

A great article published by one of Giatec Scientific's very own in this month's issue of Concrete Engineering International associated with The UK Concrete Society. [Click](#) to read the full sized article!



Concrete Bridges

Testing devices, including half-cell measurement for corrosion mapping, the first integrative smart technology to map structural capabilities and an ambient sensor to store all data gathered during a standard test, validated and stored on a smart device. The method enables data and information to be shared to other devices, greatly reducing labor costs and reducing the likelihood of human error. The company is also preparing to launch the C-Map, C-Map in September, the first corrosion mapping device that will not need a connection to the measurement.

Inspection practices elsewhere

American bridge structures have been suffering largely in the public eye since the UK election in 2015. In 2013, BBC News reported an extensive survey about the declining bridge condition in America with no mention of urban decay or the more common road factors. Although the situation is not as severe, bridge inspection must still be improved.

The March 2013 collapse of the 200 ft bridge in Ireland was blamed on poor bridge inspection practices and claims that the Irish rail company knew of its unsafe nature some 100 years ago. Luckily no one was badly injured or the condition of the train passing overhead compromised. The warning signs in Ireland however, were only visual inspections

seem used on this bridge at the time and with the right technology this collapse could have been avoided. Current bridge inspection methods in the UK have been sufficient due to, as there have been no real incidents reported to the public, however it is important to plan for the future.

The first precast concrete bridge to be built in the UK was the Humber Bridge in Rufford, Becket, completed in 1981, which means that no bridge constructed of this precise materials over the age of 30 in all of the UK. Although this seems quite old, some bridges in America are almost 100 years old and have not been well maintained.

To the average sign of bridge inspection and American structures are being built it is important to have comprehensive standards in place to ensure integrity and sustainability. As technology continues to evolve in the construction of bridges, so should the inspection processes and maintenance methods, using logical visual inspection. As the necessary continues to rely heavily on technology and industry advancements, the inspection industry should follow but this promising future atmosphere and promising lives. ■

Reference

1. [http://www.bbc.com/news/health-2013-03-20-ireland-collapse-125848488](#)

