

عنوان مقاله:

AN EXTENSION TO "ALLOWABLE DESIGN FACTOR" METHOD FOR FREE SPAN CALCULATION OF SUB SEA PIPELINES

محل انتشار:

هفتمین همایش بین المللی سواحل، بنادر و سازه های دریایی (سال: 1385)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Using the design factors is a traditional method in solid mechanics design. This method is still also the base of some design standards in the world [1,2]. In this paper, a modification has been performed to traditional Von Misses stress check method for the calculation of sub sea pipeline free spanning. The DNV OS F101 which is a well known standard for sub sea pipelines has been used for calibration [3]. A spread sheet type program for free span calculation has been developed for "Force Model" which facilitates the evaluation of the free span length based on the latest DNV proposed method as well as traditional Von Misses stress check. The method statement is the calculation of maximum allowable sub sea pipeline free span, by DNV proposed method and consequently evaluation of allowable stress to result the same free span length in Von Misses traditional method. The design factors which are the Stress Factors (SF) will be calculated by the ratio of existing equivalent Von Misses stress to yield strength of the pipeline (material) (fy).

کلمات کلیدی:

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