

Drive Train Design

Project Summary

The Drive Train of the boat is a crucial part of any boat. The boat moves and accelerates because a motor generates force and propels the boat forward. There has been many implementation of the drive train over the past few years. They have been very successful in many terms and have been in great performance during competition. This year, with a new hull, the Solar Racing Team is implementing a new drive train that optimizes the boat's performance during the endurance race and the spring race. The main goal of this new drive train is to adapt to the new hull and increase power efficiency during competition.

Requirements

- Adaptable to the Hull Design
- Power transmission from the motor to the surface piercing drive
- Must be electric powered
- Drive Train must be able to stabilized and structured in the hull
- Drive Train must meet required safety features

Learning Capabilities

- CAD modeling with SolidWorks
- Power generation/Electric Drive
- Energy study
- Mechanical design and optimization
- Efficiency analysis

Drive Train Design Team Information

The Drive Train design team meets every Monday 3PM to 4PM at Heavy Engineering room 002.

