

## **ABSTRACT**

*PT XYZ faces high downtime problems on cement mill 1 machines, which have an impact on decreasing productivity and operational efficiency. This study aims to measure the effectiveness of the machine using the Overall Equipment Effectiveness (OEE) method and identify the factors causing losses through six big losses and fishbone diagrams. The results of the OEE calculation show that the OEE value of the cement mill machine in 2024 is 57%. This value indicates that the machine operates with an effectiveness of around 57% of its ideal capacity. The main factors causing low OEE according to six big losses are idling and minor stoppages 32.30%, reduce speed losses 23%, and equipment failure loss 17.57%. Analysis using a fishbone diagram identified that the causes of the high value of six big losses, namely through the implementation of documented maintenance forms, routine machine maintenance, increasing operator competence, controlling material humidity, and maintaining a clean work environment.*

**Keywords : Downtime, Fishbone Diagram, Maintenance, OEE, Six Big Losses**