

## PROJECT PROFILE

### PROJECT

Hinkley Point B Power Station,  
Bridgwater, Somerset

### SUMMARY

300 significant concrete repairs

### PRODUCTS

Steel Reinforcement Protector 841,  
Monomix HD, Cementitious  
Coating 851

### CLIENT

EDF Energy

### CONTRACTOR

CSC Services

### BACKGROUND ►

Hinkley Point B is a nuclear power station located near Bridgwater in Somerset. Construction began in 1967 and it comprised the first Advanced Gas-Cooled Reactor to generate electricity to the grid in the UK. It now produces up to 965 megawatts of electricity, enough to meet the needs of more than one million homes.

Flexcrete products were used to complete the 2018 Concrete Spalling Remediation Programme at Hinkley Point B for client EDF Energy. The concrete repair work involved the completion of more than 300 significant repairs using Flexcrete products over a six month period. With widespread areas of spalled reinforced concrete across the power station, the work was planned to mitigate any potential health and safety issues, alleviate any impact on plant reliability and to ensure that there is no impact on ongoing nuclear safety. The concrete had spalled due to the age of the buildings involved and their environmental exposure, as well as occasional areas where water ingress had accelerated degradation.

### THE SOLUTION ►

Defective concrete was broken out to allow for exposed reinforcement to be prepared and treated. **Steel Reinforcement Protector 841** was used to protect the steel rebars prior to the application of Flexcrete concrete repair mortars. **Monomix HD**, a high strength, waterproof, class R4 structural repair mortar, was used for the concrete repairs. With outstanding abrasion resistance, **Monomix HD** is easily trowellable, has excellent low sag properties and can be applied up to thicknesses of 80mm in a single application.

For the structural waterproofing, **Cementitious Coating 851** was specified. It is a high performance, two component, waterborne cementitious modified polymer coating which provides reinstatement of effective cover on precast and in-situ reinforced concrete, enhancing durability to achieve specified design life. A 2mm application of **851** is equivalent to 100mm of good quality concrete and the coating resists positive and negative pressure under a 100 metre head.

All concrete repair works were completed by CSC Services with a 15 year service life guarantee, to satisfy the operational requirements of Hinkley Point B Power Station. Designed to require no maintenance during the lifetime of the repairs, all work was carried out in accordance with BS EN 1504, the pan European standard for concrete repair.



FM 41091  
EMS 597350  
OHS 597351

Quality  
Environmental  
Health & Safety

Flexcrete Technologies Limited  
Tomlinson Road • Leyland  
Lancashire • United Kingdom  
PR25 2DY

Tel: +44 (0) 845 260 7005 • Fax: +44 (0) 845 260 7006  
Email: [web@flexcrete.com](mailto:web@flexcrete.com) • Web: [www.flexcrete.com](http://www.flexcrete.com)

