

عنوان مقاله:

An Analysis of Polyethylene Coating Corrosion in Oil and Gas Pipelines

محل انتشار:

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خلاصه مقاله:

The corrosion of pipelines' coatings is one of the main problems in oil and gas industries for which a large amount of money is spent each year. Coating is the first defense line in front of a corrosive environment in which pipes have been buried. Good function of coating depends on its adhesiveness rate to the metal surface. Initial adhesiveness and its durability in the contact conditions are among those factors that enhance coating efficiency in long term. The rate of Initial adhesiveness has a high relationship with coating movement and surface wetness by this movement in the course of applying the coating and also with cleanliness and preparedness of pipe surface. The durability and permanence of adhesiveness depends on coating properties including its resistance in front of moisture penetration. Applying coating on the pipelines has a high cost so for this reason the selection and application of coating is of high importance. Also for underground buried pipes it is not possible to change their coatings in short durations unlike other structures. Therefore the coating must be durable for 20 years. This article proceeds to investigate the reason for corrosion in steel pipes with three poly ethylene layers.

کلمات کلیدی:

Corrosion; Initial Adhesiveness; Poly ethylene Coating

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