

***ANALYSIS OF THE EFFECT OF BAGASSE FIBER
LAYOUT FIBER ON THE STRENGTH OF
ATTRACTION USING EPOXY.***

Student Name: Asep Prihatno

Nim : 2204161068

Lecturer Mentor : Bambang DH, MT

ABSTRACT

Bagasse fiber (baggase) is an organic waste that is widely available in various regions in Indonesia. This research was conducted to determine the strength of sugarcane bagasse as a substitute composite in which this study conducted variations in the variation of the composition of the fiber woven, cross, and random by comparison volume ratio of epoxy 92 %, 88 %, 84 % with natural fibers 8 %, 12 %, 16 % by performing tensile test testing with ASTM D 638-14 standard by using the hand lay up method composite printing. The results of the tensile test of bagasse fiber for 8% weight of the highest were cross and random fibers of 15.16 MPa, for 12% of weight the highest were cross and random fibers which had a value of 18.71 Mpa, for 16% fibers which had The highest tensile strength values were woven and cross fibers which had a value of 21.69 MPa. This study shows that the addition of sugar cane fiber affects the tensile strength.

Keywords : Tensile Strength, ASTM D 638-14, Fiber Structure, Epoxy Volume.