

ENERGY STORAGE IN STEEL AND GLASS POROUS BED DURING OSCILLATING FLOW

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Abstract

In this paper the thermal response of glass and steel water bed is discussed. The no of experiments were carried out at different flow rate .Thermal response of two different materials were observed at fully saturated flow and bead size of 6.5 mm for glass and steel bed. The temperature profile for glass water bed is different from steel water bed as there is sharp rise of temperature in glass water bed. The heat energy stored and retrieved was calculated for steady and unsteady cycles. The amount of energy exchanged in steel water bed is high as compared to glass water bed.

Keywords : Glass, Steel, Temperature, Thermal Response Energy Stored and Energy Retrieved.