

Bringing modern efficiency to a historic leisure landmark

Delivering energy efficiency, installation simplicity and reliable performance as part of a £14 million leisure centre redevelopment.



Working alongside FT Leisure, Xylem supplied 20 Lowara® pumps, including 12 equipped with Hydrovar® X integrated IE5 variable speed drives, for the £14 million redevelopment of Doncaster Dome's pool filtration systems. The solution helped deliver a compact installation that supported the site's efficiency goals while meeting the challenges of a Grade II listed building.

The challenge

Doncaster Dome has been a landmark of community life in South Yorkshire for decades – a leisure centre known for music, events, ice skating, swimming, gym and sports activities for all the family. When the time came for a £14 million redevelopment, the stakes went beyond bricks and mortar. The project needed to preserve a much-loved community landmark while upgrading critical infrastructure to meet modern performance and efficiency requirements.

The building's Grade II listed status meant working within history, not around it. The Dome's distinctive curved walls and existing plant room layout created significant space constraints. There was little room to manoeuvre, and every piece of new equipment had to fit within a footprint never designed for it. The challenge was not simply about installing modern pumps—it was about integrating

End User: Doncaster Council

Client: FT Leisure

Xylem's role:

**Provided Lowara pumps and
Hydrovar X drives**

Project results:

**Improved efficiency, reduced
footprint, on-time delivery**

them into a historic structure while keeping the facility operational.

Improving energy efficiency was another key project objective. As with many local authorities, Doncaster Council faces increasing pressure to reduce energy consumption, lower operating costs and support its wider sustainability objectives. The redevelopment presented an opportunity to reduce energy consumption and operating costs, provided a solution could be delivered within the building's physical constraints; and with a tight programme to meet the summer 2026 reopening, lead times were critical. Every week mattered.

The Solution

As a long-standing Xylem partner, FT Leisure has relied on Lowara solutions across numerous leisure sector projects. This redevelopment provided an opportunity to build on that relationship by introducing Hydrovar X integrated variable speed technology.

We supplied 20 Lowara pumps—14 NSCS and six eHM units. We equipped 12 of those pumps with the Hydrovar X integrated IE5 variable speed drive. We chose this approach because of the site's constraints: the pump-mounted inverters meant we could design and install the main control panel more simply, without the space a conventional panel-mounted solution would demand. The compact design enabled the solution to integrate seamlessly within the existing plant room layout.

Commissioning was also streamlined through the Hydrovar X platform. An intuitive commissioning wizard guided the setup, reducing installation time and making system optimisation straightforward for the team on site. By continuously matching pump performance to actual system demand, the drives deliver more optimised pump operation—improving efficiency and reducing energy consumption. When lead times became critical as the reopening deadline approached, we delivered the solution, support and responsiveness needed to keep the project on schedule.

The Results

The project delivered a compact and efficient pumping solution tailored to the challenges of a Grade II listed leisure facility. Twenty Lowara pumps were installed, including 12 equipped with Hydrovar X integrated IE5 variable speed drives, enabling a straightforward installation without compromising system performance.

By continuously matching pump performance to system demand, the Hydrovar X drives help reduce energy consumption while maintaining reliable operation, supporting Doncaster Council's efficiency and sustainability objectives. This directly supports Doncaster Council's energy-saving objectives while maintaining



Limited space and tight deadlines called for a compact, efficient solution. Lowara pumps with Hydrovar X drives simplified installation and helped keep the project on schedule.



Lowara pumps installed at Doncaster Dome

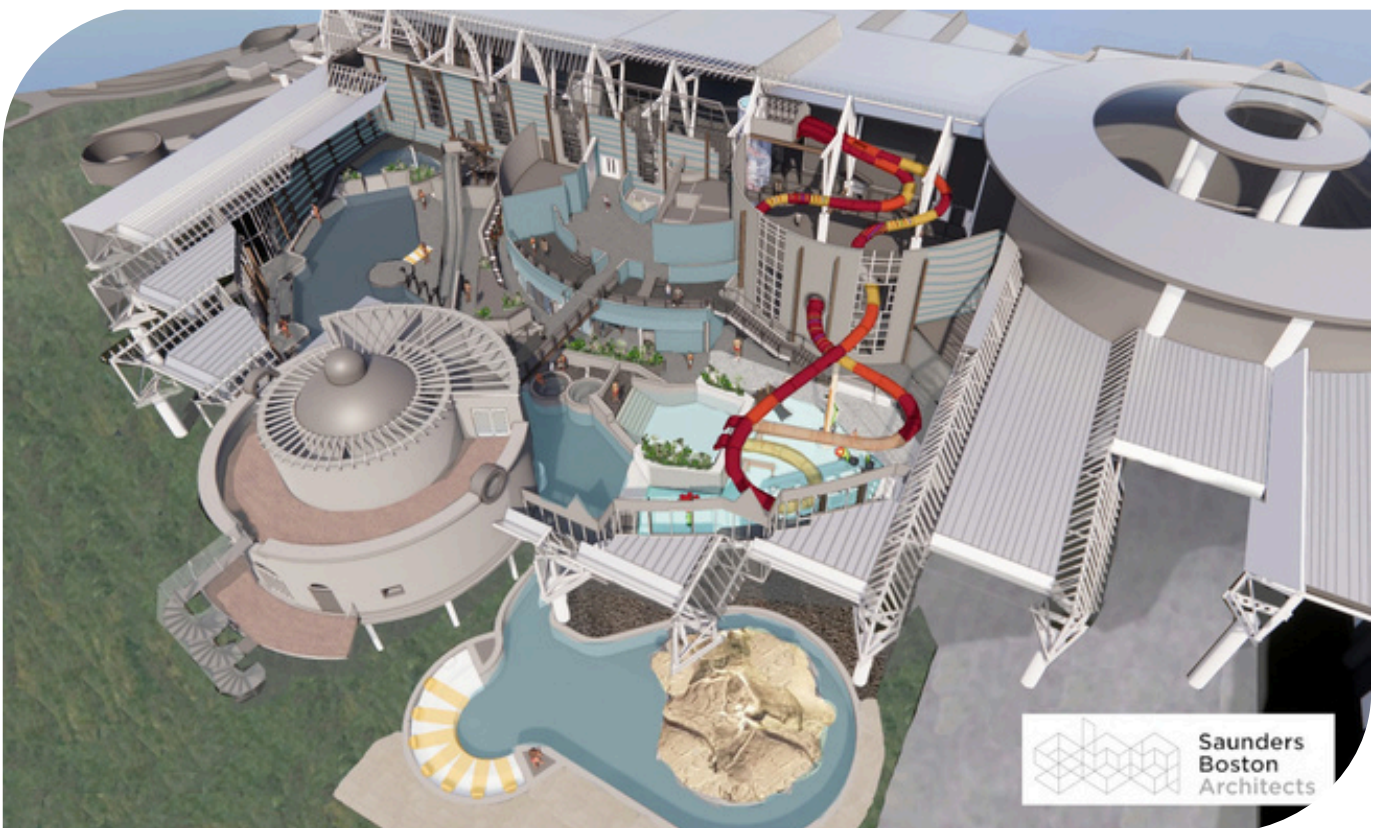
reliable performance across the facility. The commissioning wizard reduced installation time and made system setup straightforward, helping the project team meet the tight summer 2026 reopening deadline.

For FT Leisure, the project marked a shift from the fixed-speed pump solutions that defined our earlier work together to integrated variable speed technology. The success of the project has strengthened the long-standing partnership between Xylem and FT Leisure, demonstrating how integrated variable speed technology can help leisure operators improve efficiency, simplify installation and support long-term sustainability goals.

Through close collaboration, Lowara and FT Leisure delivered a solution that balanced the demands of a historic building with the performance, efficiency and reliability expected of a modern leisure facility.

Xylem's IE5 integrated inverter solution provided an innovative, space-saving approach that simplified the design and installation of our main control panel, while delivering the support and responsiveness needed to keep the project on schedule.

Andy Griffiths,
Project Manager, FT Leisure



Visualisation of the Doncaster Dome redevelopment
by Saunders Boston Architects