

Desalination Water Pipeline Abu Dhabi UAE

Large Pipeline to Deliver Water to Eastern Part of Abu Dhabi Emirate



Project Need

The Emirate of Abu Dhabi in the United Arab Emirates had a requirement to supply over 150km of high pressure pipe from the Abu Dhabi Desalination plant on the coast to the inland city of Al Ain in the east of the Emirate. Al Ain, a city of 500,000 people, was earmarked for demand growth of 5 – 8% per annum, and required a reliable and secure supply of water to ensure sustainability.

Steel Mains Sintakote® Steel Pipeline System was chosen by the appointed contractor, PAL Technologies of Abu Dhabi for our capability to provide a high pressure capability - low risk pipeline system solution without the requirement to be welded. The scheme would involve a series of pump stations and steel pipeline to deliver pressurized water supply right to the city.

Solution

Steel Mains was selected by the successful construction contractor, PAL Technology of Abu Dhabi to supply 152km of steel pipeline materials and fittings components. This consisted of 67km of 813mm OD x 6.0mm SINTAJOINT® MSCL Pipe (3.2MPa or 32 Bar); 60km of 813mm OD x 7.5mm SINTAJOINT® MSCL Pipe (4.0MPa or 40 Bar); and 25km of 813mm OD x 8.0mm SINTAJOINT® MSCL Pipe (4.2MPa or 42Bar). Steel Mains unique portfolio of SINTAKOTE® Steel pipeline manufacturing and engineering experience together with our on ground support by our local agent Euomid and our pipeline installation training team all assisted to provide the necessary assurance for a project of this size to be a success. Steel Mains proprietary SINTAJOINT® rubber ring jointing system for steel pipelines was utilised, reducing construction times and improving safety by eliminating the need for on-site joint welding. This innovation, together with Steel Mains past experience in delivering large scale pipeline projects was critical to the success of the PAL Technology Al Ain Pipeline contract.

Achievements

The project involved manufacturing and shipping over 12,000 pipes. 10,000 pipes were supplied out of Perth, Western Australia and 2000 pipes were supplied out of Brisbane, Queensland, with completion on time and on budget over a period of 9 months. Steel Main's manufacturing experience and logistics project planning skills were integral to ensuring the success of this challenging project.

Project: PAL Technology Al Ain Pipeline

Principal: Abu Dhabi Water & Electricity Authority - ADWEA

Location: Abu Dhabi – United Arab Emirates

Completion: 2005

Supplied: 152km of 813OD Sintajoint® Rubber Ring Joint MSCL Pipe & Fittings in pressure ratings of up to 4.2MPa Operating pressure