

SAFE HANDLING, INSPECTION, AND MAINTENANCE OF PORTABLE ELECTRICAL TOOLS AND EQUIPMENT

1. Learning Outcomes

This course gives every worker the knowledge and practical skill to use portable electrical tools safely, to spot defects before they cause harm, and to keep equipment in safe working order. On completion, participants will be able to:

Code	Learning outcome
LO1	Describe how electric shock affects the body and identify the two ways a person can be exposed to it.
LO2	Identify whether an appliance is Class I, II or III, and explain how each class protects the user.
LO3	Classify equipment by type and work environment, and state how often it should be inspected and tested.
LO4	Carry out a full pre-use user check on a portable tool, its plug, cable and any extension lead.
LO5	Explain what a formal visual inspection and a combined inspection and test involve, including the earth continuity, insulation resistance, leakage and functional tests.
LO6	Apply the safe-handling rules for portable tools, extension leads, adaptors and RCDs on site.
LO7	Take the right action when equipment is found faulty, and respond safely to an electric shock emergency.

2. Training Manual Contents

The participant manual is organised as follows:

Section	Title
1.	Introduction (learning objectives; training agenda)
2.	Why Portable Tools Deserve Special Attention
3.	Electric Shock and Its Effects
4.	Legal Duties and Responsibilities
5.	Classes of Equipment Construction (Class I, II, III)
6.	Equipment Types, Work Environments and Risk
7.	How Often to Inspect, Test and Maintain
8.	First Line of Defence: User Checks (Before Every Use)
9.	Second Line of Defence: Formal Visual Inspection
10.	Third Line of Defence: Combined Inspection and Testing (PAT)
11.	Extension Leads, Adaptors, RCDs and Site Power
12.	Safe Handling and Care of Portable Tools
13.	Labels, Registers and Record Keeping
14.	Emergency Response to Electric Shock
15.	Use-Case Workshop (Group Exercise)
16.	Golden Rules, Knowledge Check and Evaluation
	Appendix: Glossary of Terms