

UPS & BATTERY CHARGERS (REF:OTSUBC001)

Course Description

This three-day technical course discuss the need for different types of UPS systems. It then covers the relative comparisons between various UPS applications and their modes of operation. The batteries used for UPS systems are covered, how to select battery, load testing, calculations. Their maintenance, safety and testing is discussed with risk assessment.

Who Should Attend

Electrical maintenance and operation staff, Field Engineers, Supervisors and others responsible for Electrical Maintenance

Learning Outcomes

- Identify the function of a UPS
- Describe the operation of a UPS
- Describe the purpose of the rectifier
- Describe the purpose of the inverter
- Describe the purpose of the bypasses
- Identify battery systems and safety
- Identify battery types and function

Course Outline

DAY 1

Pre Course Test:

- Introduction
- Safety Tool box talk
- Risk assessments
- Type of batteries
- Installation & Perpetration
- Types of systems
- Selection of Batteries

DAY 2

Voltage & Current calculations

- Hazards, Risks and controls
- Controls to maintain safety critical equipment.
- Plant-room conditions
- Safe storage
- Fire & explosion hazards & Risk of Acid Electrolyte leaks
- Maintenance and Inspection (V, C, D)
- Detailed Reports

DAY 3

- UPS Types and Theory of Operation
- Main UPS Parts
- Panel Inspection and Maintenance
- Charging and PCB set points
- Load testing
- Replacement of faulty batteries
- Killing and removal of old batteries
- Test and course review

