



Inspection Equipment and Testing Facilities within the GP Group

October 2011

EVB Technology (HK) Limited

Equipment for Environment Testing



Temperature Chamber
Range: -40°C ~ 100°C

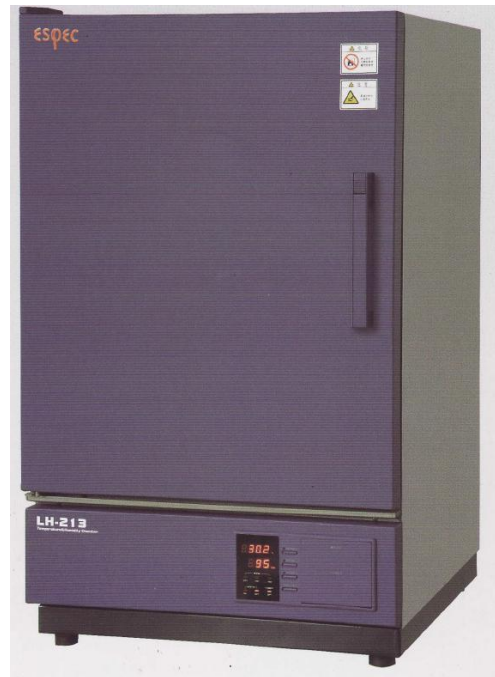


Temperature Chamber
Range: -40°C ~ 200°C

Equipment for Environment Testing



Standard Ovens
Range: 20°C~220°C



Wide Temperature Oven
Range: -30°C~95°C



High Temperature Oven
Range: 20°C~200°C

Equipment for Internal Quality Control



Karl Fisher Moisture Tester



Air permeability tester



Vapor Pro CT-3100
moisture meter for electrode
analysis



Tensometer

Facilities for Internal Quality Control



Chemical laboratory for IQC and defect analysis



UV spectroscopy and atomic absorption spectrophotometer

Equipment for In-Process Monitoring



**Metallurgical Upright
Microscope**



X-Ray Tester



Projector



Video Projector

Equipment for Cycle Testing - Cell



High Current cycler
(5V/300A)

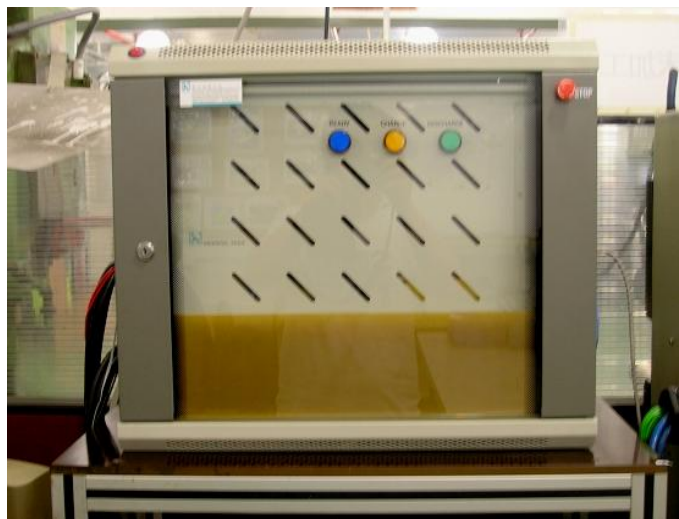


High current cycler
(5V/80A)



Moderate current cycler
(5V/5A)

Equipment for Cycle Testing - Cell



High Current cycler
(5V/600A)

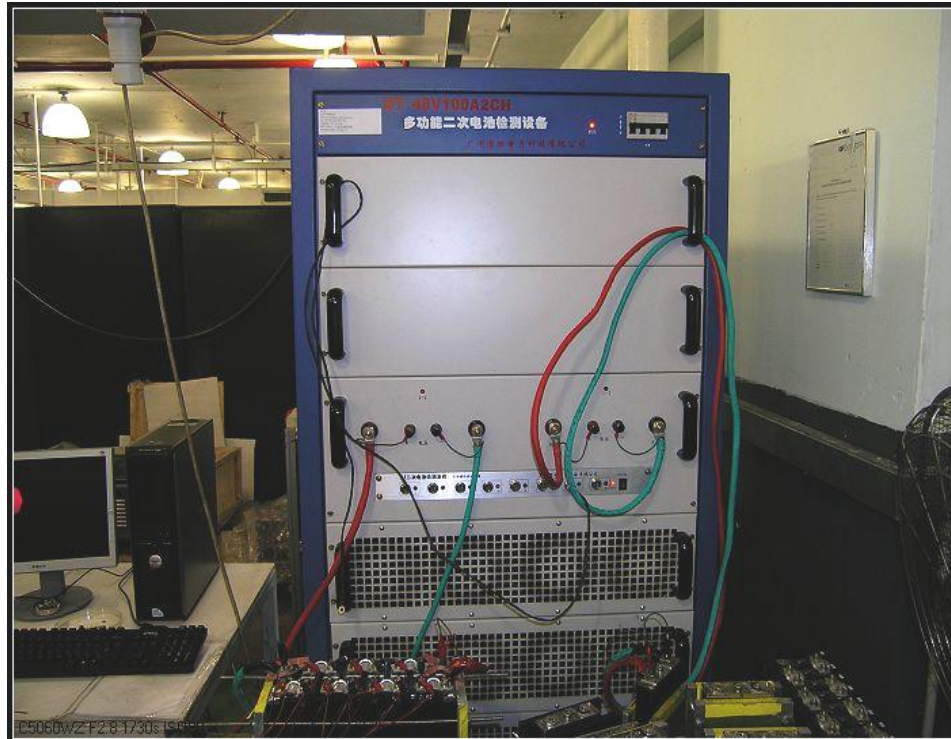


Arbin cycler
(10V/10A)



Arbin Cycler
(5V/100A)

Equipment for Cycle Testing - Pack



High Voltage cycler - Pack
(48V/100A)

Equipment for Cycle Testing - Development



Small current cycler
(5V/10mA) mainly for half cell testing



TEXIO electronic load (200V/200A)
Programmable: can set CCD, CLD, CPD

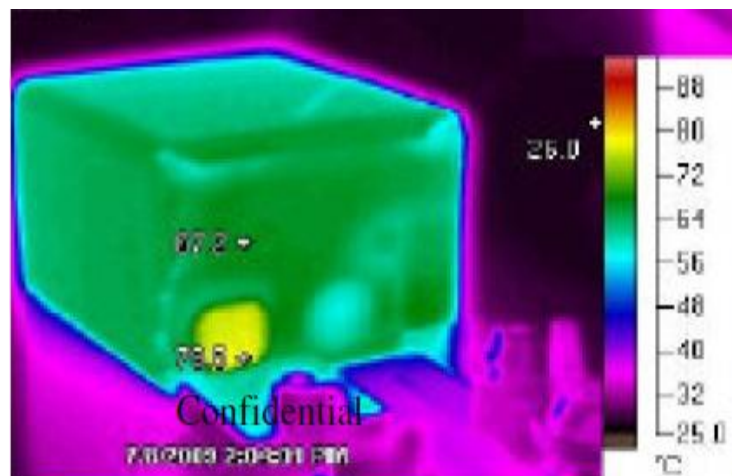
Equipment for Thermal Testing



Fluke Thermal Imager (Ti25)
Able to capture images



Fluke Thermal Imager (Ti40)
Able to capture images



UN/UL Safety Testing Capabilities



Impact Test



Crush Test



Short Circuit Test



Flame Test:
700-800°C



**High current overcharge
or reverse charge test**



Shock Test



Drop Test



All capable of being arranged within the GP Group.

External Equipment Access

- The following equipment is accessible via the Hong Kong City University or Hong Kong Science Park:
 - Differential Scanning Calorimeter (DSC)
 - Surface Profiler
 - Auger
 - X-ray Diffraction (XRD)
 - Scanning Acoustic Microscope (SAM)
 - Fourier transform infrared microscope system
 - Scanning Electron Microscopy-Energy Dispersive Spectroscopy (SEM-EDS)
 - Atomic Force Microscope (AFM)
 - X-ray Photoelectron Spectroscopy (XPS)



Contact Information

Website:

- www.gpbatteries.com
- www.evbtech.com

Email:

- info@evbtech.com

EVB Technology (HK) Limited