## *ABSTRACT*

*This study aims to analyze the factors causing breakdown time on ceramic tile packaging machines at PT. MKIR and provide improvement recommendations to increase the OEE value of the machine. This study uses the OEE (Overall Equipment Effectiveness) method as an indicator of the performance of the packaging machine by calculating availability, performance, and product quality. This study also uses the FMEA (Failure Mode and Effect Analysis) method as a risk analysis tool to identify and evaluate potential failures on the packaging machine. The data used in this study are historical data of breakdown time of packaging machines during the period of January-December 2021 at PT. MKIR, a company engaged in the manufacture of ceramic tiles. The results of this study show that the factors causing breakdown time of packaging machines are mostly mechanical, electrical, and pneumatic damage. The OEE value of the packaging machine obtained is 85.32%, which is far from the ideal OEE value set by PT. MKIR, which is 95%. Based on the analysis results, the authors provide several improvement recommendations to reduce breakdown time and increase the OEE value of the packaging machine, such as: operator training, SOP preparation, preventive maintenance and machine service, and improving cleanliness and comfort of the work environment. This study is expected to provide benefits for PT. MKIR in improving the effectiveness and efficiency of ceramic tile production processes by reducing breakdown time of packaging machines. This study can also be a reference for other researchers who are interested in conducting similar research using the OEE method.*

---

***Keywords:*** *breakdown time, packaging machine, ceramic tile, Overall Equipment Effectiveness (OEE), Failure Mode and Effect Analysis (FMEA), Fishbone*