



"All Seminars and training courses can be matched to a specific application or project."

Critical standby power battery backed installations need to perform instantly when called upon during an outage.

With such a considerable investment it is essential to ensure that system installation and maintenance practices are both safe and conducted to ensure maximum reliability. A number of rules must be observed and followed.

Together with leading industry specialists, Cellcare Technologies have developed a range of training courses and seminars specifically aimed at personnel who work on or near industrial battery installations and systems.

These seminars cover basic and advanced levels of training for both service and maintenance personnel enabling them to undertake system installation and work in accordance with the legal safety standards and relevant industry guidelines.

Standards and topics covered include Health & Safety Legislation, COSHH and European and British Standards.

All courses are presented by leading industry professionals and each delegate is issued a certificate following successful completion of a written test.

Slides, videos, sample blocs & cut-away cells together with printed notes are used during each course.

Each delegate is also issued a set of course notes to take away for future reference.

Several standard training courses are available and some of the key areas covered are listed below.

-  **Health and Safety Practices**
-  **Mandatory Regulations**
-  **Battery Technologies**
-  **Maintenance Procedures**
-  **Battery Testing**
-  **Battery Monitoring**

- +
Health and Safety
 - +
 Ensure compliance and awareness of relevant Standards.
 - +
 'Safe Operation of Lead Acid Stationary Batteries'.
 - +
 'Safe Operation of Alkaline Secondary Cells and Batteries'.
 - +
 Awareness of relevant COSHH regulations.
 - +
 Control of Lead at Work Regulations.
 - +
 Electricity at Work Regulations.

- +
Basic Battery Theory
 - +
 How they operate.
 - +
 Failure Modes.

- +
Types Of Standby Battery
 - +
 Valve Regulated Lead Acid.
 - +
 Vented Lead Acid.
 - +
 Nickel - Cadmium (Alkaline).

- +
Battery Installation
 - +
 Safe Working Practices.
 - +
 Compliance with regulations.

- +
Initial & Float Charging
 - +
 Correct initial charging methods.
 - +
 Float charge voltage criticality.

- +
Maintenance & Reports
 - +
 Maintenance procedures for long life & reliability.
 - +
 Instrument-types and their correct use.
 - +
 Data Interpretation.

- +
Condition Diagnosis
 - +
 Early problem recognition.
 - +
 Rectification to prolong life.
 - +
 Recurrence prevention.

- +
UPS & Charger Systems
 - +
 UPS Overview.
 - +
 Chargers and charging regimes.

- +
Test Procedures
 - +
 Discharge using Load banks.
 - +
 On-line testing.

- +
Battery Monitoring Systems
 - +
 Benefits of monitoring.
 - +
 Alarm level setting.

- +
Data Logging, Interpretation & Condition Diagnosis
 - +
 Recording of Data.
 - +
 Assessing Battery condition.
 - +
 Calculating Battery Performance.
 - +
 Estimating life expectancy.
 - +
 Early problem recognition.
 - +
 Rectification to prolong life.

- +
Impedance & Conductance
 - +
 This Seminar program is for engineers who will be carrying out resistance/impedance checks on standby batteries and also incorporates the General Health and Safety Training and the Basic Battery Seminar.

See more on-line @ www.cellcare.com

