

ABSTRAK

Penelitian kuat tekan ini berupa beton polimer dengan komposisi terdiri dari resin epoxy, *slag*, dan agregat halus sebagai mortar, dan variasi agregat kasar dengan gradasi monoton 15mm, 25mm dan 30mm terhadap volume silinder. Tinjauan analisis penelitian ini adalah kuat tekan dengan benda uji silinder 15cm x 30cm. Benda uji **BSL5₁** dengan campuran slag 5% gradasi agregat kasar 15mm, **BSL5₂** 25mm, dan **BSL5₃** 30mm.

Hasil pengujian kuat tekan beton **BSL5₁** memiliki kuat tekan yang tinggi 69,3Mpa, **BSL5₂** 65,1 Mpa dan **BSL5₃** 63,7 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL0,5₁** sebesar 4,2% terhadap **BSL0,5₂** dan **BSL0,5₂** sebesar 1,4% terhadap **BSL0,5₃**.

Kata Kunci : Polimer, Resin Epoxy, Kuat Tekan, Slag, Agregat Kasar, Agregat Halus

ABSTRACT

This compressive strength research is in the form of polymer concrete with a composition consisting of epoxy resin, slag, and fine aggregate as a mortar, and variations of coarse aggregate with monotonous gradations of 15mm, 25mm and 30mm to the cylinder volume. Overview of the analysis of this study is the compressive strength with a cylindrical test object 15cm x 30cm. The test object is BSL51 with a mixture of 5% slag gradation of 15mm coarse aggregate, BSL52 25mm, and BSL53 30mm.

The results of the compressive strength test of BSL51 concrete have a high compressive strength of 69.3 Mpa, BSL52 65.1 Mpa and BSL53 63.7 Mpa. The decrease in the percentage of compressive strength obtained by BSL0.51 is 4.2% against BSL0.52 and BSL0.52 is 1.4% against BSL0.53.

Keywords : Polymer, Epoxy Resin, Compressive Strength, Slag, Coarse Aggregate and Fine Aggregate.