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Understanding the pitting corrosion mechanism of pipeline steel in an impure supercritical CO₂ environment

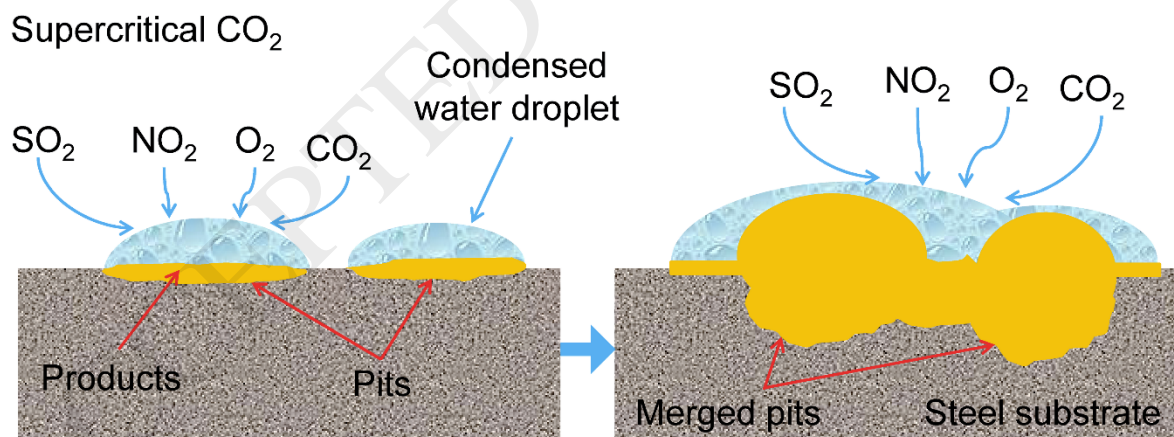
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Graphical Abstract



Highlights

- Pits did not further propagate in water-saturated supercritical CO₂-SO₂-NO₂-O₂.
- Effect of flow on the pit propagation was marginal.
- FeSO₄ was found only at the initial stage, which further evolved to form α-FeOOH.

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