

# Siemens Gamesa - SG Training Web

SE-P-50535

## SGTT - Bolt Tightening Training

### Purpose

The overall purpose of the course is to provide practical training in bolt tightening and shimming techniques and tools specific to Siemens Gamesa. Through the use of different types of exercises performed individually and/or in small groups the ability to safely and competently perform torqueing and tensioning of bolts as well as shimming are achieved.

### Who should attend?

The course is intended for Siemens Gamesa employees, customers and 3rd parties seeking to supplement their base knowledge of bolt tightening, with the procedures and tools specific to Siemens Gamesa.

### Objectives

Upon completion of the course the participants are able to:

- Know how to find documentation applicable to torqueing, tensioning and shimming
- Skilled in using torque wrenches correctly to tighten bolts
- Skilled in inspecting, assembling/dismantling and adjusting the hydraulic torque and tensioning tools
- Skilled in using hydraulic torque and tensioning tools correctly to tighten bolts using the two-stage bolt tightening procedure
- Skilled in inspecting, measuring and filling in checklist as part of shimming
- Know how to use shimming tools for filling air gaps by following the applicable procedure

Upon completion of the course the participant have obtained the following competencies:

- Select technical manuals and documentation for bolt tightening and shimming tasks to be performed under supervision
- Safely operate specialized tools used for bolt tightening and shimming
- Suitably fill out appropriate checklists when working in the turbine

### Prerequisites

Read and understand English.

SE-P-50510 SGTT - General Technical Safety Awareness eLearning OR SE-P 07900 Technical Safety Training

SE-P-50530 SGTT - Bolt Tightening Training eLearning

#### **Recommended:**

Due to the nature of the content and the learning purpose it is recommended that the participant has the competence acquired on the following training modules, prior to course commencement.

SE-P-50410 GWO BTT Mechanical

SE-P-50430 GWO BTT Hydraulic AND SE-P-50420 GWO BTT Electrical OR SE-P-06000 SWP Basic Turbine Electricity And Hydraulics

### Contents

The following topics are covered:

Introduction

Recap of eLearning curriculum

Practical tasks:

- Torque wrenches
- Hydraulic torque tools
- Hydraulic tension tools
- Shimming

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## Notes

### Validity

No Expiry

### Theory / Practice

20% / 80%

## Export control

AL-Number: N

ECCN: EAR99