

## ABSTRACT

*Wood is an insulator material but it might be a conductor if it's in a dry kiln condition (low water content). In this research, the woods tested were given cavities (holes) with variations of cavity (hole) diameter size and variations of the cavity (hole) position which the capacitance value would further be measured. The capacitance value obtained by the conversion result of the output voltage value from the measurement of a capacitive sensor using an inverting amplifier circuit. The capacitive sensor was an electronic sensor which its working principle was based on the capacitive concepts. The given input voltage was 0.7071 Vrms and the frequency was 200 Hz. Based on the test which had been conducted, the larger the size of the cavity (hole) on the wood, the greater the resulting capacitance value and each position produced different capacitance values.*

**Keyword:** *Wood, capacitance value, inverting amplifier, capacitive sensor.*