## Module BTTI Installation

BTT Installation

BTTI (17 h 40 min)





**Aim:** The aim of this BTT Installation Module is to give the participants the knowledge and skills to carry out basic installation tasks (supervised by an experienced technician), using safe working procedures and the correct PPE.

## **PROGRAM: BTTI Basic Technical Training Installation**

1. Introduction to the BTT Installation Module 1.1 Safety instructions and emergency procedures 1.2 Facilities 1.3 Introduction 1.4 Aim and objectives 1.5 On-going assessment 1.6 Motivation 1.7 Human factor 2. Introduction to Installation 2.1 Installation overview 2.2 Why installation safety? 2.3 Safety signs 2.4 Types of PPE 2.5 The importance of appropriate isolation 3. General procedures for working onsite with installation 3.1 Checklists, Work instructions, etc. 3.2 Housekeeping 4. Installation environments 4.1 Installation environments 5. Handling and storing 5.1 Risks and hazards associated with handling and storing 5.2 Reception / Inspection 5.3 Unloading and storage of blades, nacelle, tower sections & hub 5.4 Tools and equipment 5.5 Return of goods and components 6. Lifting operations 6.1 Post-use inspection 6.2 Risks and hazards associated with lifting operations 6.3 Roles and responsibilities 7. Main component preparation, pre-assembly and assembly 7.1 Preparation, pre-assembly and assembly pre-assembly and assembly 7.3 Challenges when assembling the main components 8. Principles of mechanical Completion 8.1 Introduction to mechanical completion 8.2 Examples of mechanical completion 8.3 Risks and hazards associated with mechanical completion 9. Principles of electrical completion including cable work 9.1 Introduction to electrical completion 9.2 Examples of electrical completion 9.4 Different types of cables 9.5 Simple installation diagrams 9.6 Cutting and crimping of cables 9.7 Marking, routing and termination of all cable types 10. Principles of hydraulic completion 10.1 Introduction to hydraulic completion 10.2 Examples of hydraulic completion 10.3 Risks and hazards associated with hydraulic completion 11. Principles of operation with external generators

11.2 Risks and hazards associated with the operation of auxiliary systems with an external generator

generator

11.5 Use of external generators for other auxiliary uses

- 7.2 Risks and hazards associated with main component preparation,
- 9.3 Risks and hazards associated with handling and working with cables

- 11.3 Preconditions for the operation of a lift with an external generator
- 11.4 Preconditions for the operation of an internal crane with an external

Prerequisites: BTTM **Certificate validity:** 

BTTI Module (BTT Installation)

**Duration:** 17 h 40 min (2,5 days)

BTTI Program : Sections 1 to 14

Re-certification if you have not performed installation work in the last year, or at the request of the company.

Maximum students: 12 people per Edition.

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- 12. Introduction to handover to the commissioning 12.1 Handover to commissioning
- 12.2 Risks and hazards associated with handing over to the commissioning
- 13. Summary and Theoretical test 13.1 Summary
- 13.2 Theoretical test
- 14. Training review
- 14.1 Training review 14.2 Feedback session