

Case Study

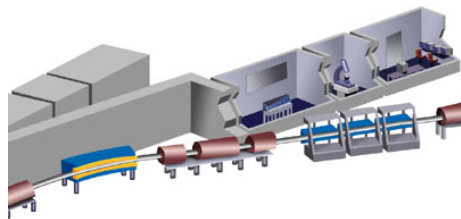


Engineering Design & Drawing Office Services to Diamond Light Source

Nuvia was contracted to supply design services for the new synchrotron radiation research facility, known as Diamond Light Source (DLS), at the Harwell Science and Innovation Campus in Oxfordshire.

DLS is the largest scientific research facility to be built in the UK for 30 years, producing ultra-violet and X-ray beams of exceptional brightness, allowing experiments to be carried out which probe deep into the basic structure of matter and materials. The facility comprises a 3 GeV electron storage ring, injected from a 100 MeV linac through a full energy booster synchrotron, and an initial complement of seven beamlines.

Nuvia has prepared designs and specifications for the diverse services in each beamline laboratory and radiation shielded safety enclosures (hutches) that will supply the experiments and control the environment within experimental cabins. The services design can be generally split into five areas:



- Piped services, including
 - compressed air
 - inert gases and
 - services support stanchions;
- Electrical and associated services, including
 - power distribution
 - lighting
 - UPS distribution
 - telecommunications and ethernet;
- Construction, including details of the structure to form the non-bioshielded cabins, doors, windows and finishes;
- HVAC, including
 - fan coil units and control systems
 - chilled water supply
 - room ventilation;
- Beamline Component Cabling.

Electrical design for the vacuum system of the synchrotron has also been prepared by Nuvia.

Registered Office

Nuvia Limited
Kelburn Court
Daten Park
Risley
Warrington
Cheshire
WA3 6TW

info@nuvia.co.uk

CS-509 – July 2008

www.nuvia.co.uk