



Location: Flanders Make - Lommel

DESCRIPTION

Following the shift towards electrification, research into drive cycles, fast charging and aging of batteries is paramount. That is why we perform extensive research on batteries for all kinds of applications, including electric vehicles.

In our battery labs, we test cells, modules and packs to help select the right battery cell for any application. Our testing infrastructure allows to perform endurance and ageing tests on battery packs. Our research infrastructure includes climate chambers to determine operational temperature ranges or to perform accelerated life tests.

We can run the following battery test:

- Cycling and aging
- High current pulse testing
- Drive cycle testing
- Fast charging testing

TECHNICAL SPECIFICATIONS

1. BATTERY TESTING

Available equipment and specifications:

- Battery cell tester PEC SBT 0550
 - 18 channels
 - -3V tot 5V, 0-50A
 - Combined channels: up to 600A
 - Max. 4,5kW over 18 channels
- Battery module tester PEC SBT 8050
 - 9 channels
 - 0V to 80V, 50A
 - Max. current: 50A/channel (up to 450A in parallel) (PEC)
 - Max. 27kW over 9 channels
 - Additional DAQ for several temperature/voltage sensors per channel
- Battery pack tester & simulator Triphase
 - 4 channels
 - 0V to 1500VDC
 - 270 A per channel (1080 A in parallel)
 - Max. 135kW per channel (540 kW in parallel)

2. CLIMATE CONTROL TESTING

Available equipment:

- Climate chamber for battery pack testing (2.000 L - with automated fire extinguishing system)
- Several climate chambers with humidity control for battery module testing (up to 600L)

Specifications:

- Temperature range: -40°C to 180°C
- Relative Humidity (10% to 98%) - climate rooms & climate chambers
- CW climate room: max. 2 x 600kg battery packs
- Programmable Seasonal temperature profile

OUR OFFER

Using the infrastructure in our battery labs, we offer:

- Cycling and aging, high current pulse testing, drive cycle testing, fast charging testing, etc.
- Battery fabrication for proof of concept