



# THE PAPERLESS TEST

Cloud connectivity and smartphone apps herald new levels of efficiency and effectiveness for instrumentation when introduced in the correct way

// URSULA RABI

The Internet of Things has been a buzzword for years and we still laugh about the tweeting washing machine or the self-ordering fridge. Nevertheless, these first appliances have enabled further research and development, while more and more useful applications for the industry have evolved.

In an ideal world, analog devices could simply be transformed to digital devices by the use of micro-controllers. But this would just mean we have a different type of what was used before, when there are many more gains that can be made by transitioning to digital.

Test-Fuchs works intensively with partners to optimize processes for gaining economical and time advantages. In the field of resistance testing, the company finds a lot of things that could be

improved. Much has been learnt about how lightning can affect airplanes. As a result protection techniques have improved, but the testing method has stayed the same. Engineers often still use analog instruments, which are difficult to handle and are heavy. They write their results on printed forms with a pen – a slow and inconvenient procedure.

## INTUITIVE AND ACCURATE

With the new Bonding and Loop Resistance Tester (BLRT3), Test-Fuchs aims to accelerate the testing possibilities for bonding or loop resistance. The customizable interface provides users with the necessary test information from the manual, which is uploaded from laptop or server. Single test results are stored on the device, with no pen or paper required, and

1 // The BLRT3 bonding tester has a customizable interface and a simple, intuitive design

transferred back to the original place. The BLRT3's simple and intuitive design and usage without paper reduces the risk of wrong data and errors.

The BLRT3 generates accurate results on complex measurements. Four different ports speed up testing with different clamps suitable for alternate touchpoints. The device automatically detects which clamp is connected. All of the parts are independent from each other, so clamps can be replaced or calibrated without interrupting the testing procedure.

## CLOUD AND APP CONNECTIVITY

It would not be a Test-Fuchs device if the feature-set stopped there. The technicians have worked on alternative display solutions and now testing can be executed via a smartphone app.

## “PAPERWORK AND OUTDATED STORAGE SYSTEMS ARE NO LONGER NEEDED”

Simultaneously, the company’s innovation department took BLRT3 and connected it securely to the cloud. The challenge here is to have all of the key factors in place so the documentation is consistent and comparable. The BLRT3’s cloud feature is the first time Test-Fuchs has made the live

2 // The web interface enables remote management of BLRT3s

database entries of all measurements and live statistics from a device, accessible not only on the actual device.

The service, which is called Data Solutions, allows for active fleet management of devices and clamps and saves costs for calibrating and service control. Updates for all devices can be deployed centrally.

Data Solutions enables data to be analyzed in completely different ways than in the past. Correlation between single measurement points and methods can be calculated. In addition, recurring errors are detected much earlier and much more simply. A graphic illustration of single points and connecting lines makes failure detection simpler and contributes to improving safety.

Data Solutions and BLRT3 are making it easier to switch from paper documentation to electronic records by providing more

value. Time-consuming paperwork and outdated storage systems are no longer needed. Required data research and audits become much easier; quality and transparency improves throughout the entire process. For engineers, the solution enables faster measuring and intelligent features as guidance, while second displays and hands-free working makes their tasks easier to perform.

The aerospace industry shows few limits on its ambition to push the envelope and Test-Fuchs is one of a few suppliers that has proven it can provide superior aerospace test capabilities to the entire world. The company has nine service offices in Europe and Asia and just recently set up a production line at its newest facility in Cleveland, Ohio.

*Ursula Rabi is marketing and sales assistant with Test-Fuchs*



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