

عنوان مقاله:

PROPERLY DESIGN AND OPERATE MULTI-PIPE SLUG CATCHERS

محل انتشار:

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خلاصه مقاله:

A two-phase flow pipeline is intended for transporting the gas and liquid phases simultaneously. There are different modes under which liquid can be produced from the pipeline. These include: the continuous liquid flow production mode under normal steady flow conditions; the intermittent or transient liquid production mode occurring when flow rates are varied and the pigging or sphering mode when liquid is displaced within the pipeline in a relatively short time. These occasionally very large volumes of liquids encountered must be handled and stored as they emerge from the pipeline, preferably without any reduction in velocity, which would be reflected in the gas production. For this reason, a liquid-receiving facility known as a slug catcher is always connected to a twophase pipeline. In this paper, rigorous modeling of multiple-pipe slug catcher based on computational Fluid Dynamic (CFD) Calculations with ANSYS .CFXTM is presented, together with its application for debottlenecking of an existing multiple-pipe slug catcher

کلمات کلیدی: Slug Catcher, CFD, CFX, Simulation, Design

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