



European Qualification Profile

3. Installation onshore including components change

1. Production

2. Transport

3. Installation

4. Commissioning

5. Plant operation

6. Maintenance and trouble-shooting onshore

7. Maintenance and trouble-shooting offshore



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General assignment: This process stage comprises the complete erection and installation of the wind turbine following the delivery and unloading of all components at the site. The work is generally subject to tight schedules and demands a high level of coordination by the site manager. The same routines apply to the replacement of major components during the operational life of the turbine.

Description/Scope of the assignment: The assignment is initiated by the delivery contract and ends with the hand-over of a fully functional wind turbine. Preparatory activities include foundation work and the unloading and handling of individual components. Formal completion of the process stage is enacted via the commissioning process

Key sub-assignments: The following key sub-assignments have been identified and specified in individual job profiles

3.1

Logistics and operational planning

3.2

Ensure workers' safety

3.3

Wind Turbine installation

3.4

Electric works

3.5

Substation connection

Job profile

Process stage 3 Installation onshore including components change

Work assignment

3.5 Substation

Description

The focus of this assignment is the interface with the electric grid and in particular the electrical connections from the substation to the wind plant side and the electrical connections from the substation to the grid network side.

Scope

The assignment is grouped in two sub-assignments:

1. Connect the substation to the wind turbine
2. Connect the substation to the grid

| Requirements | | | | | |
|---|---|--|---|------------------|----------------------|
| | <i>Knowledge</i> | <i>Skills</i> | <i>Competences</i> | <i>EQF-level</i> | <i>NQF-Reference</i> |
| 3.5.1 Electrical connections from the substation to the wind turbine | - Technical knowledge from professional institute or coming from a specific job's experience. | <ul style="list-style-type: none"> - Capacity to perform the jobs on base of detailed indications and /or drawings. - Capacity to perform electrical connections. - Capacity to read and interpret the electrical plan/schemes. | - Executive autonomy in performing operations on complex apparatus that require a specific knowledge regarding component and their functioning. | 3 | 3/4 (IT) |

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|---|---|---|---|---|---|
| <p>3.5.2 Electrical connections from the substation to the grid network side</p> <p>(Electrical plant technician)</p> | <ul style="list-style-type: none"> - Technical knowledge coming from qualification from professional institute or coming from a specific job's experience; - Specific knowledge about substation parts and functioning - Knowledge of specific standards and norms (IEC, CENELEC and the national body) - Knowledge of regulations adopted by Transmission and/or Distribution System Operators (Grid Codes) - Knowledge of regulations adopted by Authority for Electric Energy and Gas | <ul style="list-style-type: none"> - Capacity to interpret critically drawings or equivalent schemes. - Capacity to understand and to perform working phases sequence;. - Capacity to execute works about complex electrical high voltage installations. - Capacity to perform electrical connections in high voltage. - Capacity to execute every type of wirings and all necessary electric measurements for check | <ul style="list-style-type: none"> - High working autonomy - Capacity to perform with personal and specific competence operations on complex machinery; | 3 | <p>5 (IT)</p> <p>H2/B2 Certificate (FR)</p> |
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