



**CONCEPTUAL DESIGN OF STEAM ENGINE FOR MOTORCAR: POWER
TRANSMISSION DESIGN**


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“I declared that this thesis is the result of my own work except the ideas and summaries which I clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree”.

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ABSTRACT

Reflecting by its title which is “Conceptual Design of Steam Engine for Motorcar: Power Transmission Design”, the task is mainly focusing on developing a conceptual design of transmitting the power generated from steam engine to the wheels. The primary aim of this project is to design an apt power transmission system for a steam car with the assist of Computer Aided Design software, CATIA. The noteworthy of this project is to present a platform of distributing the power generated by a steam engine to the wheels, and to verify required power to generate by the steam engine in order to ensure a car may reach the desired speed. The system is a front-wheel drive (FWD) where the engine is mounting at the front of the car and geared directly to the front wheels by several gears (gearbox) and a differential (final drive). Gearbox is a non-variable speed where only one forward gear is used and a reverse gear. A non-variable speed gearbox is used since a steam engine has an utmost torque available at all engine speeds. Clutch is used for this concept to allow gear change from neutral to either forward gear or to the reversing gear. A differential is used in this concept to provide an equal torque to the both right and left wheels either in straight line or when cornering.

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