

ABSTRAK

Penelitian kuat tekan ini berupa beton polimer dengan komposisi terdiri dari resin epoxy dengan perbandingan 1:1 , 1:2 dan 1:3 , *slag*, dan agregat halus sebagai mortar, dan agregat kasar dengan gradasi 15mm - 30mm terhadap volume silinder. Tinjauan analisis penelitian ini adalah kuat tekan dengan benda uji silinder 15cm x 30cm. Benda uji **BSL11₁** dengan campuran slag 11% perbandingan 1:1 resin dan hardener, **BSL11₂** perbandingan 1:2, dan **BSL11₃** perbandingan 1:3.

Hasil pengujian kuat tekan beton **BSL11₁** memiliki kuat tekan yang tinggi 45,5 Mpa, **BSL11₂** 38,2 Mpa dan **BSL11₃** 17,0 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL11₁** sebesar 11% terhadap **BSL11₂** dan **BSL11₂** sebesar 21,2% terhadap **BSL11₃**.

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 with a ratio of 1:1 , 1:2 and 1:3 , slag, and fine aggregate as a mortar, and coarse aggregate with a gradation of 15mm - 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 was BSL11₁ with a mixture of 11% slag resin and hardener ratio 1:1, BSL11₂ ratio 1:2, and BSL11₃ ratio 1:3.

The results of the compressive strength test of BSL11₁ concrete have a high compressive strength of 45,5 Mpa, BSL11₂ 38,2 Mpa and BSL11₃ 17,0 Mpa. The decrease in the percentage of compressive strength obtained by BSL11₁ is 11% against BSL11₂ and BSL11₃ is 21,2% against BSL11₃.

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