

Concrete Repair/Protection-

Coolkeeragh Power Station

The re-development of the Coolkeeragh power station by ESB International Investments involved the upgrade of the old Oil fired station to a new combined cycle gas power station. Larsen Contracts were appointed as the concrete refurbishment contractor for the repair of the existing cooling water culverts, band screens and pump houses. The project was a fast track, twenty two week programme. The firm completion date was critical as the £450million power station contracts was scheduled to start immediately after the refurbishment was completed. Despite some unknowns Larsen were able to complete two weeks ahead of schedule. The existing station had been in service since 1959. A concrete condition survey found the structures to be in a reasonable condition requiring some remedial works so the new station upgrade was designed to reuse some of the existing concrete infrastructure.

The underground cooling water cooling water culverts were constructed of reinforced concrete. The first operation was to provide a seal to the steel intake doors before draining the culverts of all water. Next, all internal joints were sealed using the Sika Combiflex jointing system. The culvert walls were all hammer tested to determine the extent of the concrete repair, defective concrete was removed and the reinforcement grit blasted and treated with an anti corrosion steel primer. All concrete surfaces were high pressure jetted to clean and remove any marine growth. Sika Ferrogard corrosion inhibitor was applied to all surfaces prior to the hand-placed and sprayed concrete repairs.

Similar repair techniques were employed in the other parts of the intake structure. The band screens and pump houses were removed of all silts and high pressured washed prior to treatment with a Sika anti-chloride protective coating system.



Project Details:

Client:

ESB International Investments

Main Contractor: Larsen Contracts Ltd

Application:

Sika Concrete repair, Jointing, Application of corrosion inhibitor and protective coatings.

Market:

Concrete Repair and Protection