

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 **BSL11.5₁** dengan campuran slag 11.5% perbandingan 1:1 resin dan hardener, **BSL11.5₂** perbandingan 1:2, dan **BSL11.5₃** perbandingan 1:3.

Hasil pengujian kuat tekan beton **BSL11.5₁** memiliki kuat tekan yang tinggi 55.2 Mpa, **BSL11.5₂** 43.9 Mpa dan **BSL11.5₃** 18.7 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL11.5₁** sebesar 11.32 % terhadap **BSL11.5₂** dan **BSL11.5₂** sebesar 25.18 % terhadap **BSL11.5₃**.

Kata Kunci : Polimer, Resin Epoxy, Hardener, 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 BSL11.51 with a mixture of 11.5% slag resin and hardener ratio 1:1, BSL13.52 ratio 1:2, and BSL11.53 ratio 1:3.

The results of the compressive strength test of BSL13.51 concrete have a high compressive strength of 55.2 Mpa, BSL11.52 43.9 Mpa and BSL11.53 18.7 Mpa. The decrease in the percentage of compressive strength obtained by BSL11.51 is 11.32 % against BSL11.52 and BSL11.52 is 25.18 % against BSL11.53.

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