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TITLE OF PROJECT: Experimental Study On partial Replacement in Beam By Seeding Trays With Polythene Balls

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ABSTRACT(150-300words):

Reinforced Concrete is being used in the most of construction activities. Present days the problem faced by the construction industry is acute shortage of raw materials. For simply supported reinforced concrete beam, the region below neutral axis is in tension and above neutral axis in compression. As concrete is weak in taking tension, steel reinforcement is provided in the tension zone. The concrete below the neutral axis act as a stress transfer medium between the compression and tension zone. Partial replacement of the concrete beam. Weight and savings in materials. In this study, an experimental investigation on partial replacement of concrete below the neutral axis is done by using seeding trays and the results were compared with M35 grade concrete RCC beams and replaced beams by using polythene balls.

Objectives

1. To study the flexural behavior of beams by partial replacement of concrete below neutral axis with seeding trays.
2. To compare the effect of replacement of concrete by seeding trays with other methods using Polythene balls.
3. To analyze the material saving of different methods of replacement.
4. To conduct a comprehensive cost analysis between partial replacement beam, Replaced beam and conventional beam.

KEYWORDS:

Neutral Axis, Partial Replacement, Self-Weight, Seeding Trays.

CATEGORY: Structural Engineering