# ABSTRACT

*Quality control of the production results is crucial, because it can affect the level of customer satisfaction and the quality of the resulting product. Eddy Current Testing (ECT) is one of the methods of Non-Destructive Testing based on the interaction between the magnetic field with the object being tested. ECT is able to detect defects, cracks, holes in a wide variety of objects that are conductive. To ease testing using the scanning system ECT or scanning already. The voltage of the signal generator through the distribution of the value of the voltage read from the whole point of testing. On the object there are anomalies, voltage data unreadable by normal object would be different as without material. Of data distribution data that can detect any anomalies in the ingredients. This time the scanner system using test point number 49 and 100 because the accuracy of the X axis and Y axis 95.43% 95.48%. The voltage data obtained subsequently formed the matrix and visualized so that it will easily find out the location of the anomalies on the object. The optimal coil on coil research is with ferrit, length 4 cm and coils of 500. With the research and testing accuracy is getting better. Scanning system designed is able to detect any anomaly on diameter aluminum anomaly with the size 10 mm.*

***Keywords****: Eddy Current Testing, the movement of the magnetic field, Induction coil, the acquisition and mapping data.*