



WireFlow Test Framework

Versatile platform for circuit board testing

CONFIGURABLE • MODULAR • AFFORDABLE • ROBUST

Products and Services

WireFlow has long experience in helping companies set up test and programming environments for electronic production. We have gathered all our tools and knowledge into a versatile framework we call *WireFlow Test Framework*. Using our framework, we can help you to quickly develop an effective and affordable solution for testing and programming your products in the production line.

We can jump-start your project by using our well-defined process to walk through things like;

- **Testability analysis**
- **Test specification**
- **Fixture configuration**
- **Test sequence programming**
- **Production start up**

WireFlow offers the complete set of products and services needed for a production test and programming station.

You choose which parts you want to do yourself, and what parts you want us to do. We can assist you all the way from idea to ongoing production, or just provide you with hardware and software building blocks.

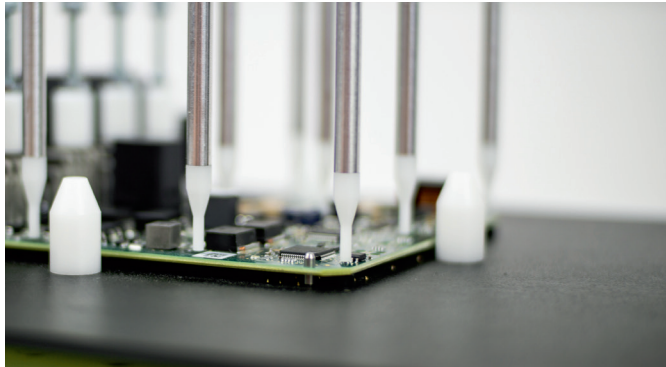
Our Test Framework uses state-of-the-art software tools like TestStand, LabVIEW, WATS and TeamViewer. The hardware building blocks are chosen with care to provide high quality, affordable price, off the shelf delivery and easy software integration.



About circuit board production testing

Production testing is vital when manufacturing electronic products. Each printed circuit board assembly, PCBA, must be individually tested before it is mounted in the final product. There are two primary ways to do this:

In Circuit Testing (ICT): Small voltages are applied to strategic points on the board, and resulting values are measured. This requires access to the bare circuit board and is typically done in a needle-bed test fixture, where the un-powered board is mounted. ICT is optimal for testing components like resistors, capacitors and diodes.



Circuit board in place for test and programming

Functional testing: This is a higher level of testing, where the powered circuit board is verified by testing its functionality. This testing is normally required for boards that include integrated circuits like voltage regulators, processors etc. It is not uncommon for a special test software to be executed on embedded processors in order to obtain good test coverage and fast and stable test cycles. For best test coverage, this Functional testing should be combined with ICT testing.



Needle-bed test fixture

Test fixture

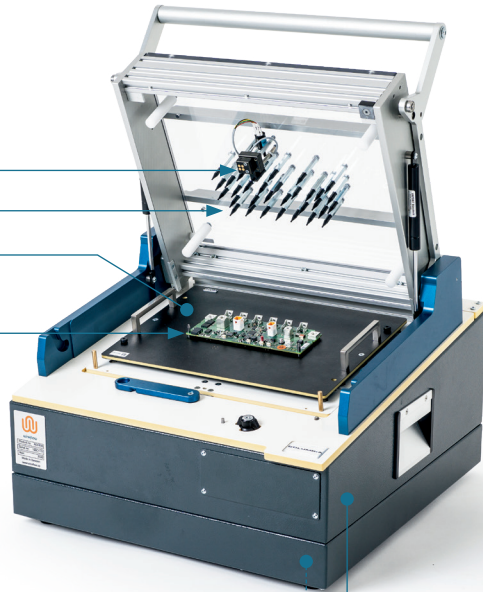
Lightprobe

Pushrods

Exchangeable cassette

Test object

Needle-bed (under test object)



Scanner



Label printer GX43t



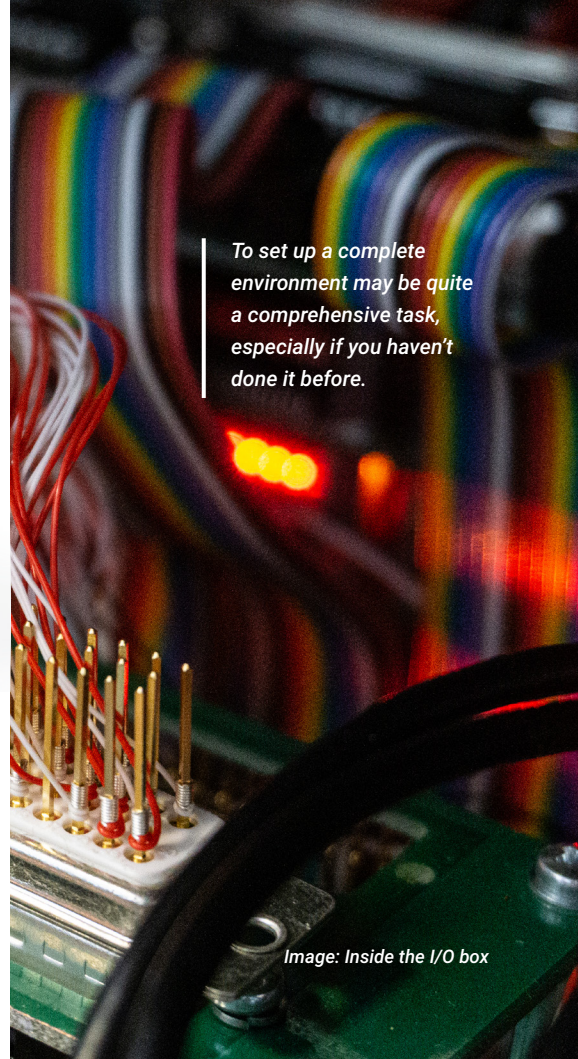
Label printer ZT410



Fingerprint reader WF 2111

I/O box

Instruments (inside)



To set up a complete environment may be quite a comprehensive task, especially if you haven't done it before.

Image: Inside the I/O box

