

AUTOMATIC REACTOR COOLING WATER FILTERS at Hinkley Point B Power Station

EDF Energy Generation owns and runs a number of nuclear power stations in the UK and supplies energy businesses with electricity.

Based near Bridgwater in Somerset, Hinkley Point B is a EDF Energy Advanced Gas-cooled Reactor (AGR) nuclear power station. The plant, which was built in 1967, has two reactors with a combined electrical output of 1220 Mega Watts – capable of supplying electricity to over 1 million households.

Nuclear power stations harness the energy released from continuous fission of the atoms to produce steam, which is then used to drive the turbines that produce electricity. As part of the process, the nuclear reactors require large quantities of cooling water.

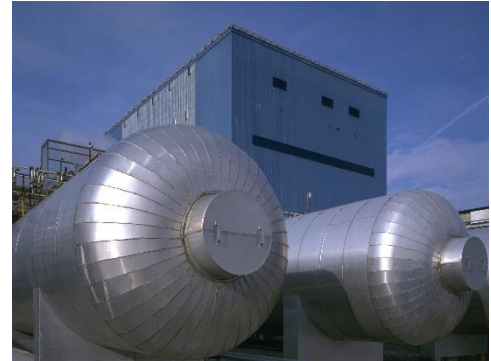
At Hinkley Point B, seawater from the Bristol Channel is used to provide the reactor cooling water. However, in order to protect the system from risk of blockage by particulates, it is necessary to continuously filter the raw water.

As part of a major refurbishment programme to replace cast iron pipework, the old filters were removed and replaced with the latest BOLLFILTER systems. Two BOLLFILTER Automatic seawater filters – one Duty, one Standby – with Super Duplex Stainless Steel internals have been installed on the water supply to each reactor.

BOLLFILTER Automatic filters are particularly suitable for such a challenging application thanks to their reliability and minimal maintenance requirements.

Client: British Energy

System: System 4 x BOLLFILTER Automatic Seawater Filters with Super Duplex Stainless Steel internals.
TUV approved
Filtration Level: 2000 microns
Flow Rate: 1631 m³/hr
Operating Pressure: 8 bar



TOP & CENTRE. Hinkley Point B Power Station.
Pics courtesy of British Nuclear Group.
ABOVE. One of Hinkley Point's BOLLFILTERs prior to despatch.