

# Dr. Dish Training System



## Team

Michael Hinrichs, Nicholas Lefebvre, Michael Ryan, and Casey Halbmaier

## Clinic Advisor

Anton Beck

## Industry Representative

Adam Pan

Jeff Campbell



## Project summary

Airborne Athletics is a leader in sports training equipment. One of their main products is the Dr. Dish basketball training device that increases practice efficiency. Airborne tasked a group of University of St. Thomas engineering students to design and build a new net system for the Dr. Dish machine. The net system utilizes new design components to differentiate Dr. Dish from competitor's products.

## Design Goal

Enclose the Dr. Dish net system, increase longevity, and add new market differentiators while not compromising the functionality of the device.



Figure 1: Solid Works rendering with market differentiators.

## Design Constraints

1. The top of the net system shall contain the following dimensions or larger: front: 80", back: 113", Side: 67".
2. The front of the net system shall have a height of 12'.
3. The back of the net system shall accommodate different hoop heights, from 9' to 10'.
4. In collapsed position, the whole system shall be no larger than 32" wide by 78" tall.
5. The net system shall be configurable from the storage position to the operational position and back with no more than 25 lbs. of force.
6. The whole net system shall be constructed on a swivel pin to accommodate the post position.



Figure 2 :SolidWorks Rendering of new system.