



DIY ENGINE

Pool Event

Points: 30

Introduction

A **Stirling engine** is a heat engine that operates by cyclic compression and expansion of air or other gas (the *working fluid*) at different temperatures, such that there is a net conversion of heat energy to mechanical work.

Problem Statement

Design and fabricate a Stirling engine which can generate high rpm



Event structure

- 1 A presentation is to be given explaining the design of engine.
- 2 The engines will be judged on the basis of appearance and RPM (crank rotation)

Material

Teams are allowed to use any material and tools.



Rules

- 1 Each team consists of 3-4 students.
- 2 One pool can send only a single team.
- 3 Final engines should not exceed the given dimensions 25x25x30 (dim-cm).
- 4 Ready-made engine and electronics won't be entertained.

Points

- 1 Presentation of design-20%
- 2 Final features and aesthetics of engine-30%
- 3 Highest RPM-50%

Further information visit-<http://www.instructables.com/howto/stirling/>

