

It is more labor-saving when crossing the Long Barrier (equivalent to using an inclined plane).

And, we also changed the wheels to larger ones, which have a higher overall effect on the Robot compared to the medium wheels. Moreover, the speed can be improved within a controllable range, and also convenient for practical pole crossing and confrontation.

* The Green Motor: 200 rpm
The Blue Motor: 600 rpm ✓

We choose this one!

We use 36 teeth-gear to drive the 84 teeth-gear

$$600 \frac{\text{rev}}{\text{min}} \times \frac{36_{\text{teeth}}}{84_{\text{teeth}}} \approx 257 \frac{\text{rev}}{\text{min}}$$

This result a 1.29 times increase compared to using the green motor, and ensures that the transmission can increase the force on the wheels while reducing speed.

In another hand, it can avoid the problem of jamming caused by direct contact with the Long Barrier.



project

Chassis Design

designed by:

Kevin

witnessed by:

YZ

date: 6.21