

IMS09-07 Electrical Testing & Maintenance

Introduction

These procedures are produced in accordance with our Corporate responsibilities under the Health & Safety at Work Act 1974 and Electricity at Work Regulations 1989 which require that all work on or near an electrical system shall be carried out in such a manner as not to give rise, so far as is reasonably practicable, to danger. In addition, that all applicable electrical installations will be subject to a regime of regular/ scheduled testing/ certification in accordance with current legislation and our statutory responsibilities.

These procedures predominately consider fixed installations and buildings although it is appropriate to include certain items of mobile plant and/or waste processing equipment from both electrical performance/ conformity and fire risk mitigation perspectives.

These procedures are specific to electrical testing, ongoing and preventative maintenance and fire risk mitigation but they are to be considered in conjunction with and in accordance to over arching procedures contained within the wider IMS as to risk assessments, contractor approval and site induction.

Electrical Shut Down/ Isolation of Processing Equipment

To be complied with at the end of every shift and in accordance with and in addition to IMS09-03 Site Machinery Isolation Policy, all electrical items are to be safely isolated when not in operation or under supervision. This will be my means which may include a key switch, Deadman or locking off procedure; all ignition keys are to be removed from items of plant and stored securely as to avoid unauthorised operation. All space heaters and/or electrical convection heaters must be turned off when not in close supervision, they **MUST NOT** be used on a timer device or otherwise left on overnight under any circumstances. All areas in the immediate vicinity of any electrical panel are to be kept free from detritus and must be cleaned of accumulated dust on a daily basis as to avoid potential fuel sources for fires. These areas must be blown clean by way of compressed air daily. All electrical cabinets and/or control panels on machines must be kept locked at all times and only accessed when the item in question has been fully isolated; periodic checks will be conducted by the Operations Manager to ensure ongoing compliance.

Mains/ Mechanical Plant Rooms

All mains and mechanical plant rooms must be constructed to be fully enclosed, access by locking door with restricted access and with appropriate fire mitigation and firefighting considerations such as fire doors, Co2 portable extinguishers and bare block walls. Fixed, automatic extinguishers and fire detection should be fitted where appropriate.

New Electrical Installations

All new electrical installations will be completed by a suitably qualified and experienced electrical engineer or electrical engineering company and will be a NIC/EIC/ECA Approved Contractor with current membership. All Installations will be in accordance with BS7671 and the 18th Edition of Wiring Regulations (as amended)

Repairs to/ Additions to an Existing Electrical Installation

All defect investigation, remedial works and/or repairs to existing electrical installations will be completed by a suitably qualified and experienced electrical engineer or electrical engineering company who will be a NIC/EIC/ECA Approved Contractor with current membership and in accordance with BS7671 and the 18th Edition of Wiring Regulations (as amended)

Inspection Scheduling/ Management

A schedule for the timely management of electrical installations will be the responsibility of the Site Operations Manager who will keep, maintain and update a timetable of expiry dates for the electrical installations. In addition, the Operations Manager will retain all electrical inspection, defect/ non-conformity reports and subsequent certifications

Electrical Conformity Testing

A comprehensive inspection and testing of electrical systems (Electrical Conformity Testing) on fixed installations will be conducted every **5 years**; certification of same will only be issued upon satisfactory completion and retained for inspection throughout the period of its validity. A report will be generated detailing all non-conforming items and/or defects and/or unsafe systems; these items will be repaired to satisfactory condition immediately. If this is not possible, the item in question will be isolated and/or removed and will be posted as DO NOT USE until such time as a satisfactory repair can be affected.

Portable Appliance Testing (PAT)

Portable appliance testing (PAT) describes the examination of electrical appliances and equipment to ensure they are safe to use, and predominately refers to smaller electrical items such as hand drills and heaters, plus office-based equipment such as computers and photocopiers etc. Most electrical safety defects can be found by visual examination but some types of defect can only be found by testing. However, it is essential to understand that visual examination is an essential part of the process because some types of electrical safety defect can't be detected by testing alone. The Electricity at Work Regulations 1989 require that any electrical equipment that has the potential to cause injury is maintained in a safe condition.

PAT testing will be conducted on an annual basis, each item tested will be individually marked as complete and conforming, all non-conforming items will be removed from service and either disposed of or repaired to a compliant standard.

A 'master' inspection sheet which details all of the items tested will also be issued

Retention of Certification

All certification will be retained by the Operations Manager for the duration of its validity as a minimum requirement and in accordance with statutory requirements.