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Weighted Risk Scores Method Proposal for Occupational Safety Risk Assessment

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Abstract : Occupational safety risk management is the most important element of a safe working environment. Effective risk management can only be possible with accurate analysis and evaluations. Scoring-based risk assessment methods offer considerable ease of application as they convert linguistic expressions into numerical results. It can also be easily adapted to any field. Contrary to all these advantages, important problems in scoring-based methods are frequently discussed. Effective measurability is one of the most critical problems. Existing methods allow experts to choose a score equivalent to each parameter. Therefore, experts prefer the score of the most likely outcome for risk. However, all other possible consequences are neglected. Assessments of the existing methods express the most probable level of risk, not the real risk of the enterprises. In this study, it is aimed to develop a method that will present a more comprehensive evaluation compared to the existing methods by evaluating the probability and severity scores, all sub-parameters, and potential results, and a new scoring-based method is proposed in the literature.

Keywords : occupational health and safety, risk assessment, scoring based risk assessment method, underground mining, weighted risk scores
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