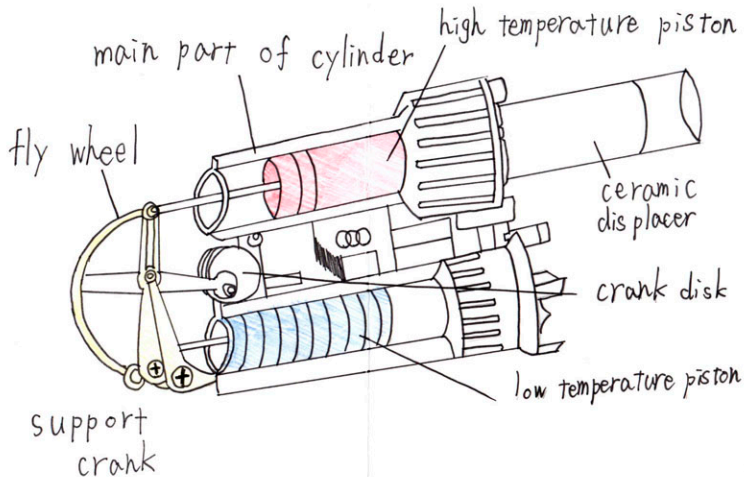


Stirling engine's Construction



Stirling Engine's Charm

Hirosaki Minami
High School

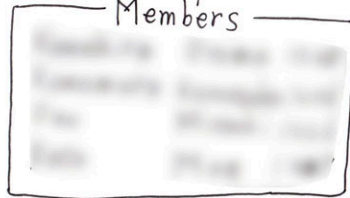
HR12 - Group 03
Members

Motive

We want everyone
to know about
the charm of
this engine.

References

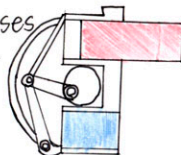
- Wikipedia
- Aomori Prefecture Industrial
Technology Center Industrial
Research Institute.



MECHANISM (Alpha configuration)

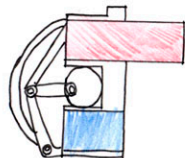
COMPRESSION

pressure decreases
as cooled air
contracts.



HEATING

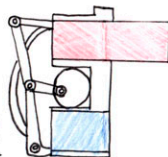
pressure increases
as heated air
expands.



ONE CYCLE

COOLING

air moves from low
temperature side to
high temperature side
and the air is cooled.



EXPANSION

air pushes both
pistons, storing up
the excess energy.

CONSIDERATION

Stirling engine has future
promise.

- Stirling engine is one form of heater.
- It is heating and cooling gas or air inside, a cylinder from outside.
- Gets power by changing the volume of the gas (expand by heating, shrink by cooling)

"Stirling engine's history"

- It was invented by Robert Stirling in 1816.
- It died out when the gasoline engine was invented.
- It was revived around the time of oil shock in 1973 and 1979.