Nondestructive test methods for concrete bridges: A review

Sardar Kashif Ur Rehman, Zainah Ibrahim, Shazim Ali Memon, Mohammed Jameel

Department of Civil Engineering

Abstract

NDT methods applicable to concrete bridges are reviewed. The methodology, advantages and disadvantages along with up to date research on NDT methods are presented. Different damage levels, having less dependence on inspector judgment, are suggested. Moreover, a flow chart based on damage level along with NDT methods and potential remedial measures are proposed for periodic health monitoring of structures. NDT methods are also suggested to address specific problems related to structures. Finally, the relation between some of the well-known NDT methods and most common problems encountered by the field engineers is proposed. Hence, the importance of structural health monitoring is highlighted.

Original language	English
Pages (from-to)	58-86
Number of pages	29
Journal	Construction and Building Materials
Volume	107
State	Published - Mar 15 2016

Kashif Ur Rehman, S., Ibrahim, Z., Memon, S. A., & Jameel, M. (2016). *Nondestructive test methods for concrete bridges: A review. Construction and Building Materials*, *107*, 58-86. DOI: 10.1016/j.conbuildmat.2015.12.011