

Power plant refurbishment

Case study 2012

Focus products: Intercrete® 4802, Intercrete® 4820, Intercrete® 4840

Location: Pocerady, Czech Republic

Project owner: CEZ

Contractor: Česká Voda (Czech Water), part of the Veolia Group

Project size: 2,100m²



Background

After over 30 years in service, several of the plant's below-ground concrete water tanks were showing signs of degradation. Despite regular maintenance, the existing two-coat fibre reinforced coating had detached in some areas, exposing the concrete substrate and reducing cover. Being underground, the environment was damp, with poor ventilation. Fast-return-to-service was a priority, so there was insufficient time to dry the substrate out, a pre-requisite for conventional coating systems.



The solution

Intercrete offered a complete water-based system for the repair and long term protection of these assets. The surface was hydroblasted to remove the old coating and any damaged concrete. Any exposed rebar was treated with Intercrete 4871 to prevent further corrosion. Large voids were filled with Intercrete 4802 rapid-setting repair mortar and the remaining substrate reprofiled using polymer modified fairing coat Intercrete 4820. Finally, Intercrete 4840 high performance epoxy modified cementitious coating was spray-applied in two coats of 1mm, providing a durable solution.

With its tolerance to damp environments and easy application, Intercrete provided the ideal fast-return-to-service solution for the customer in this situation.