

## Analyzing Defects with Failure Assessment Diagrams of Gas Pipelines

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**Abstract :** The approach in analyzing defects on different pipe lines is conducted through Failure Assessment Diagram (FAD). These methods of analyses have further extended in recent years. This approach is used to identify and stress out a solution for the defects which randomly occur with gas pipes such are corrosion defects, gauge defects, and combination of defects where gauge and dents are included. Few of the defects are to be analyzed in this paper where our main focus will be the fracture of cast Iron pipes, elastic-plastic failure and plastic collapse of X52 steel pipes for gas transport. We need to conduct a calculation of probability of the defects in order to predict and avoid such costly defects.

**Keywords :** defects, failure assessment diagrams, steel pipes, safety factor

**Conference Title :** ICME 2014 : International Conference on Mechanical Engineering

**Conference Location :** London, United Kingdom

**Conference Dates :** May 26-27, 2014