BOLLFILTER HELPS KEEP ENVIRONMENT COOL

at National Oceanography Centre, Southampton

The National Oceanography Centre, Southampton is the integrated collaboration between the Southampton-based part of the Natural Environment Research Council’s National Oceanography Centre and the University of Southampton’s School of Ocean and Earth Science, at the Waterfront Campus in the docks. One of the world’s top five oceanographic research institutions, NOCS is home to some 520 research scientists, lecturing support and seagoing staff as well as over 700 undergraduate and postgraduate students.

NOCS has taken advantage of its dockside location to help reduce energy consumption by means of a unique seawater cooling system (SWC). The cooling system – which is the only one of its kind in the UK – utilises seawater during the winter months to indirectly cool the building via a heat exchanger. The Centre has several laboratories and cold stores that require cooling even in winter.

The SWC uses raw seawater taken from the dock. A BOLLFILTER Automatic Type 6.18, self cleaning filter has been fitted prior to the heat exchanger. This operates continually to remove marine detritus, such as seaweed, from the water and helps maintain the efficiency of the system. Although the filter is designed to operate with minimal maintenance, BOLLFILTER provided on-site training for NOCS’s engineering staff to allow in-house adjustment and cleaning if necessary.

Candice Snelling, NOCS Environment & Energy Advisor noted that “The system will reduce annual electricity demand by approximately 5% per year, saving an estimated 117 tonnes in carbon dioxide emissions a year. It also helps maintain a comfortable environment for our staff and students.”

Client: NOCS
System: BOLLFILTER Automatic Type 6.18 DN 150 Carbon Steel Vessel with 3mm Rubber Lining Seawater Internals and Sacrificial Anode

Flow Rate: 144 m3/h
Filtration Level: 1500 microns (1.5mm) with reusable filter candle
Operating Pressure: 2 bar
Design Pressure: 16 bar