

## Role of Water Supply in the Functioning of the MLDB Systems

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**Abstract :** The purpose of this paper is to address the challenges faced by MLDB system at the piston foundry plant due to interruption in supply of water. For the MLDB system to work in Model, two sub-units must be connected to the robotic main unit. The system cannot function without robotics and water supply by the fan (WSF). Insufficient water supply is the cause of system failure. The system operates at top performance using two sub-units. If one sub-unit fails, the system capacity is reduced. Priority of repair is given to the main unit i.e. Robotic and WSF. To solve the problem, semi-Markov process and regenerative point technique are used. Relevant graphs are also included to particular case.

**Keywords :** MLDB system, robotic, semi-Markov process, regenerative point technique

**Conference Title :** ICASAM 2023 : International Conference on Applied Statistics, Analysis and Modeling

**Conference Location :** Vancouver, Canada

**Conference Dates :** August 03-04, 2023