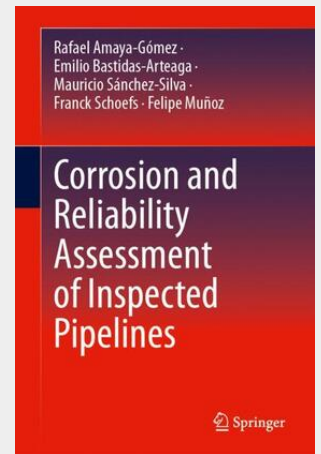


Corrosion and Reliability Assessment of Inspected Pipelines

This book provides the most up-to-date, advanced methods and tools for risk assessment of onshore pipelines. These methods and tools are based primarily on information collected from ILI measurements and additional information about the soil surrounding the pipeline. The book provides a better understanding how the defects grow and interact (repulsion or attraction) and their spatial variability. In addition, the authors contemplate new defects that evolve between inspections and how they could affect the pipeline's reliability. A real-world case is presented to reinforce the concepts presented in the book. The book is structured into three parts: i) an introduction to onshore pipelines and the problem of corrosion, ii) a framework that deals with uncertainty for integrity programs for corroded pipelines, and iii) the applications of the methods presented in the book. The book is ideal for researchers and field engineers in oil and gas transportation and graduate and undergraduate engineering students interested in pipeline reliability assessments, spatial variability, and risk-based inspections.

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