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## **Characteristics on the Electric Shock Accidents of Distribution Lines in Korea**

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### **ABSTRACT**

In this study, we analyze the current status of major disasters in distribution works and propose safety measures through the distribution live work method and electric shock risk assessment. The result of analyzing the ratio of electric shocks to the occurrence of industrial accidents in the recent 13 years shows that the death rate is higher than other industries, with the construction industry in particular occupying most of the disasters - higher than collapse disasters. We analyzed statistical data of 101 victims selected as live work, distribution line, pole, and 22.9 kV in the investigation report of major accidents of fatal electric shocks from 2001 to 2014. The safety measures were established through the risk assessment of the distribution method using the standard model of the risk assessment based on the results of electric shock analysis on the distribution line. In order to prevent electric shock accidents, recently being discussed, the risk assessment procedures were carried out in the aforementioned 22.9kV special high voltage wire live operation method. We derived the risk reduction plan for the distribution line from the results of the major accident statistic and demonstration of the line works.

**Keywords:** electric shock, distribution line, risk assessment