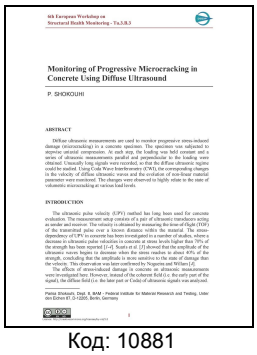

Код: 10881

P. Shokouhi

Monitoring of Progressive Microcracking in Concrete Using Diffuse Ultrasound

Дрезден, Германия, 2012 год

8 стр; формат: 23,5 x 16 см; библиографический список: 16 единиц

Diffuse ultrasonic measurements are used to monitor progressive stress-induced damage (microcracking) in a concrete specimen. The specimen was subjected to stepwise uniaxial compression. At each step, the loading was held constant and a series of ultrasonic measurements parallel and perpendicular to the loading were obtained. Unusually long signals were recorded, so that the diffuse ultrasonic regime could be studied. Using Coda Wave Interferometry (CWI), the corresponding changes in the velocity of diffuse ultrasonic waves and the evolution of non-linear material parameter were monitored. The changes were observed to highly relate to the state of volumetric microcracking at various load levels.

Доклад. 6-я Европейская конференция по мониторингу технического состояния сооружений, 2012. Редакция Кристиана Боллера.

Ключевые слова:

Содержание