

THE TAY RAILWAY BRIDGE – SURVEY OF CORROSION RATES

A corrosion monitoring exercise on the Tay Bridge is described. The purpose of the exercise, the choice of monitoring technique and the factors influencing the placing of corrosion monitors are detailed.

The results from locations along the bridge and different positions on the section of the structure are detailed and compared with data found from previous work in different environments.

The results show that, apart from the underside surfaces, the corrosion rate is relatively even along the bridge. The undersides, particularly those at the centre, are most corrosion prone and maintenance painting should be concentrated in this area. The Tay Bridge is not subjected to a severely corrosive environment, despite its marine location. In fact, the environment is relatively mild and severe loss of metal will not occur at areas of paint failure.