

ABSTRACT

To identify an anomaly in the object, we need a method that does not need to damage the object, such as we want to know the existence of another object that is in the ground. And the method that is often used to find out is electric tomography. In this study, 3 methods of measuring the voltage value were used, namely, adjacent, cross, and opposite, the measurement of adjacent electric current injected through adjacent electrodes on a homogeneous object obtained the highest voltage with a value of 0.846 V and the highest voltage on an inhomogeneous object had a value of 1.002 V, on the measurement cross injection electric current is injected through electrodes facing each other on a homogeneous object, the highest voltage is obtained with a value of 1.016 V and the highest voltage in an inhomogeneous object has a value of 1.041 V, the opposite measurement of electric current is injected at the electrode crossing, on a homogeneous object the highest voltage value is obtained with a value of 1.276 V and on the inhomogeneous object, the highest voltage was obtained with a value of 0.909 V. The measurements for each method were taken from pairs of electrodes that were not injected with electric current. When the conditions are homogeneous, the resulting voltage value has one pattern, the highest peak occurs at the pair of electrodes located at the phantom angle, the cause is the distance of the electrodes at the corner meeting each other.

Keywords: ACEIT, Anomaly, Cross, Adjacent, Opposite, Voltage.