

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 **BSL8,5₁** dengan campuran slag 8,5% perbandingan 1:1 resin dan hardener, **BSL8,5₂** perbandingan 2:1, dan **BSL8,5₃** perbandingan 3:1.

Hasil pengujian kuat tekan beton **BSL8,5₁** memiliki kuat tekan yang tinggi 39,6 MPa, **BSL8,5₂** 26,9 MPa dan **BSL8,5₃** 9,9 MPa. Penurunan Persentase nilai kuat tekan yang didapat **BSL8,5₁** sebesar 12,7% terhadap **BSL8,5₂** dan **BSL8,5₂** sebesar 17% terhadap **BSL8,5₃**.

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 BSL8.51 with a mixture of 8.5% slag resin and hardener ratio 1:1, BSL8.52 ratio 2:1, and BSL8.53 ratio 3:1.

The results of the compressive strength test of BSL8.51 concrete have a high compressive strength of 39.6 MPa, BSL8.52 26.9 MPa and BSL8.53 9.9 MPa. The decrease in the percentage of compressive strength obtained by BSL8.51 is 12.7% against BSL8.52 and BSL8.52 is 17% against BSL8.53.

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