DESIGN AND ANALYSIS OF REMOTE-CONTROLLED WATER BODY CLEANING VEHICLE

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Abstract

Water pollution is a big problem caused by trash floating in rivers, lakes, and ponds. This trash hurts fish and other water animals, affects the environment, and can be dangerous for people. Our project works on this issue by creating a remote-controlled vehicle to clean water. Using 3D modelling software like Fusion 360, we want to make a good solution to lessen water pollution. It measures 60 cm in length, 20 cm in width, and 25 cm in height, using steel. Steel is a durable, corrosion-resistant material that provides high strength to it. It will keep the vehicle stable and effective in water. It's light but strong in construction to hold the mechanism for collecting waste and ensures operation without any failure. It has the purpose of removing floating waste from the water body effectively and economically It is efficiently made to improve the environment through reduced pollution of water and preservation of aquatic ecosystems. In the future, options such as solar power or autonomous navigation can be integrated. Efficacy of the designed model will encourage eco-friendly technologies for responsible water management.

Keywords

water pollution, waste collection, aquatic cleaning, design, simulation, analysis, environmen