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DESIGN AND FABRICATION OF HYDRAULIC WHEELBARROW WITH AN ADJUSTABLE HANDLE

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ABSTRACT

A versatile and effective instrument made specifically for the transporting of heavy goods is the hydraulic wheelbarrow with adjustable handles. The goal of this project is to design and construct a wheelbarrow with a hydraulic system for simple lifting and lowering of goods with an adjustable handle mechanism for ergonomic modification for users of various heights. Gathering customer needs, completing research and analysis, and carrying out the necessary calculations and simulations are all part of the design process to make sure the wheelbarrow has the desired load capacity and stability. Lifting capability, control valve placement, and hydraulic fluid flow are all considered during the careful design of the hydraulic system. Users can modify the handle height to suit their preferences or level of comfort thanks to the adjustable handle mechanism, which improves user ergonomics and lessens strain when operating. To avoid accidents and safeguard the user and the cargo, safety elements like wheel guards and load retention systems are included

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