

DESIGN OF A SYSTEM AND MECHANISMS TO MAINTAIN A COSTANT FUEL LEVEL IN A FIRE WHIRL GENERATOR

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ABSTRACT

This report introduces on how a scaled model (prototype) is designed to maintain a constant fuel in a fire whirl generator. The purpose of developing this scaled model is to provide a refuelling system to a fire whirl generator that helps in getting a precise result in laboratory work.

The outcome of the project is to present a refuelling system that can refill automatically to a fire whirl generator without in contact directly or to refuel manually to the metal pan. Other than refilling, this prototype is also designed with a shutdown mechanism, which is a safety precaution, to stop the refilling, allowing the remaining fuel to burn and extinguish by itself. Besides, there is also an auto refilling system designed to refill into the container. The purpose of the design is to maintain the fluid level and the pressure in the container.