

# GWO BLADE REPAIR TRAINING



## TARGET GROUP

Personnel who will be working in the wind industry specifically in relation to composite inspection and repair work. Personnel that perform job functions that have been risk assessed by their employer or their workplace duty holder as a function, where composite work training according to this standard may mitigate some of the identified hazards and risks



## OBJECTIVES OF THE COURSE

The aim of the GWO Blade Repair training module is to enable the participants to support and care for themselves and others working in the wind industry by possessing the necessary knowledge, skills and ability for blade repair.

After having successfully completed the GWO Blade Repair training the participants will be able to:

- Take responsibility for working safely with applicable chemicals, while utilising the applicable personal protective equipment in a controlled manner throughout all phases of blade inspection and repair work (Ability, intermediate level)
- Explain typical types of blade construction, materials and the importance of surface finish relating to aerodynamic performance and efficiency (Knowledge, intermediate level)
- Distinguish between and work safely in a controlled manner with epoxy, polyester, polyurethane, vinyl ester, methacrylate, reinforcement materials and solvents related to composite inspection and repair work (Skills, intermediate level)
- Prepare, operate and maintain the correct tools and equipment, be it electrical or mechanical (Skills, intermediate level)
- Take responsibility for safely performing and documenting laminate, sandwich panel and surface layer repairs in accordance with a work instruction in glass fibre reinforced composite parts (Ability, intermediate level)



## COURSE CONTENT

- Lesson 1 INTRODUCTION
- Lesson 2 SAFETY DATA SHEETS
- Lesson 3 WORK INSTRUCTION
- Lesson 4 RISK ASSESSMENT
- Lesson 5 SECURE AN AREA
- Lesson 6 DROPPED OBJECTS
- Lesson 7 WASTE SEGREGATION
- Lesson 8 ERGONOMICS
- Lesson 9 LOCK OUT TAG OUT
- Lesson 10 PERSONAL PROTECTIVE EQUIPMENT
- Lesson 11 MASKS AND FILTERS
- Lesson 12 CHEMICAL SAFETY
- Lesson 13 COMPOSITES AND BLADE CONSTRUCTION
- Lesson 14 MATERIALS
- Lesson 15 TOOLS AND EQUIPMENT
- Lesson 16 PHASE TEST
- Lesson 17 LAMINATION SKILLS
- Lesson 17 LAMINATION SKILLS
- Lesson 18 BASIC LAMINATION
- Lesson 19 SANDWICH PANEL
- Lesson 20 PAINTING
- Lesson 21 BLADE INSPECTION
- Lesson 22 INSPECTING LIGHTNING PROTECTION SYSTEM
- Lesson 23 SANDING SKILLS
- Lesson 24 GRINDING SKILLS
- Lesson 25 SURFACE REPAIRS
- Lesson 26 LAMINATE REPAIRS
- Lesson 27 FILLING AND SHAPING
- Lesson 28 TRAILING EDGE REPAIRS
- Lesson 29 LEADING EDGE REPAIRS
- Lesson 30 SANDWICH PANEL REPAIR
- Lesson 31 BOND LINE REPAIRS
- Lesson 32 SUMMARY AND FINAL TEST
- Lesson 33 TRAINING REVIEW

## 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

## APPROVAL



Global Wind Organisation

## COURSE LIMITATIONS



The course ratio are 6 participants on 1 instructor.

## PRICE AND VALIDITY



The price is 1955 EUR per person. Certificate is Unlimited.

## DURATION OF THE TRAINING COURSE



The duration of the Full training course is 9 Days.