

## 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<sub>1</sub>** dengan campuran slag 10% perbandingan 1:1 resin dan hardener, **BSL10<sub>2</sub>** perbandingan 1:2, dan **BSL10<sub>3</sub>** perbandingan 1:3.

Hasil pengujian kuat tekan beton **BSL10<sub>1</sub>** memiliki kuat tekan yang tinggi 46.7 Mpa, **BSL10<sub>2</sub>** 35,4 Mpa dan **BSL10<sub>3</sub>** 13,6 Mpa. Penurunan Persentase nilai kuat tekan yang didapat **BSL10<sub>1</sub>** sebesar 11,3 % terhadap **BSL10<sub>2</sub>** dan **BSL10<sub>2</sub>** sebesar 21,8% terhadap **BSL10<sub>3</sub>**.

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 BSL10.1 with a mixture of 10% slag resin and hardener ratio 1:1, BSL10.2 ratio 1:2, and BSL10.3 ratio 1:3.*

*The results of the compressive strength test of BSL10.1 concrete have a high compressive strength of 46.7 Mpa, BSL10.2 35.4 Mpa and BSL10.3 13.6 Mpa. The decrease in the percentage of compressive strength obtained by BSL10.1 is 11.3% against BSL10.2 and BSL10.2 is 21.8% against BSL10.3.*

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