**TUNNELS AND SHAFTS**

**Southern Water Dover**  
U.K.  
Foul water sewer interceptor tunnel, 1.6km long, “turn key” design and construct sub-contract using NATM technique.  
*Sprayed concrete*  
*value £1.1m*

**Chetlain Properties**  
Thurrock U.K.  
Construction of 2 No. access tunnels at the Dolphin Development, constructed using NATM.  
*Sprayed concrete*  
*value £800,000*

**Thames Water Barnet**  
U.K.  
Design and construction of 25m diameter x 20m deep storm water detention shaft, using our own *Monoshot* design.  
*Sprayed concrete*  
*value £220,000*

**London Underground Limited * **  
London U.K.  
Strengthening of northern line tunnels under River Thames by application of purpose designed sprayed concrete lining.  
*Sprayed concrete*  
*value £213,000*

**Railtrack**  
Bradway, Sheffield U.K.  
Strengthening of brick lined tunnel using a combination of sprayed concrete, anchoring and cementitious grouting.  
*Sprayed concrete*  
*value £420,000*
Railtrack
Rochester U.K.

Various strengthening and support activities to Higham tunnel, an unlined chalk tunnel, using specialist shotcrete techniques, over a 5 year period.  

*Sprayed concrete*

value £270,000

Railtrack
Strood Tunnel U.K.

Re-profiling and strengthening to sections of Strood tunnel, an unlined chalk tunnel, using special adapted rail mount equipment, During an emergency possession.  

*Sprayed concrete*

value £370,000

Lend Lease Dartford U.K.

Twin road tunnels at Blue Water Development, 7.2m in diameter, constructed using NATM, lined with 250mm thick fibre reinforced concrete.  

*Sprayed concrete*

value £300,000

London Underground Limited *
London U.K.

Jubilee Line Extension - Strengthening of brick arches with 350mm thick 50 Mpa concrete with microsilica.  

*Sprayed concrete*

value £225,000

Railtrack London U.K.

Waterloo Channel Tunnel Terminal - Strengthening of 30 brick arches totalling 12,000m², working from the underside, using overhead sprayed concrete techniques.  

*Sprayed concrete*

value £205,000
Docklands Light Railway London U.K.

Stabilisation of 120 year old brick lined tunnel with 100mm thick fibre reinforced concrete.  

*Sprayed concrete*  
*value £213,000*

Scot Rail  
Greenock, Scotland U.K.

Relining of brick built Newton Street Tunnel, using resin anchored steel mesh and sprayed concrete. The lining was completed in 6 weeks, involving placing some 600m³ concrete.  

*Sprayed concrete*  
*value £200,000*

British Airports Authority London U.K.

Heathrow Airport Baggage Tunnel, constructed of six shafts 8m dia. x 16m deep and two chambers 14m dia. x 60m long, using NATM techniques – utilising the wet or shotcrete process primary and secondary lining. Settlement/convergence minimal, well within specified tolerances.  

*Sprayed concrete*  
*value £1.05 m*

South West Water Bristol  
U.K.

Lining of sections of drill and blast interceptor sewer to provide temporary support.  

*Sprayed concrete*  
*value £300,000*

British Waterways Board Falkirk,  
Scotland

Design and build of a new 7.0m diameter 170m long canal tunnel Constructed using side drift NATM techniques – utilising wet sprayed Concrete techniques.  

*Sprayed concrete*  
*value £1.8m*
Byera Hill Tunnel  
Government of St Vincent & Grenadines St  
Vincent, West Indies

Design and build of an enlargement to an existing 3.0m diameter tunnel to 7.0m diameter 70m long road tunnel. 
Constructed on nightly possessions – utilising wet sprayed Concrete techniques.  

Sprayed concrete  

value £340,000

Park Hill Tunnel  
Government of St Vincent & Grenadines St  
Vincent, West Indies

Design and build of an enlargement to an existing 3.0m diameter tunnel to 7.0m diameter 30m long road tunnel. 
Constructed – utilising wet sprayed Concrete techniques.  

Sprayed concrete  

value £340,000

Heathrow T5c Back Shunt Tunnel  
Ferrovial  
Agromen UK Ltd  
Heathrow.

Excavation and completion of 30m long x 5.0m diameter tunnel Tunnel constructed using 200mm thick steel fibre reinforced shotcrete primary and secondary linings.  
Final finish +/- 5mm floated smooth.  
Sprayed using robotic nozzle  

Sprayed concrete  

value £600,000