عنوان مقاله:

A NEW METHOD TO SUPPLY WATER FROM THE SEA THERUGH ROCKFILL INTAKES

محل انتشار:

پنجمین کنفرانس بین المللی سواحل و بنادر و سازه های دریایی (سال: 1381)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Using rockfill, it is possible to expliot seawater for different goal such as refrigerators, desalinators, etc, without the problems involved in previous methods. In practice, rockfill intack with a predefined shape could be made by excavation and filled with rakfill in tidal coasts. The flow of seawater passes through rockfill and enters the pond, and then it will be transferred to pump house. Since rockfill has high permeability the size of rockfill intake is limited and construction costs is very low compare to other methods. Regarding that in coarse media the reynolds number exceeds it's critical value, there for analyzing this kind of flow the well-known Laplas equation can not be used. In this paper it is shown that by using one of the suggested equation between pizometric (i)and drift valocity in porous media (i=mvn) and it's combination whit continuity equation, a differential equation could be derived that the height of pizometric and potential function Φ results from it's direction of velocity vectors ultimately the capasity of rockfill intake .could be calculated. The solution of a bove differential equation is explained by finit difference method

کلمات کلیدی:

Rockfill intake, Reynolds number, finite difference, and turbulent flow