

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 **BSL9,5₁** dengan campuran slag 9,5% perbandingan 1:1 resin dan hardener, **BSL9,5₂** perbandingan 1:2, dan **BSL9,5₃** perbandingan 1:3.

Hasil pengujian kuat tekan beton **BSL9,5₁** memiliki kuat tekan yang tinggi 45,3 Mpa, **BSL9,5₂** 34 Mpa dan **BSL9,5₃** 12,7 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL9,5₁** sebesar 11,3% terhadap **BSL9,5₂** dan **BSL9,5₂** sebesar 21,1% terhadap **BSL9,5₃**.

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 BSL9,51 with a mixture of 9,5% slag resin and hardener ratio 1:1, BSL9,52 ratio 1:2, and BSL9,53 ratio 1:3.

The results of the compressive strength test of BSL9,51 concrete have a high compressive strength of 45,3 Mpa, BSL9,52 34 Mpa and BSL9,53 12,7 Mpa. The decrease in the percentage of compressive strength obtained by BSL9,51 is 11,3% against BSL9,52 and BSL9,52 is 21,1% against BSL9,53.

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