

Training Title

UPS & BATTERY SYSTEMS

Training Duration

5 days

Training Venue and Dates

UPS & Battery Systems & Chargers	5	27 June - 1 July	\$3,300	Dubai
UPS & Battery Systems & Chargers	5	10-14 October	\$3,300	Dubai

In any of the 5 star hotel. Exact venue will be informed later.

Training Fees

- 3300 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch

Training Certificate

Define Management Consultants Certificate of course completion will be issued to all attendees.

Who Should Attend

Managers, Engineers and Technicians, responsible for the design UPS, installation, testing, safety, and operation of electrical utilities and power stations, who need to refresh their knowledge and skills.

Training Description

Delegates will gain an overall appreciation of the applicable standards and working practices to:

- Describe the operation of UPS
- Know what is the storage battery systems
- Review of Electrical circuits analysis
- Electricity supply
- Circuit protection
- Switches and control systems
- Know the types of UPS
- Industrial supply and distribution
- Electrical maintenance
- Design a simple UPS
- Knowing the application of UPS



Training Methodology:

The latest educational methods and strategies are employed. The course is designed to maximize delegate participation. From the outset the goals of each participant are discussed to ensure needs are fulfilled as far as possible. Questions and answers are encouraged throughout and at the daily wrap-up sessions. This gives participants the opportunity to discuss with other delegates and the presenter their specific problems and appropriate solutions. All delegates take away a manual of all the material presented. Only minimum note taking is encouraged to ensure maximum delegate attention during the seminars.

Training Objectives

- Gain an understanding of different types of batteries and their application;
- Learn battery charging methods and safe handling of batteries,
- Understand the purpose and function of uninterrupted power supply (UPS);
- Have an appreciation for block diagrams of UPS;
- Understand various parts, design and function of systems;
- Have an appreciation of the sizing and selection of batteries, hazards involved when working with batteries and the various operation modes;
- Learn maintenance and testing procedures.

Training Overview

Review of electrical circuit analysis

- Introduction to electric circuits and their analysis
- Generation
- Single and three phase analysis
- Complex power calculation
- Balanced three-phase circuits
- Distribution
- Distribution and utilization on premises
- Static electrical plant.

UPS Systems

- Introduction to UPS
- Types of UPS
- Functions of UPS
- Design of UPS
- Alarm circuits using UPS

Safety of Electrical Equipments and installation in hazardous areas

- Safety and isolation
- Flameproof installations
- Battery charging
- Ring circuit continuity
- Appliance testing
- Testing in hazardous areas
- Machine testing

- Lighting
- Short circuit currents
- Fundamental of protections

Batteries and Battery Chargers

- Design of Power Supply
- Type of Batteries
- Integrated of power electronics with solar energy
- Control equipment and interlocks
- Control systems – electronic and solid state systems

Power Supplies & UPS Operation and Application

- Introduction to Power Electronics
- Solar Energy and its Applications
- Power Supply Units
- Control Circuits
- Industrial electrical equipments

Case Studies, Group Exercises, Group Discussions, Last Day Review & Assessments will be carried out.

.....

