

عنوان مقاله:

The effect of variation in floor basement elevation on flow energy losses on inflatable dams in free jump state

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در مهندسی عمران، معماری ومدیریت شهری (سال: 1395)

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خلاصه مقاله:

Construction of water dams instead of concrete dams and culverts is among modern environmental solutions being paid much attention in recent years. The rubber dam is a thick rubber tube, which is usually installed along the transversal cross section of the river, and confronts the river water by filling or emptying it (with air or water), with an arbitrary height. Rubber dams could be with deflector or without it. On the other hand, the dam basement or cushion level may be installed at different elevations relative to the river floor, including the case where the basement is lower than the river floor, acting as a stilling basin, or the case where it is the same level with the river floor. For the purpose of studying the energy dissipation, hydraulic parameters such as the flow rate, the depth of water at the upstream and the downstream, and depths before and after hydraulic jump were measured and the flow energy loss over the dam was computed. Of the findings of this study one can mention the decreasing trend of the relative energy loss with increase in the drop number, which is given in detail in the conclusion

كلمات كليدى:

Rubber Dam, deflector, energy dissipation, basement, cushion

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