Parametric analysis of the models of confinement of the concrete column

Authors Kamal Ait Tahar, F Taouche, Y Bouamra Publication date 2012 Conference **Key Engineering Materials** Volume 498 Pages 1-14 Publisher Trans Tech Publications Ltd Description Existing models for the concrete confined show a great respect in terms of effectiveness of confinement. The concrete confinement which consists in preventing these strains can be carried out either by an external envelope, or by a weak spacing between the stirrups. All models consist of some modification factors multiplying the unconfined concrete properties; these modification factors depend on the strength ratio and the confinement level. The relation of the ultimate strength 'and ultimate strain in many existing models is complexity by representing. Each author gauges his model according to the experimental data. In this study, we present the results of a parametric analysis of some the most used models of confinement. The results show that the models of confinement have an important disparity between the

values of the strength (f CC) and axial ultimate strain ( $\varepsilon$  cc) of confined concrete. Total citations