CONTINUOUS STUDY OF USE OF SCRAP STEEL IN CONCRETE

Prepared by: Eugene Hiang Miaw Seong

ABSTRACT

Concrete is the main material for construction nowadays. Basically, concrete is consisting of three mainly material, namely cement, water and aggregate (coarse aggregate and fine aggregate). Sometimes, admixture is added to concrete to change or modify certain properties of concrete.

In order to apply the concrete in construction work, steel bars or reinforced is required knows as reinforced concrete. Similarly, same concept is applied to this project title. Scrap steel is becomes the material that I use to investigate. The scarp steel is function as the reinforcement in construction. Three types of scrap steel are used to investigate to find the flexural strength and compressive strength for beams and cubes respectively. The procedure for making and testing the concrete also has been taken account in this project work.

In order to get the consistent result for flexural strength, compressive strength and bending moment through some specific formula, the concrete mix work and the workability is very important. Therefore, concrete mix design is used to determine the content of cement, aggregate and water according to the concrete grade is required, so that, it can achieve the maximum workability to get the consistent results.