

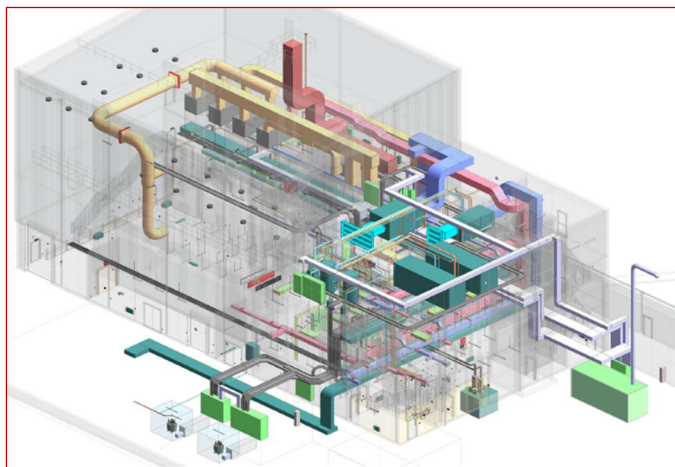
CASE STUDY

Subject: HVAC & Building Services Design Experience.

Client: CCFE UKAEA.

Project: Lithium Breeding Tritium Innovation (LIBRTI).

Brief: To support UKAEA as Subject Matter Experts in Nuclear HVAC & Building Services Design.



Summary Scope of Work

Project LIBRTI is a global first experiment facility, an international project of the highest importance to the Fusion Futures programme. International lithium breeder experiments undergo Neutron Irradiation with a view to producing Lithium. Lithium is the fuel used to power fusion reactors, such as UKAEA STEP (Spherical Tokamak) Fusion Reactor, an independent reactor building programme for commercial energy, much like Rolls Royce SMR and other Fission plants within the UK.

Ingenium are the HVAC principal consultants, providing an Intelligent Customer (IC) role as Subject Matter Experts in high integrity, active ventilation, containment/ confinement design. Delivery includes but is not limited to:

- HVAC design,
- Building services design,
- Safety case support, HAZOP's, HAZID's, HAZAN's,
- Writing all HVAC system requirements,
- Preparation of documentation from Concept (FEED), through to RIBA Stages 2, 3 & 4 for handover and management to the Principal Contractor for detailed design and build.

Modular Design

Ingenium have provided and implemented modularisation into the design to maximise off-site build quality and expedience of manufacture (DfMA) and on-site installation. Many complex HVAC systems are skid mounted in modular frames, shipped into the plantroom for connection and commissioning which is to be provided by Ingenium engineers.