

A case study of a concrete bridge and corrosion phenomenon

Role of Concrete Bridges in Sustainable Development - Proceedings of the International Symposium - Celebrating Concrete: People and Practice, 2003, Pages 329-338.

Authors: Guettala, A. Abibsi, A.

Abstract

Certain concrete structures remain in an excellent condition after more than one century of exposure to particularly severe climatic conditions. This article describes the diagnosis carried out on the degradation of a reinforced concrete bridge put into service only 15 years ago, as well as the follow up after repairs. The principle causes of the acceleration of its degradation are highlighted. The stages of repair and performance of the structure following this are discussed. The importance of maintenance and regular inspection of concrete structures is highlighted.

Keywords Corrosion; Degradation; Diagnosis; Latex resin; Maintenance; Repair.

Link <http://www.scopus.com/record/display.url?eid=2-s2.0-33644699014&origin=resultslist&sort=plf-f&src=s&imp=t&sid=910D20F9FC5C03866AAC9DEF15E43949.aXczxbyuHHiXgalW6Ho7g%3a150&sot=inw&sdt=a&sl=40&s=AU-ID%28%22Guettala%2c+Abdelhamid%22+9736572400%29&relpos=5&relpos=5&citeCnt=0&searchTerm=AU-ID%28%5C%26quot%3BGuettala%2C+Abdelhamid%5C%26quot%3B+9736572400%29>