

상대습도가 배관위험평가에 미치는 영향

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Regulatory authorities in many countries are moving away from prescriptive approaches for keeping natural gas pipelines safe. As an alternative, risk management based on a quantitative assessment is being considered to improve the level of safety. This work focuses on the effect of humidity on the consequences from the accident of natural gas pipelines and quantitative risk analysis with introducing a parameter of fatal length. The fatal length is defined as the integrated fatality along the pipeline associated with hypothetical accidents. This parameters can be estimated easily within a geographic information systems(GIS). With currently acceptable criteria taken into account for individual risk, the minimum proximity of the pipeline to occupied buildings is proportional to the square root of the operating pressure of the pipeline. The deviation due to humidity is less than few percent. Therefore, in screening step, the humidity can be ignorable to estimate the risk of transmission pipeline.