

PRODUCT INFORMATION

Micro Electronics Device Leak Test System

Automating high-speed, high-accuracy gross leak test



Up to 60 parts are processed per minute

Up to 60 parts (Works) can be automatically picked, placed, tested for Pass/Fail judgment and sorted by LZ-3000, using the “index table with two jigs set on it”.

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.

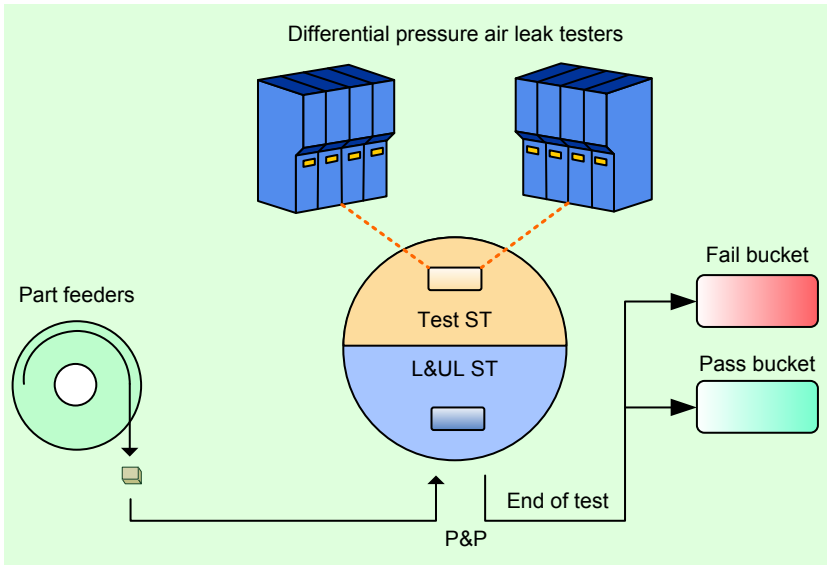


Differential pressure air leak tester for micro-volume parts “LS-1881(ZS)” x 8 units

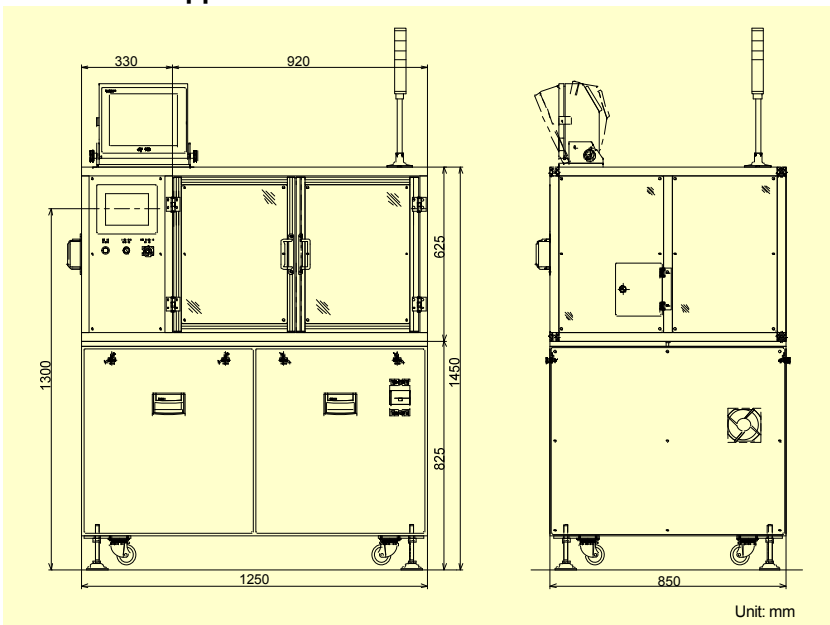
■ Performance and Specification

Model		LZ-3000		
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	Pneumatic unit model number	LUV-880-KX03	LUV-880-KX05	LUV-880-KX2
	Min. Work internal cavity volume	0.3mm ³ ≤	0.5 mm ³ ≤	2.0 mm ³ ≤
	Min. measurable equivalent flow	1.17 × 10 ⁻⁶ Pa·m ³ /sec	5×10 ⁻⁶ Pa·m ³ /sec	2 × 10 ⁻⁵ Pa·m ³ /sec
	Applicable Work size	2.0 × 1.6, 2.5 × 2.0 mm	2.5 × 2.0, 3.0 × 3.0, 3.2 × 2.5 mm	3.8 × 3.8, 5.0 × 3.2, 9.5 × 7.2 mm
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		0.4MPa ≤, 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.)		

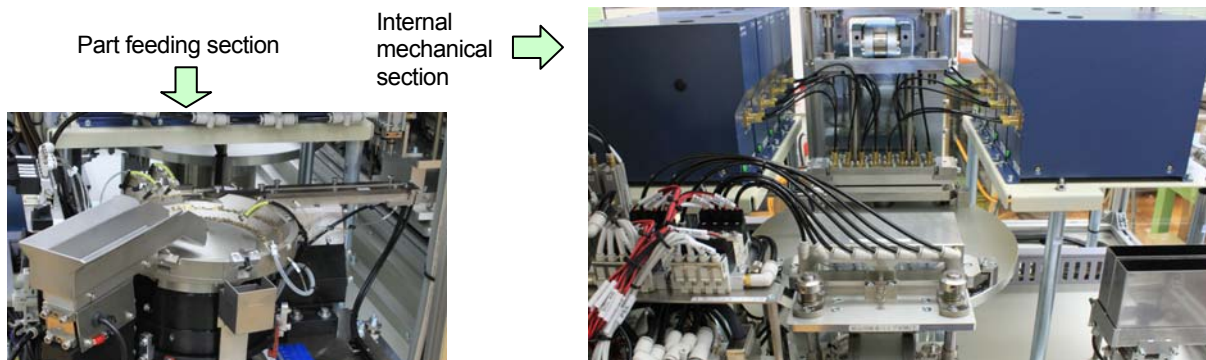
■ System Diagram



■ External Appearance



■ Internal Mechanism



■ Examples of screen displays

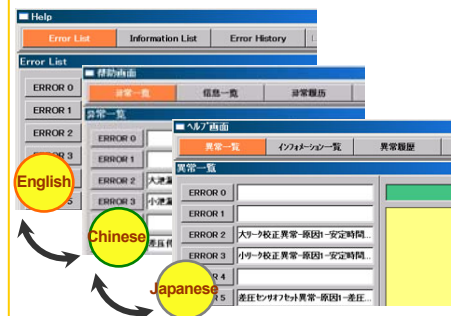
▲ 8-station measurement screen
Measurement and judgment statuses are displayed in an easy-to-understand way.

STATION	Location	Pressure	Temp	Comp	Calibration	Quality Management	Setting	Mastering
STATION 0	0.1	-2.7	20.1	Pa	OK	OK		
STATION 1	0.1	-2.7	20.1	Pa	OK	OK		
STATION 2	0.1	-2.7	20.1	Pa	OK	OK		
STATION 3	0.1	-2.7	20.1	Pa	OK	OK		
STATION 4	0.1	-2.7	20.1	Pa	OK	OK		
STATION 5	0.1	-2.7	20.1	Pa	OK	OK		
STATION 6	0.1	-2.7	20.1	Pa	OK	OK		
STATION 7	0.1	-2.7	20.1	Pa	OK	OK		
STATION 8	0.1	-2.7	20.1	Pa	OK	OK		

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

STATION	Location	Pressure	Temp	Comp	Calibration	Quality Management	Setting	Mastering
STATION 0	0.1	-2.7	20.1	Pa	OK	OK		
STATION 1	0.1	-2.7	20.1	Pa	OK	OK		
STATION 2	0.1	-2.7	20.1	Pa	OK	OK		
STATION 3	0.1	-2.7	20.1	Pa	OK	OK		
STATION 4	0.1	-2.7	20.1	Pa	OK	OK		
STATION 5	0.1	-2.7	20.1	Pa	OK	OK		
STATION 6	0.1	-2.7	20.1	Pa	OK	OK		
STATION 7	0.1	-2.7	20.1	Pa	OK	OK		
STATION 8	0.1	-2.7	20.1	Pa	OK	OK		

▲ 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

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