

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM



Project Report
On

**“DESIGN AND DEVELOPMENT OF PNEUMATICALLY OPERATED 50cc
ENGINE”**

Submitted in the partial fulfillment of requirements for the award of degree

**BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING**

Submitted by

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ABSTRACT

The project aims at developing a motorcycle that runs on compressed air without having to perform drastic modifications to the conventional IC engine setup. Air can be compressed into small volumes and can be stored in suitable containers at high pressures. Air that is compressed into containers is associated with an enormous amount of energy. When the stored compressed air is released, it freely expands thereby releasing the energy associated with it. This energy released can be utilized to provide useful work. The idea is to emulate the process of expansion of hot gases inside the combustion chamber using compressed air. A jet of air released into the engine chamber pushes the piston down converting energy into reciprocating motion. This motion is further converted into rotary motion with the help of transmission elements before it hits the road via the wheels.