV-880-KX2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Work internal cavity volume</td>
<td>0.3 mm$^3$/s</td>
<td>0.5 mm$^3$/s</td>
<td>2.0 mm$^3$/s</td>
</tr>
<tr>
<td>Min. measurable equivalent flow</td>
<td>$1.17 \times 10^6$ Pa·m$^3$/sec</td>
<td>$5 \times 10^6$ Pa·m$^3$/sec</td>
<td>$2 \times 10^6$ Pa·m$^3$/sec</td>
</tr>
<tr>
<td>Applicable Work size</td>
<td>2.0 x 1.6, 2.5 x 2.0 mm</td>
<td>2.5 x 2.0, 3.0 x 3.0, 3.2 x 2.5 mm</td>
<td>3.8 x 3.8, 5.0 x 3.2, 9.5 x 7.2 mm</td>
</tr>
</tbody>
</table>

**Part (Work) feeding method**

- Aligning and feeding by part feeders with hoppers

**Part (Work) placing method**

- Picking and placing (Left to right) using the “index table with two jigs set on it”

**Test operation**

- Full automatic: ■ Normal operation, ■ Calibration, ■ Recovery
- Manual: ■ Manual operation, ■ Calibration, ■ Return to original position, ■ Parts ejection

**Judgment processing**

- Sorting and collecting Pass and Fail parts using collecting buckets

**Self-diagnosis function**

- Self-diagnosing tester abnormality, operation errors, pressure abnormality, etc.

**Data output**

- Automatically storing test data to USB memory, RS-232C

**Ambient temperature**

- 5 to 40°C

**Power source**

- Three-phase 380V or three-phase 200V, 50/60Hz, 1.5kW

**Air pressure source**

- 0.4 MPa ≤, 250L/min, Pipe caliber Rc1/2 (PT1/2 female screw)

**External dimensions**

- 1250 (W) × 1450 (Max. 1890) (H) × 850 (D) mm

**Option**

- Parts (Works) to be tested can be changed for each test.
- Feeding and ejecting parts (Works) (Online supported and IC carrier magazines are supported.)
**System Diagram**

- Differential pressure air leak testers
- Test ST
- L&UL ST
- Fail bucket
- Pass bucket
- Part feeders
- End of test
- P&P

**External Appearance**

- Dimensions: 920 mm x 330 mm x 1250 mm
- Unit: mm

**Internal Mechanism**

- Part feeding section
- Internal mechanical section

**Examples of screen displays**

- **8-station measurement screen**
  - Measurement and judgment statuses are displayed in an easy-to-understand way.

- **Quality management screen**
  - Test data and graphs in the past can be displayed.

- **Display language can be switched between Japanese, Chinese and English**

- **Other screen displays**
  - Help screen, Mastering screen, Settings table screen, Counter check screen, and many other screens

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*The contents in this Product Information are as of August 2014. The information is subject to change without prior notice.*