

## SUMMARY

**Saha**, Department of Civil Engineering, Faculty of Engineering, University of Brawijaya, Juny 2018, *The Effects of Spiral Can Fiber on Compressive Strength, Tensile Strength, and Modulus of Elasticity of Normal Concrete*, Academic Supervisor : Ari Wibowo dan Indra Waluyohadi.

Concrete is a material suitable for tensile strength and compressive force strength. One way to improve the property allows you to use fiber by adding the fiber into the concrete that can increase the compressive strength, tensile strength and modulus of elasticity of the concrete. This experiment aims to find out how the compressive strength, tensile strength and modulus of elasticity of the concrete.

The percentage of processed canned fibers in this study was 10% of the volume of concrete used. Various kinds of common materials without fiber, plain fiber and fiber with a spiral A and spiral B. Tests carried out include compressive strength, tensile strength and modulus of elasticity of concrete. Tests performed on concrete that have been running 28 days. The tools that can be used for compression are compression machines or compressive strength machines, while the elasticity modulus test uses an extensometer.

The result of a strong tensile experiment showed that the highest average were obtained on concrete B fiber with a value of 2.046 MPa. Strong test results also show that the highest average value is obtained at a price of 22,890 MPa. To calculate the elasticity modulus value is done by 3 ways that is using secan modulus elasticity, initial tangen modulus elasticity and achievement SK SNI T-15-1991 where obtained by value of modulus of maximum elasticity on each sheet of B series fiber with value secan modulus elasticity equal to 18870,9 MPa , the initial tangen modulus elasticity of 19320.0 MPa and for the value of elastic modulus referring to SK SNI T-15-1991 obtained value of 23733,512 MPa.

**Keywords:** can fiber, compressive strength, tensile strength, modulus of elasticity