

عنوان مقاله:

Pipe Load Bearing strength of Casing Spacers in Carrier Pipeline Installation

محل انتشار:

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خلاصه مقاله:

In pipelines it is frequently necessary to position one or more pipes carrying a line medium within a rigid outer casing. This carrier pipe within an outer casing arrangement is frequently provided for water and sewer mains within highway and railroad crossing pipe casings to maintain carrier pipe alignment, restrain the carrier pipe against floatation or other movement, or maintain the carrier pipe in a fixed position and orientation such as per grade requirements in the case of a gravity sewer. Casing spacers are for fixing pipes position, isolating carrier pipe mechanically, and chemically from pipe casings. A casing spacer includes first and second elongated, steel shell members comprised of stainless steel or high strength steel with corrosion inhibiting coatings, with each shell member having a semi-circular cross section for engaging and enclosing a carrier pipe within an outer casing. In this paper, the loading capacity of casing spacers in different types of carrier pipelines is calculated. As a case study, the Qatar world cup championship stadiums infrastructure projects are evaluated. The result shows, the stainless-steel casing spacers loading capacity that used in mentioned projects are much more than the pipelines weight.

کلمات کلیدی:

Pipeline, Casing Spacer, pipe installation, loading Capacity

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