

# PIPELINE CATHODIC PROTECTION ATTENUATION

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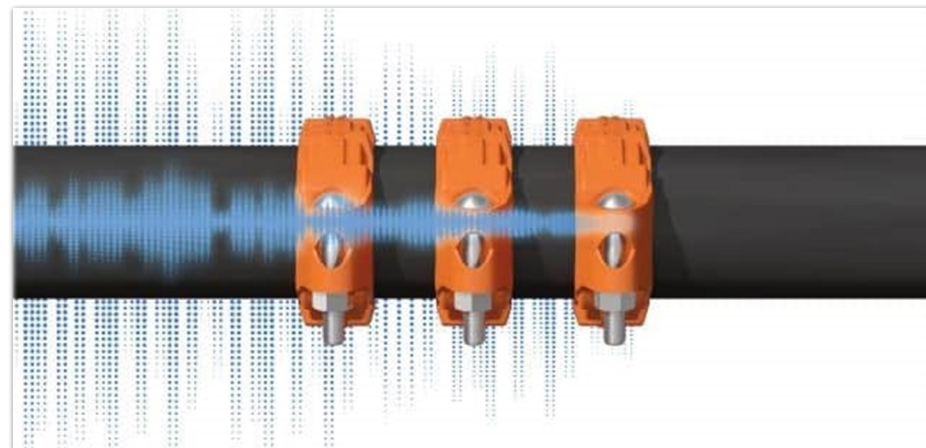
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Attenuation (or Current Attenuation) is a **telecommunications term defined as a reduction in signal strength that commonly occurs while transmitting analogue or digital signals over long distances.** It is measured in decibels (dB). Pipeline Attenuation is a novel cathodic protection that has been used successfully in deep-water flowlines in excess of 10 miles.

During pipeline signal attenuation coating (SAC) survey, alternative current (AC) signals are transferred through the pipelines. **The signals helps in identifying coating defects in deep-water pipelines and risers that are protected from corrosion by cathodic protection.**

## **But, why Pipeline Cathodic Protection Attenuation?**

Subsea pipelines experience flow assurance challenges due to changes in pressure, and low temperature leading to flow issues such as Hydrates, Wax and Asphaltene deposits



within the flowlines. These deposits however, are tackled using insulation coatings which are susceptible to holiday effects over time.

Hence, pipeline cathodic protection attenuation provides a cost-effective preventive and corrective solution to these challenges.

## **Advantages**

- It is used in sections of pipelines where vortex-induced-vibration (VIV) devices would not physically allow the installation of bracelet anodes.
- It is used to optimize cathodic protection retrofit along an existing pipeline, among others.