

JOB DESCRIPTION

POST TITLE	Power Supply Engineer		
DIVISION/DEPARTMENT	Technical Division		
REPORTS TO	Head of Power Supplies Group	GRADE	5

AIM

As a member of the Power Supply Group support the operation of all Diamond's magnet power supplies, magnets, and associated cabling, striving for a high degree of operational reliability. Contribute to the design and development of new power supplies.

ACCOUNTABILITIES

- Support the operation of the power supplies, including being part of the 24 hour on-call team, and carrying out power supply troubleshooting and repair where necessary. Investigate beam trips attributable to the power supplies and strive to minimise the number of trips and repair time.
- Provide technical knowledge and practical experience of supply technology, and their control interfaces.
- Contribute to the regular monitoring, testing and preventative maintenance of the power supplies, in order to minimise down time, and ensure stable, reproducible operation.
- Contribute to the development of test and maintenance procedures and ensuring adequate spares levels are maintained for the power supplies.
- Manage safety aspects of work related to the operation of the magnet power supplies, the cabling and magnet loads, including the preparation of safety documentation, such as Risk Assessment, Method Statements and procedures.
- Maintain up to date documentation.
- Support the development of new power modules and electronic circuits as part of the continuous improvement programme for the power supplies.
- Support the design and manage production of any new power supplies required for the accelerators or beamlines.
- Support new power supply projects, including interfacing with internal customers, engineers and scientists, to develop requirements, propose solutions, manage expenditure and track project progress.
- Develop technical expertise in power supply technology and control.
- Perform Electromagnetic Compatibility (EMC) measurements and analysis as required.

Because of the changing nature of our business your job description will inevitably change. You will, from time to time, be required to undertake other activities of a similar nature that fall within your capabilities as directed by management.