



European Qualification Profile

1. Production – turbine assembly

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: Despite different levels of in-house production in different manufacturer structures the final mechanical and electrical assembly of a wind turbine nacelle in a workshop environment is characterised by generic process stages, whereas the assembly of the tower and rotor blades is subject to on-site access conditions. The individual assignments are regulated and monitored by the manufacturer's in-house quality management system. High-quality assembly, however, requires an understanding of wind turbine operating conditions and factors on the part of all involved.

Description/Scope of the assignment: Since turbine contracts are generally customized the assembly process begins with the collection and organization of contract-specific data and specifications and ends with the compiling of customer-specific turbine documentation and operating instructions. The assembly assignments are completed by a testing procedure which functions as a final quality check before the nacelle is released for shipment.

Key sub-assignments: The assembly process is grouped into the following key sub-assignments:

- 4.1 Collect and organise all required contract-specific documentation and specifications
- 4.2 Assure availability of materials and components (quality management input controls and in-house logistics)
- 4.3 Secure the work area(s) and select appropriate protective clothing

- 4.4 Conduct assembly procedures using the stipulated tools, devices and hoisting/transport equipment in accordance with H&S regulations, quality management specifications and documentation requirements
- 4.5 Carry out post-assembly adjustments and alignment of components
- 4.6 Conduct tests of all functions in line with quality management stipulations and customer acceptance procedures (indoor commissioning)
- 4.7 Issue completion certificate and – where applicable – customer acceptance certificate
- 4.8 Compile all machine documentation and release for shipment