The Influence of Recycled Crushing Strength of RC Beams under Repeated Loading

Abstract - This paper describes a study of the effect of crashed (recycle) concrete on reinforced concrete beams. Three-dimensionally nonlinear finite elements analysis has been used conducted the numerical investigations of the general study of recycling-beam. ANSYS.11.0 computer-program using in this paper. Solid65 using as element of concrete, link8 for steel. The compression strength of the concrete mix decrease due to the strength of crashing concert. It’s weaker than gravel aggregate, that lower strength due to weak of old mortar cement around the aggregate and due to crashed process. The percentage of decrease of the compressive strength equal to (59.8) % and deflection of beam increase due to weak of concrete and the load of initial crack, it’s lower than traditional concrete contains natural aggregate.

Keywords - crushing concrete, repeated load, finite elements.