



Factory Acceptance Testing facilities at Constant Power Services

Ensuring the product you have invested in, is fit for purpose and able to support your critical load.

EQUIPMENT

- 400kVA Generator
- 300kW Load bank
- Power Analysers
- Flexible Switchgear

TESTING ABILITY

With the installation of a 400kVA/320kW diesel generator set along with an external loadbank connection point rated at 250kW we

are able to provide factory acceptance testing for our Riello Product range here at our offices in Letchworth.

With switchgear configured to allow us to do both single and multi-module system testing on the same platform, flexibility is available for your project requirement.

It is also possible to demonstrate higher rated equipment at a reduced load level, however with reduced load levels.

A power analyser is connected to capture waveforms and measures, so that this may be recorded and shown on a larger screen while in the test area as well as over screen-sharing via Zoom or Teams.

CLIENT SUPPORT

In response to the changed world we now live in, I felt that we had a duty to reduce energy, time and expense for our clients in supporting their needs with regards to Factory Testing.

The facility in Letchworth has more than enough space and with some subtle changes, we can support our clients with testing up to 250kW/kVA.

Be it in person or via live stream we can carry out almost everything that we would do in our Parents factories in Italy.

Kevin Wilson

WHAT DO WE OFFER?



There are two operatives on the platform as standard and subject to the size of the project or if there are multi module systems this can be increased.

We have a Platform supervisor/Project Manager; who will liaise with the customer and answer any questions that may be raised and provide an overview of the tests being carried out.

The Platform Operative carries out the switching, load steps and other functions which are required during the test and will also record the results in order for a report to be compiled for the customer.



TESTS

A typical standard test includes the following sections: Overview, Static Tests & Dynamic Tests.

Overview covers the appearance of the UPS, the options fitted and the display navigation.

Static Testing involves applying various load levels to the UPS and recording various parameters. The load steps are done using a resistive load-bank and normally at 25%, 50%, 75% and 100% load levels. During each of these levels the Voltages of the input and output are recorded, along with the Power and harmonics.

The **Dynamic Testing** involves viewing the waveforms on a phase of the input & output voltage & current during various changes in operation. This normally this is Mains Failure switching to battery, Mains Return and switching back online, Transfer of load from Inverter to bypass, Transfer of load from bypass to Inverter, Step Load from zero to 100%, Stepp load from 100% to zero.

Customer specific and customisable tests such as Soak and Heat run tests available on request.

FAT'S IN THE FUTURE?

Covering all eventualities and ensuring that testing can be carried out with customers attending remotely is made easy with our new and improved test facility.

With a wireless headset for the platform supervisor and two webcams with three metre cables so they can be moved around the platform, being able to see the products tested will not be a problem.

The first camera shows an overview of the test platform and a second camera can be moved to focus on particular points of discussion. Accessing webpages by utilising the connectivity card also allows the customer to see the real time UPS readings.

Remote factory acceptance testing is now simplified with the use of both Teams & Zoom streaming services. The test platform is set up in a way that makes this very easy for the customers to see exactly what is happening. Remote factory acceptance testing works well with many clients preferring this option.