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Design and Fabrication Floating Back Pack System

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Abstract: *A suspended load-bearing backpack is a device designed to capture the mechanical energy generated by the vertical oscillation of the load on the back during gait. The objective of this study was to evaluate the effect of a suspended load-bearing backpack system on specific temporal and kinetic parameters that describe gait. The purpose of this project is the design and development of a floating backpack. Our project proposes to design a backpack that allows the load to move relative to the user during walking and running, such that the large movements between the load and the user reduce fluctuations in the vertical motion of the load relative to the ground.*

Keywords: suspended-load, Floating bag, backpack, fatigue