

**Singapore Stanford Partnership Programme**

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**Effect of Anchor Drop on Buried Pipelines**

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Submarine pipelines often are laid on a seabed to transport hydrocarbon across a stretch of water. In certain conditions, the pipelines need to be buried below the seabed level so that they will not be exposed to local hydrodynamic forces. If the pipeline is subjected to adverse hydrodynamic forces due to waves and currents, failure may occur. The environmental impact of a failed pipeline conveying hydrocarbon may be detrimental to the local flora and fauna. Even for a buried pipeline, it may still be subjected to the risk of a dropped anchor. Depending on the seabed material, the anchor may penetrate through the seabed threatening the integrity of the pipeline. This experimental study aims to explore the penetration depth of a dropped anchor as a function of the type of seabed material.