



**PM Generator**  
**Electrical Design**  
**Engineer**

**ALSTOM** is a global leader in the world of power generation and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom Wind belongs to the Alstom Group and is dedicated since 1981 to design and manufacture wind turbines. For its headquarter in Barcelona (Spain) we are looking for:

**PM Generator Electrical Design Engineer**

**Purpose of the Job:**

Electrical design of low speed, permanent magnets based synchronous generators for wind turbine applications

**Responsibilities**

Electrical calculations and investigations required for the development of permanent magnet generators for wind turbine applications, considering technical, industrial and commercial constraints

Developing and maintaining calculation tools, methodologies and rules for electrical design of permanent magnet generators

Technical support to sales departments, internal and external partners (e.g. for manufacturing) and customers

Specifying and evaluating measurements on mock-ups, test-rigs and on-site

Specifying and following-up work packages for external partners (e.g. universities, engineering companies)

**Educational Requirements**

Electrical Engineering degree or PhD, preferably specialisation in large electrical machine design

**Knowledge / Experience**

**Mandatory:**

Experience in electrical design and calculation of permanent magnet motors / generators for high power applications

Experience with electromagnetic calculations using FEM software, preferably CEDRAT FLUX

High level of English language, Spanish or French will be considered as a plus

**Desirable:**

>3 years experience in design and development of large electrical machines

Experience in Wind sector and knowledge of competitors solutions

Experience in industrialisation and manufacturing of permanent magnet motors / generators

Experience in international working environments

**Technical skills / competencies:**

Good knowledge of electromagnetic layout, modelling and behaviour of large electrical machines

Knowledge of electromagnetic FEM software, preferably CEDRAT FLUX

Use of typical simulation and calculation tools (Matlab / Simulink, PSpice,...)

Solid base in power electronics, control and protection and electrical power systems

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[www.careers.alstom.com](http://www.careers.alstom.com). (Job Requisition of PM Generator Electrical Design Engineer: **BAR0008K**)

or send your cv to: [piergiuseppe.ragone@power.alstom.com](mailto:piergiuseppe.ragone@power.alstom.com)