

1.14.29. RESEARCH INTO THE CORRELATION BETWEEN CONCRETE STRENGTH AND UPV VALUES

Tumendemberel B., Baigalimaa Ts., Centre of NDT,
Mongolian University of Science and Technology, Mongolia

There are many test methods to assess concrete in situ, such as Non-destructive Testing methods (Ultrasonic Pulse Velocity), and this method consider indirect and predicted tests to determine concrete strength in situ, whereas this test affected by many parameters depend on the nature of materials used in production concrete. So, there is a difficulty in determine strength of hardened concrete in situ precisely by this methods. This research aim to find unified relationship connect the results of this test and correlate them with the results of compressive strength of cubes by using statistical methods in the analyzing process depending on laboratory tests carried on concrete cubes with different mixing ratios and different curing conditions, and finding correlation curves to predict the strength of concrete much better.