

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 **BSL10,5₁** dengan campuran slag 10,5% perbandingan 1:1 resin dan hardener, **BSL10,5₂** perbandingan 1:2, dan **BSL10,5₃** perbandingan 1:3.

Hasil pengujian kuat tekan beton **BSL10,5₁** memiliki kuat tekan yang tinggi 48,1 Mpa, **BSL10,5₂** 36,8 Mpa dan **BSL10,5₃** 15,6 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL10,5₁** sebesar 11.3% terhadap **BSL10,5₂** dan **BSL10,5₂** sebesar 21.2% terhadap **BSL10,5₃**.

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 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 BSL10.51 with a mixture of 10.5% slag resin and hardener ratio 1:1, BSL10.52 ratio 1:2, and BSL10.53 ratio 1:3.

The results of the compressive strength test of BSL10.51 concrete have a high compressive strength of 48.1 Mpa, BSL10.52 36.8 Mpa and BSL10.53 15.6 Mpa. The decrease in the percentage of compressive strength obtained by BSL10.51 is 11.3% against BSL10.52 and BSL10.52 is 21.2% against BSL10.53.

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