

GWO ADVANCED RESCUE TRAINING COMBINED

HUB, SPINNER AND INSIDE BLADE RESCUE, NACELLE, TOWER AND BASEMENT RESCUE, SINGLE RESCUER: HUB, SPINNER AND INSIDE BLADE AND SINGLE RESCUER: NACELLE, TOWER AND BASEMENT TRAINING



OBJECTIVES OF THE COURSE

The aim of this module is to enable the course participant to perform injured person rescue operations in a WTG Hub, Spinner and Inside Blade Rescue, Nacelle, Tower and Basement Rescue, Single Rescuer: Hub, Spinner and Inside Blade and Single Rescuer: Nacelle, Tower and Basement, by using industry standard rescue equipment, methods and techniques, exceeding those of GWO work at height.

The COMBINED GWO ADVANCED RESCUE TRAINING module shall ensure that the course participants are able to;

- 1) Assess and determine rescue strategy (relevant rescue method, technique, certified equipment, and required personnel) for various rescue scenarios, from the nacelle, tower, basement, hub, spinner and inside a blade of a WTG
- 2) Assess and determine evacuation strategy during a rescue operation, attending to a clear and preferred evacuation route for the injured person outside or inside the tower
- 3) Explain and demonstrate the identification and suitable selection of certified and structural anchor points, relevant for various rescue scenarios
- 4) Explain and apply the concept of lifting angle, angle factor and deviation
- 5) Explain national and local requirements and/or procedures for helicopter rescue in an WTG, including preparing the injured person, preparing the WTG, the Heli-pad safe zones and safe behaviour included
- 6) Explain and control common risks of hazardous energies and common hazards of enclosed space areas, when performing rescue operations
- 7) Apply rescue methods and techniques in performing descending and ascending rescue operations, from a WTG nacelle, tower and basement, using a rescue stretcher and spineboard, manually and power-driven lowering/raising rescue system (rescue device, pulley system or similar)
- 8) Fit a harness and other PPE (e.g. helmet, safety glasses) onto an injured person, in an enclosed space
- 9) Package an injured person on a rescue stretcher and spineboard in a vertical or horizontal configuration to enable safe transportation, by doing regular checks, using rescue equipment such as cervical collar and avoiding head down configuration of the unconscious injured person.
- 10) Manually transport an injured person on a rescue stretcher or spineboard - in a balanced way
- 11) Change directly from balancing an injured person from a horizontal position to a vertical configuration (and vice versa) when suspended
- 12) Perform rescue operations, in the nacelle, tower and basement, using safe and suitable (certified or structural) anchor points, lifting angles, deviation, and edge protection for the rescue equipment
- 13) Perform rescue operations using the casualties personal fall protection on the injured person - as fall protection backup, when required
- 14) Perform rescue operations in a WTG nacelle, tower and basement using personal flashlight (e.g. helmet light), if required due to poor lighting conditions
- 15) Act as the informal rescue team coordinator performing scene assessment and hazard identification, assessing and determining the rescue strategy and exercising clear communication
- 16) Perform clear and precise communication in a stressful rescue operation, both with members of the rescue team as a team coordinator and as a team member
- 17) Apply clear communication and guidance to other emergency responders (e.g. vessel crew or ambulance crew) including coordinating the handover of an injured person
- 18) Transport an injured person horizontally over the length of the turbine, with the use of industry rescue equipment (zip line)
- 19) Transport an injured person to a higher platform, using rescue up techniques and equipment (both manual and power-driven) in a controlled and secure manner

Course Participants will show signs of:

- 20) Acknowledging the benefits of having a coordinator in a rescue team, and the responsibility that comes with it
- 21) Taking part in discussing which advanced rescue preparations, and emergency and communication procedures, apply in their own organization
- 22) Committing themselves to avoid incidents from where they may be exposed to a rescue operation
- 23) Committing themselves to act out this value by demonstrating a pro-active approach and role model behavior



COURSE CONTENTS

- Lesson 1 - Introduction
- Lesson 2 - Emergency Response Plan in Your Own Organization
- Lesson 3 - Measures to prevent injury during training
- Lesson 4 - Head Support during rescue
- Lesson 5 - Packaging the Injured person
- Lesson 6 - Lowering/Raising Rescue System
- Lesson 7 - Hub Rescue Exercise (From Blade)
- Lesson 8 - Hub Rescue Exercise 3 & 4 (From Spinner)

- Lesson 9 - Evacuation of an injured person from the Nacelle to the Base of the Tower
- Lesson 10 - Rescue from Enclosed Space
- Lesson 11- Rescue from Crawl Space
- Lesson 12- Rescue Up
- Lesson 13- Single Rescuer
- Lesson 14- Evaluation



TARGET GROUP

Personnel who will be working in the wind industry or related fields and will have their duties in a wind turbine environment. Personnel that may need or is selected by their employer to perform advanced rescue or lead an advanced rescue operation, where training according to one or more modules of the GWO Advanced Rescue Training may mitigate the identified risks.

APPROVAL



Global Wind Organisation

DELEGATE PREREQUISITES



- All personnel participating in advanced rescue training shall be medically fit and capable of fully participating.
- Valid GWO BST module Working at Heights, GWO First aid and GWO Manual Handling certificates are prerequisites for participation.
- Furthermore, Course Participants shall have created a personal Course Participant profile in WINDA and provide their own WINDA ID prior to completing the training.

DURATION OF THE TRAINING COURSE



The duration of the Full training course is 3 Days.

PRICE AND VALIDITY



The price is 1050 EUR per person. Certificate is valid 2 years.

COURSE LIMITATIONS



The course ratio are 4 participants on 1 instructor.

TRAINING APPROACHES AND EQUIPMENT:



- Theoretical tasks with presentations and visualizations
- Group workshops
- Case studies
- Practical exercises in workshops
- Practical exercises using real life equipment
- Professional instructors with industry experience