

**RISK ANALYSIS OF DAMAGE TO DOOSAN GV180  
MACHINE USING FMEA METHOD TO IMPROVE  
PREVENTIVE MAINTENANCE PERFORMANCE  
750 RUNNING HOURS IN PLTMGPT. BIMA GOLDEN  
POWERINDO SITE MELIBUR**

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**ABSTRACT**

*The reliability of a power plant is the ability of an equipment or electrical component to carry out its operating functions at certain time periods and operating conditions. So that it can produce electricity and be able to serve electricity supply to consumers. To support this reliability, decision support and risk analysis systems are used that can identify potential causes and impacts of damage to power plant components using FMEA. By using this system, the priority of equipment maintenance will be obtained based on the value of the RPN. High equipment reliability is obtained with planned maintenance support through preventive maintenance methods. Preventive performance and FMEA, measured based on performance targets set by the company. The results of the highest RPN value in PLTG namely valv in / exe (180) and sparklup (140) are expected to be the company's evaluation material to improve the reliability and appropriate risk treatment in operational activities of the power plant.*

*Keywords: Risk analysis, FMEA, the performance, preventive maintenance*