



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.8, pp 284-289, 2017

Experimental Study on Strength Properties of High Volume Flyash Concrete with Polypropylene Fibre

R.M.Karthikeyan¹, N.Vellingiri^{2*}, D Jayalin³

^{1,2}SNS College of Technology, Department of Civil Engineering, Coimbatore, Tamil Nadu, India.

³Karunya University, Department of Civil Engineering Coimbatore, Tamil Nadu, India

Abstract : High volume flyash concrete is a concrete in which atleast 50% of cement is replaced by flyash⁷. This study focuses on the influence of high volume flyash replacement for cement with the constant amount of polypropylene fibre content. Flyash is replaced in various replacement levels of 0, 40, 50, 55 and 60% by the weight of cement in concrete. Slump, compressive and split tensile strength of concrete mixes were evaluated. The test results indicate that the addition of high volume of flyash improves the slump and strength properties of concrete. Flyash replacement of 55% by the weight of cement is considered as the optimum replacement level.

Keywords : cement; fly ash; polypropylene fibres; slump; compressive strength; split tensile strength.

N.Vellingiri *et al* /International Journal of ChemTech Research, 2017,10(8): 284-289.
