

Oldham BAFF tanks

Case study 2009

Focus products: Intercrete® 4820,
Intercrete® 4840

Client: United Utilities

Contractor: RAM Services Limited

Summary: Repair and protection of 3000m² of
concrete on BAFF treatment tanks

Background

Oldham WWTW has undergone a £10m refurbishment to improve the quality of the treated effluent. Biological Aerated Flooded Filters (BAFF) are made up of a series of reinforced concrete tanks, where a medium of polystyrene balls are used to grow bacteria to treat the effluent. After 8 years' service, the walls and columns exhibited distress in the form of attack of the paste and aggregate of the concrete, necessitating repair and protection system to assure the 60 year design life.



The solution

Consulting Engineers, MWH selected a system comprising Intercrete 4820, a single component engineering quality fairing coat for filling minor imperfections, and Intercrete 4840, a two-component, water based, epoxy and polymer modified coating with high chemical and abrasion resistance. Intercrete 4840 withstands a 100 metre hydrostatic head and has a long history of use in wastewater treatment facilities with its proven resistance to sewage and aggressive condensates. The system is compliant with EN 1504 and offers a safe and environmentally friendly method of reinstating structural integrity.