

Siemens Gamesa - SG Training Web

SE-P-50540

SGTT - (EN,ES,PT,CN) Gearbox Inspection and Oil Sampling eLearning

Purpose

The purpose of this eLearning is to provide the participant with introductory knowledge of the procedures for inspection of gearboxes. This includes identifying different types of damage to teeth and bearings as well as establishing the root cause. Additionally, the course will also introduce the participant to oil sampling and the ISO4406 standard. The e-learning serves as a theoretical basis, before practical training in a Training Center or at site.

Who should attend?

The course is intended for Siemens Gamesa employees, customers and 3rd parties who perform tasks on gearboxes including oil sampling.

Objectives

Identify the key parts of a gearbox
Recognize wheels and pinions on a number of turbine models
Identify different types of bearing
Recognize the importance of following the Inspection Checklist
Recognize types of damage to teeth and bearings and state what causes them
State the purpose and location of the internal lubrication system, inline and offline filtering systems
Interpret the ISO 4406 rating on an oil sampling report
Assess the level of pollution on a filter magnet
State the key steps involved in changing the offline filter
List the steps involved in taking an oil sample correctly
Upon completion of the course the participant have obtained the following competencies:
Basic knowledge of Siemens Gamesa's procedures for inspection of gearboxes.
Basic knowledge if Siemens Gamesa's method and procedure for taking oil samples.

Prerequisites

Read and understand English.

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

SE-P-50410 GWO Basic Mechanical

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

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Contents

The following topics are covered:

- Introduction
- Key gearbox components
- Inspection procedure
- Types and causes of gear and bearing damage
- Internal lubrication and filtering systems
- Oil standards (ISO4406)
- Inspection of inline filter magnets
- Changing offline oil filter
- How to take an oil sample

Notes

Course is available in English, Spanish, Chinese & Portuguese languages - choice of language is inside the course

Validity

No Expiry

System requirements needed to run this e-learning:

System course duration: The time shown below is pure system time for the course.

Operating System: Windows 7 and above

Processor: Dual Core 2 GHz

RAM: 4 GB

Hard Disk: 1GB of free disk space

Sound Card and Speakers (headphones recommended)

Screen Resolution: 1920 x 1080 pixel minimum for optimal viewing (24Bit)

Internet Connection: 2Mbps Broadband connection (or equivalent)*

Internet Browser: Internet Explorer 11+, Google Chrome (latest version), Firefox (latest version), Edge

Internet Browser Requirements:

- JavaScript enabled
- Pop-ups enabled
- Cookies enabled

Export control

AL-Number: N/A

ECCN: N/A