

JOB DESCRIPTION – Mechanical Project Engineer

Job Title	Mechanical Project Engineer
Date Reviewed	February 2024
Responsible To	Head of Engineering Operations
Responsible For	None
Location	Maidenhead, Berkshire OR London

Business Profile

AVK are the UK's leading provider of critical power systems and maintenance that guarantee reliable power. For over 30 years we've been supplying UPS systems, standby diesel generators and more recently Battery Storage and Gas Generation solutions providing our clients with reliable back-up power schemes for their mission critical services and systems.

We are trusted by many of the UK's largest Data Centre operators, Finance & Banking providers and Telecommunications companies to design, install and maintain 100% power integrity by providing diesel/gas generators, uninterruptible power systems, battery storage, switchgear, protection relays and turnkey solutions.

AVK specialise in all aspects of the design, planning, implementation, and on-going maintenance of critical power systems. We provide solutions for standard or large-scale bespoke applications, covering all project sizes from £1k up to £30m. Our extensive and growing client base reflects our highly regarded reputation for both quality and service.

Role summary

The Mechanical Project Engineer is responsible for the design of mechanical support systems on UPS and Generator projects ensuring compliance with both project specifications and industry standards.

The Mechanical Project Engineer also assists in the development and improvement of engineering processes and best practices and supports the business development group. This role has responsibility for quality, process, and the high standards our customers expect.

The role is based at our Head Office in Maidenhead with frequent travel to client sites and supplier premises.

Responsibilities

	Provide up front technical support to the sales department on the specification and design of UPS & Generator systems, specifically focussing on mechanical packages (i.e. Fuel Storage & Supply Systems, Cooling Systems, Ventilation Systems, Vibration Transmission, Exhaust Management Systems, Acoustic Attenuation, etc.)
	Assist sales department in the preparation of technical proposals & submissions including; review of client specifications, generation of technical compliance statements, development of proposal drawings and preparation of initial design documentation.
	Take responsibility for the specification & design of mechanical packages on UPS & Generators projects from project handover to completion, providing technical support throughout to the Project Management and Commissioning Team.
	Assist in the development and implementation of Automated Control Systems
	Develop design documentation (drawings, technical data sheets, control philosophies, reference calculations, etc.) in line with project requirements and timescales.
	Assist Project Managers with generation of project specific Method Statements and Risk Assessments in accordance with project specifications.
	Generate Factory Witness Test procedures and associated test documentation in line with project specifications and industry standards.
	Attend Factory Witness Testing of UPS and Generators Systems in Europe and/or UK, along with client representatives (end user, consultant, etc.)
	Develop and write Site Acceptance Test procedures and associated test documentation in line with project specifications.
	Attend client and supplier design meetings as required thought out project cycle, from pre-sales to project completion.
	Provide Projects Administrator with the necessary technical documentation required to complete project O&M Manuals (i.e. as built drawings, datasheets, etc.)
	Identify and lead Technical Studies on both new and existing technologies relevant to UPS and Generator Systems
	Prepare and issue detailed scope of works requirements for sub-contractors.
	Where necessary, provide onsite supervision and technical assistance during project installation.

Skill-set and Experience

A minimum qualification level of Undergraduate degree in Mechanical Engineering or equivalent discipline	Essential
3-5 years' experience working as a Mechanical Design or Project Engineer.	Desired
Good knowledge of fluid transfer systems, ventilation systems, material selection, project management principles, CDM principles, etc	Desired
Basic understanding of electrical distribution systems and components, electronic control systems and components, etc	Desired
Ability to complete technical studies and present findings to both technical and non-technical stakeholders	Desired
Ability to interpret and generate technical design documentation eg, drawings, technical data sheets, control philosophies, equipment schedules, design calculations, etc	Essential
Ability to communicate professionally in interactions with both clients and suppliers.	Essential
Ability to manage time effectively, working on multiple concurrent projects, ensuring design documentation is produced in line with project and quality requirements.	Essential
Excellent MS Office and MS Project skills.	Essential
Good knowledge of 2D and 3D CAD software, specifically AutoCAD, Revit	Desired
Able and willing to travel abroad to witness Factory Acceptance Testing on UPS & Generator systems (typically 3-5 days per test including travelling time).	Essential
Full UK driving licence	Essential