EC ITB*

Wind turbine statutory equipment maintenance and inspection training standards

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Introduction

The ECITB, industry employers and subject matter experts have developed Training Standards (TS) which define the curriculum of a series of short courses. These TS are now available for interested parties to develop wind turbine maintenance and inspection of statutory equipment training courses under ECITB licence.

Who are they suitable for?

Training developed from these standards is for anybody responsible for wind turbine maintenance and inspection of statutory equipment. This suite is for the annual inspection of wind turbine statutory equipment. Training developed to ensure the wind turbine technician can safely enter, access, egress and perform duties associated with electrical generation in order to inspect and maintain the following:

- a. In service lift
- b. Compact and davit cranes
- c. Inspection of working at height systems and equipment
- d. First aid boxes

What will be covered? TS WT 01-01: Wind Core Module (3-day course)

This is a pre-requisite for all the other TS in the suite. Subjects include:

- An awareness of the wind turbine industry
- Health & Safety requirements for wind turbines

- Importance of training and competence with regards to maintenance and inspection
- Responsibilities of maintenance and inspection
- Importance and purpose of reports in inspections
- Fundamental engineering principles of materials
- Materials utilised in wind turbine
- Bolts and screws used in wind turbine statutory equipment
- Calibrated hand tools utilised in wind turbine statutory equipment
- Calibrated chains in wind turbine lifting equipment and accessories
- Fundamental principles of wire rope utilised in wind turbines
- Legal responsibilities and first aid box inspection
- Work area, material and equipment preparation and reinstatement requirements
- Inspections of statutory equipment in wind turbines
- Actions after completing the inspection

TS WT 02: Wind turbine service lift maintenance and statutory inspection (2-day course)

Subjects include:

- Preparation requirements for maintenance and inspection
- Principles of lift operation and the common wind turbine lifts
- Undertaking statutory lift maintenance
- Accelerated degradation

TS WT01-03: Compact and Davit (2-day course)

Subjects include:

- Relevant legislation and the implications for crane maintenance and inspection
- The types of cranes utilised on wind turbines
- Health and safety implications related to crane inspection and maintenance
- Terminology relevant to lifting equipment
- Inspection terminology related to cranes
- Inspection periods related to lifting equipment
- Safe working systems utilised for wind turbine cranes
- How to conduct pre-use checks before operating a crane
- Maintenance requirements for cranes
- Inspections on wind turbine cranes
- Function checks on the crane
- The requirement and the importance of load testing and conduct a load test

TS WT 01-04: Inspection of working at height systems and equipment (1-day course)

Subjects include:

- Legislation relevant to working at height
- Working safely during inspecting working at height systems and equipment
- The importance and terminology for inspecting working at height systems and equipment
- How energy is dissipated
- Types and functions of personal equipment utilised when working at height
- The fall arrest/work restraint systems utilised when working at height
- Evacuation systems utilised in wind turbines
- Inspect working at height systems, equipment and PFPE
- Inspection report for working at height systems, equipment and PFPE

Next Steps

If you are an employer or training provider and are interested in developing a course that can be delivered under ECITB licence against the wind turbine lift maintenance and inspection and/or core standards, please contact your ECITB Account Manager or ray.skene@ecitb.org.uk for further information.

