

The Future in Solderability Test

Microtronics' mindset is creating value for our customers in the industries we are serving. Our deep experience and leadership in core quality control technologies leads us in the development and distribution of cutting-edge equipment.

Through permanent improvement, worldwide support, training and tight cooperation with our customers, we guarantee high quality products and service.

Local representatives are permanently trained to give you the best possible support - worldwide.



Your Local Contact:



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CONTEST[®]

Ionic contamination
Ionograph



Fully automized Ionic Contamination Tester

Why use it?

- Measure how clean your substrates or boards are
- Measure residues of the production process
- Test and monitor the washing processes
- Material income qualification
- Measure residues of flux
- Monitor production

Features:

- Reporting trough MS-Word templates: fully customizable
- Database for all results
- Network capabilities
- Data is clear, no need for interpretation
- Easy software interface
- Sensitivity: 0,20%
- Test accuracy: 0,005µS/cm
- Life time Sensor
- High reliable EtherCAT network connection
- Self cooling circulation pump - does not warm the test fluid
- Recording of the fluid temperature during measurement

Supported standards:

MIL-P-28809	IPC-6012D
MIL-STD-2000A	IEC Standards
DEF-STD 10/03	
IPC-TR-583	
IPC-TM-650	

System types:

Partumber	TANK dim's	Basket dim's	Liter
MI-ContTest-100-S	110x170x40 mm	100x160x30 mm	7,7
MI-ContTest-100	110x170x90 mm	100x160x80 mm	8,7
MI-ContTest-250-S	260x360x40 mm	250x350x30 mm	10,7
MI-ContTest-250	260x360x90 mm	250x350x80 mm	15,4
MI-ContTest-600-S	635x635x40 mm	610x610x30 mm	23,1
MI-ContTest-600	635x635x60 mm	610x610x50 mm	31,2

NEW:
Can test with IonSol TS01



Our patented Process with Heating or Cooling allows users to test with the same fluid temperature each time!

The ContTest systems are the only systems in the market that allow you to always test at the same temperature of the test solution. So, you always test with the same setup. The temperature in other systems is not controlled. Hence, no test is the same as the other one, because there is always a different temperature. This leads to different results.

We have eliminated this in the ContTest systems, offering a stable and comparable test setup.

Ionic contaminations can have a significant impact on the lifetime of an electronic assembly, especially in regards to dendrite growth or moisture sensitive parts. To overcome this, measuring the ionic contamination of the assemblies is the only reliable way. This is performed during development, test and to monitor production. The ContTest systems measure the ionic contamination in accordance with international standards. They were developed to be used in production environments as well as labs.

The rising need to determine ionic contamination on modern SMD assemblies is often underestimated. The negative effect on reliability and durability is surprising.

Ionic contamination often leads to dendrite growth, which can cause shorts and total failure of a component or assembly. Thus, it is important to know how much „salts“ there are on a board after reflow or later processes. Fluxes contain different salts and they stay behind after the reflow process. This can trigger dendrite growth or reduce the resistance between pads. However, this cannot be measured and sometimes it takes a long time for dendrites to grow. It cannot be simulated in accelerated aging.

Measuring the ionic contamination is done by immersing the substrate into a liquid - usually a water/isopropanol solution - to resolve the salts on the surface or from the remaining flux. These change the electric conductivity of the liquid and can be measured by the ultra-sensitive sensor. The result is displayed in a graph as an equivalent to µgNaCl/cm² and time. The solution is regenerated before each test.

We also offer optional heating and cooling of the solution to test at the same temperature each time to make the results comparable.

Required parameters for the test is the surface of the substrate in cm² (or X and Y in cm). Added surface caused by components can be set according to the standards. Reports can be generated using MS-Word templates that can be edited with your logo and so on. We offer a lot of export functions for the results, graph and data.