

Compressed Air Driven Car

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Abstract

The industrials and peoples in this century are looking for a car with alternative energy sources. This matter becomes more significant because of the fluctuating prices of petroleum and diesel as well as, the emission of poisonous gases from different types of vehicles has become highly damaging to the health of beings. For this reason, it is the right time to look for a car that is 100% green eco-friendly.

The idea in this project was to build a new car without any pollution, by using the compressed air as a source of energy to move the car. An Air Compressed Driven Car designed and developed were the engine is a pneumatic air motor which uses the compressed air inside the air cylinder as a source of fuel to create mechanical energy. The air can provide the expected performance with no pollution. The model was verified using the experimental setup which demonstrates the effectiveness of the Air Compressed Driven Car. To achieve better speed and distance some improvement must be made like how to lower the air consumption. Moreover, keep in mind this vehicle still in its early stage which required much improvement to be satisfactory to the consumer.

Keywords:

Air Cylinder, Pneumatic Air Motor, Green eco-friendly, Compressed Air.

Biographies:

Mohammed Saleh Alrashedi and Mohammad Tarahib Alharbi (Presenters) are the final year student of Mechanical Engineering Program at Yanbu Industrial College, Yanbu Al-Sinaiyah, Saudi Arabia.

Dr. Fahad Alhujaili (Project Advisor) is an assistance Professor in the Mechanical Engineering Technology Department at Yanbu Industrial College at Yanbu Saudi Arabia. He has a PhD degree in Mechanical Engineering with a concentration on control of dynamic systems with a special interest in vibration control and MSc degree in Engineering Management with a concentration on Reliability Engineering from the University of Dayton, BSc degree in Mechanical Engineering King Fahd University of Petroleum & Minerals. A member of Saudi Council of Engineers. Worked as Head of Mechanical Engineering Technology Department from 2015-2017.