FTA및 HAZOP를 이용한 화학공장 정량위해성 평가 및 개선

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Accidents in chemical industries such as explosion, and chemical release cause significant consequences for environment. To prevent such major accidents in industrial operations and technologies should be evaluated. In this work, convergence reaction process as having greatest physical risk by using qualitative analysis was concentrated. High potential hazards are evaluated in process which can daunt by using FTA as a systematic way to identify possible risks. Sub-risk indicators which come from inherent process safety and operations management was established using HAZOP study to determine whether deviations from sub-risk indicators led to undesirable consequences. For this, acrylonitrile production was considered as a case study. Results can determine the best countermeasures to mitigate the risk of a studied industry.

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