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## Human Resources

### Mechanical Design Engineer Job Description

**Job Title:** Mechanical Design Engineer

**Location:** Plzeň, CZ

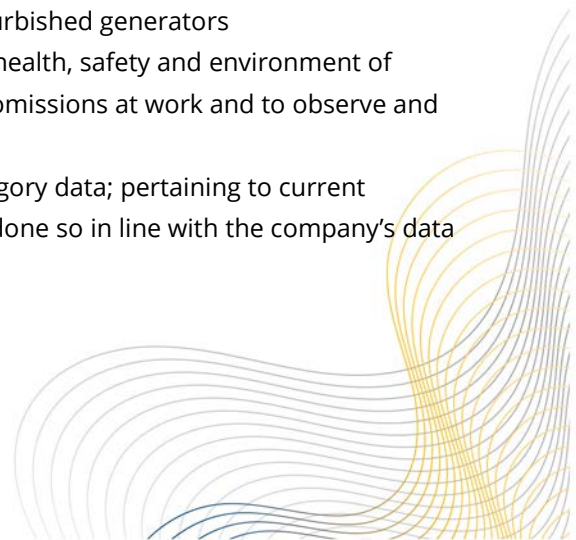
**Department:** Engineering

#### Role Purpose

To support BRUSH and its customers with a high-level technical expertise, advice, guidance and solutions on mechanical issues related to BRUSH generators. To ensure that BRUSH supports its customers and always delivers products and services to customer satisfaction, within budget and on time.

#### SECTION 1 – Key Responsibilities

- Supporting the business by resolving all mechanical design issues related to large generator designs (impact of cooling systems, preparation of operating charts, evaluation of machine performance, calculation of resistance/reactance, static and dynamic testing, insulation system design, winding design, etc.).
- To support BRUSH with Innovative, fully engineered and creative solutions to customer problems.
- Provide mechanical engineering evaluation, in depth analysis and product design solutions to satisfy changing customer requirements
- Ensure that all designs and applied technology are compliant with the relevant technical, safety and environmental standards, codes of practice etc.
- Supporting and accompanying Sales and Project Managers during the pre-contract award stage to promote BRUSH service credibility and competence. Engineer and develop competitive solutions for all sales initiatives.
- To conduct DFMEAs and participate in PFMEAs to ensure a thorough risk review on all changes has been completed. Leading RCA investigations as and when required by the business.
- Approval of technical documentation related to BRUSH generator products and services.
- Providing technical guidance.
- Engineer and develop competitive solutions for all sales initiatives.
- Acting as engineer/technical expert for large generator projects throughout the full product life cycle.
- Acting as a critical interface with other BRUSH engineering departments to maintain quality of products.
- Being available to travel internationally and domestically as and when required.
- Ensure that all products are designed for manufacturing in the most cost effective and timely manner.
- Producing detailed analysis and up-rate reports for existing/refurbished generators
- All employees have a legal duty to take reasonable care for the health, safety and environment of themselves and of others who may be affected by their acts or omissions at work and to observe and follow the relevant systems, rules and methods of working.
- Ensure all data protection activities of personal and special category data; pertaining to current employees, customers and all other external stakeholders, are done so in line with the company's data Protection Policy.



- Accountable for the adequate data protection activities and awareness levels within their area responsibility, in line with the data protection policy.
- The job description is not to be regarded as exclusive or exhaustive and you may be required to undertake various duties as may reasonably be required of you by the Company.

## **SECTION 2 – Person Specification**

### **Qualifications or Functional Experience**

- University Degree - Mechanical Engineering.
- Experience working in a similar role at a Generator Original Equipment Manufacturer.
- Applicants will need to demonstrate an extensive knowledge of medium/large electrical machinery, specifically two-pole turbo-generators – welcomed.
- Appreciation of financial/commercial aspect/implications of proposed technical solutions for in service problems.

### **Knowledge/Skills**

- Computer literate with the ability to maintain accurate records.
- Highly proficient in the use of IT systems including:
  - All Microsoft office software packages, including but not limited to Excel, Word and PowerPoint.
  - Experience of modelling software.

### **Personal Attributes**

- Knowledge of design techniques, tools, methodologies, procedures etc. utilised within the design and manufacture of turbogenerators and salient pole generators together with the associated auxiliary systems - welcomed.
- Experience in an engineering environment.
- Clear and highly effective communicator, both verbal and written; adept at disseminating information to others; keeps colleagues at all levels of the organisation informed of important issues, problems, and status of projects in a timely manner.
- Skills in the following areas:
  - Design reviews.
  - Design methodologies.
  - Project management.
  - RCA investigations.
  - Lateral thinking.
  - Formal Presentations.
  - Meeting Management.
  - Lean techniques and methodologies.
  - Proven track record in developing and maintaining highly effective working relationships.
  - Experience of bringing design concepts to manufacture.

