## **ABSTRACT**

PT Medion Jaya Farma is a pharmaceutical company located in West Bandung Regency. The company is engaged in livestock pharmaceuticals and produces several products. One of the sub-units in this company is the Biological Product Maintenance 1 division which produces vaccines and sterilizes pharmaceutical equipment. In production activities in this sub-unit requires a steam engine to sterilize livestock equipment, the machine is called the Autoclave machine. The Autoclave-035 machine uses steam to sterilize so that viruses, bacteria, fungi, and other organisms can die. The Autoclave-035 machine was damaged and malfunctioned, causing machine downtime due to sub-optimal machine maintenance and not thinking about the service life of the machine components. Therefore, it is necessary to analyze and design using the Reliability Centered Maintenance II method and the Age Replacement model to obtain the policy for the Autoclave-035 machine maintenance time interval and the optimal component replacement time interval.

Keywords — Maintenance, Failure Mode and Effect Analysis, Reliability Centered Maintenance II, Age Replacement Model, Downtime Machine.