

6. Development of Non-Destructive Inspections for Quality Assurance of Concrete Structures

- Non-Destructive Inspections by Hammering Test and Infrared Thermography-

Shohei Kawaguchi, Toshiyuki Ishii, Kunikazu Azuma, Tetsuya Hironaka

A vast number of infrastructures, such as highways, are recently approaching the end of their service life. Maintenance and repair of aging structures are also an important issue in the construction industry. Efficient and inexpensive testing methods are indispensable for maintaining the social infrastructures. Execution of proper repair works at appropriate timing is also advantageous in minimizing their life cycle costs. Thus, non-destructive testing systems are being developed mainly aiming for efficient testing and assuring the quality of concrete structures. Of a number of non-destructive testing methods, this paper describes hammering tests and infrared thermography and their results.

Key words : maintenance and repair, quality assurance, non-destructive inspection, hammering test, infrared thermography