

The concrete fractures fractal nature analysis applications

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Abstract

The materials, specially ceramics have one very important new characterization frontiers, based on fractal nature. It is basically characteristics which existing everywhere in the material world as well as energy. One of quite new applications, reported in this paper, is related to concrete fractures, where we can reconstruct the fractured parts, in some constructions and estimate and predict the mass of the concrete for reconstruction the morphologies for each fractured part. Here we present the procedure of a concrete samples consolidation which are base for our fractal analysis. Based on fractured concrete samples, we applied fractal analysis and reconstruction by quite new fractal application. All of these, in the future research could be generalized for the samples and areas of others civil engineering materials.

Keywords: fractures, concrete, fractals, reconstruction