THE REMAINING STRENGTH ANALYSIS OF CORRODED OFFSHORE PIPELINE USING FINITE ELEMENT METHODE

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ABSTRACT
Pipeline plays an important role in the distribution system and transmission fluid. Pipes must be in good condition and safe in operation. Some environmental conditions that can affect the system one of which is corrosion of the pipeline caused by environmental conditions and fluid flow. At the end of this task force will analyze the rest of the subsea pipeline due to corrosion to determine the distribution of tension and stress corrosion of the largest in the worst point should not exceed the yield strength than required by current design. Calculation method used is the standard code ASME B.31. Then to find out the corrosion rate, calculated based on the weight lost during the corrosion of metal with the results of the inspection parameters such as depth of corrosion, exposure time, corrosive cross-sectional area, and others. With the known rate of corrosion of the pipe, than the remaining life can be calculated until a safe condition to operate.

Kata kunci : Offshore Pipeline, korosi, metode elemen hingga