Siemens Gamesa - SG Training Web

SE-P-50570

SGTT - (EN,ES,PT,CN,AR) Cable Training eLearning

Purpose

The purpose of this eLearning is to provide the participant with thorough theoretical knowledge of work on cables of all sizes found in Siemens Gamesa wind turbines. This includes cable material types, shielding, connections, diagram reading and use of tools. 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 related to cable work in Siemens Gamesa wind turbines

Objectives

Name the different types of cable used at Siemens Gamesa
State what the cables are used for
State the advantages and disadvantages of each cable type
Explain how to mount and route cables safely and recognize the importance of doing
Identify the key tools used in small cable work
State the purpose of each tool
Explain how it works
Name the main accessories used in cable work
Explain the purpose of the accessories
State the sources and effects of electrical noise
State the purpose of shielding when making connections
Identify the different types of shielding and state how they are fitted
Recognize how different shielding connections are illustrated on electrical diagrams
Recognize the right tools and equipment for carrying out the following work on copper (Cu) and aluminium (Al) cables:
- Cutting
- Stripping
- Crimping

State how to prepare and use these tools for power cable work
Identify the correct procedure to connect the following cables:
- Cu - Cu
- Cu - Al
- Al - Cu
- Al - Al

Recall the correct tools to use for the connections
Identify the procedures to follow in the Work Instruction on Main Cable Connections
Upon completion of the course the participant have obtained the following competencies:
A theoretical understanding of cable work on all sizes of cables found in Siemens Gamesa wind turbines.

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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 eLearning OR SE-P 07900 Technical Safety Training
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
- Cable types
- Mounting and Routing cables
- Stripping, crimping and press tools
- Cable cutters and other small cable tools
- Small cable accessories
- Electrical noise and types of shielding
- Interpreting diagrams
- Fitting cables in controllers
- Connecting power cables
- Cable connections at generator, yaw point, saddle, tower connections and A12 cabinet.

Notes

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

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

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Export control

AL-Number: N
ECCN: EAR99