

the initial version's roller launching device had significant limitation. particularly when faced with interference from other machines. making normal launching difficult. Taking inspiration from last season, we decided to explore an alternative approach - using a catapult launch for importing the Triballs.

① Martin: ① The catapults device only require one motor, saving one motor compared to a roller launching, which opens up more design possibilities for other components.

② It also reduces the overall height of the machine, allowing it to ~~navigate~~ navigate through the path ways on both sides of the area.

③ The device's launch trajectory follows a parabolic curve with a narrowing opening, making it more difficult for opponents to intercept.

④ To simplify operation, we implemented an automatic emission logic for the device. It detects the distance between the Triball to this device and the sensor to trigger the launch.

Disadvantages: 1. there are some drawbacks, including a longer time to import (15 sec → 20 sec)

Overall, the second-version launcher has improved a lot.

Project Version 2. designed by: Kevin witnessed by: Joker date: 7.4