

Table of Contents

[1. Standard Robot 3](#_Toc99732232)

[1.1 Analysis of Other Teams’ Standard Robots (5) 3](#_Toc99732233)

[1.2 Overview of Robot Functions (10) 3](#_Toc99732234)

[1.3 Core Robot Parameters (5) 3](#_Toc99732235)

[1.4 Design Scheme (50) 3](#_Toc99732236)

[1.4.1 Mechanical Structure 3](#_Toc99732237)

[1.4.2 Hardware 4](#_Toc99732238)

[1.4.3 Software 4](#_Toc99732239)

[1.4.4 Algorithm 4](#_Toc99732240)

[1.4.5 Other 5](#_Toc99732241)

[1.5 R&D Iteration (20) 5](#_Toc99732242)

[1.5.1 Version Iteration Record 5](#_Toc99732243)

[1.5.2 Important Issues and Solutions 5](#_Toc99732244)

[1.6 Member Contribution (5) 6](#_Toc99732245)

[1.7 References (5) 6](#_Toc99732246)

[2. Sentry Robot 7](#_Toc99732247)

[3. Hero Robot 8](#_Toc99732248)

[4. Engineer Robot 9](#_Toc99732249)

[5. Aerial Robot 10](#_Toc99732250)

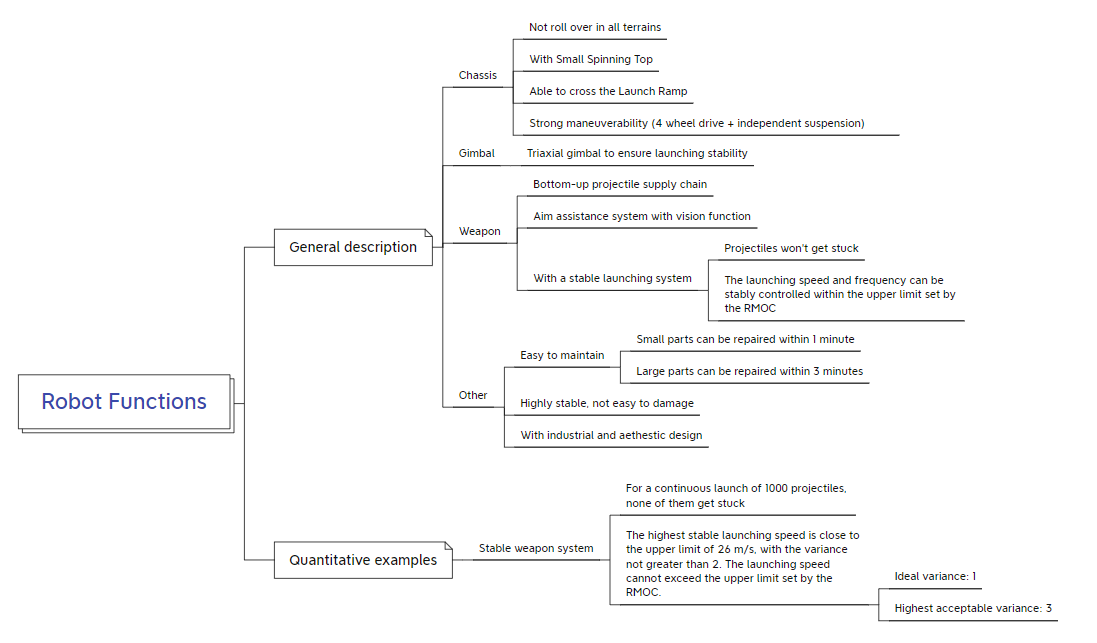
[6. Dart System 11](#_Toc99732251)

[7. Radar 12](#_Toc99732252)

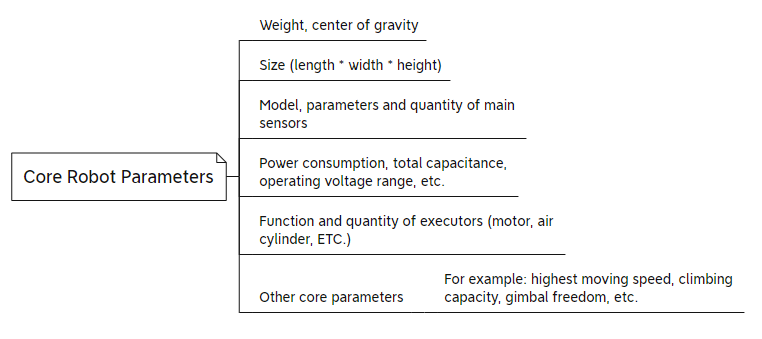
# Standard Robot

## Analysis of Other Teams’ Standard Robots (5)

## Overview of Robot Functions (10)

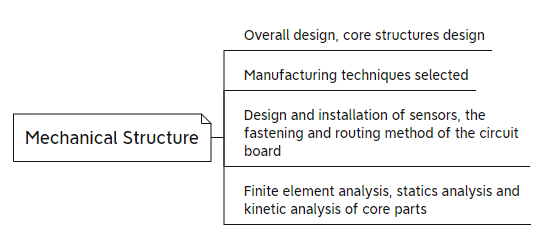


## Core Robot Parameters (5)

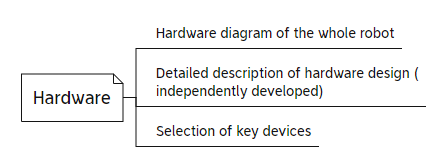


## Design Scheme (50)

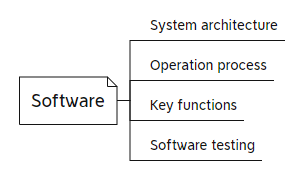
### Mechanical Structure



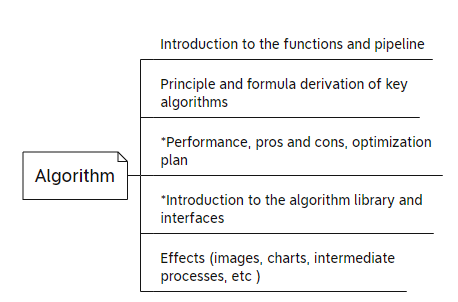
### Hardware



### Software



### Algorithm



### Other

## R&D Iteration (20)

### Version Iteration Record

| Version or Phase | Detailed Description of Function or Performance | Completion Time |
| --- | --- | --- |
| V1.0 |  | 2022.3.18 |
| V1.1 |  | 2022.4.2 |
|  |  |  |
|  |  |  |
|  |  |  |

### Important Issues and Solutions

| NO. | Issue Description | Root Cause | Solution & Effect | Robot Version or Phase | Person in Charge |
| --- | --- | --- | --- | --- | --- |
| 1 | 10 out of 100 rounds of projectiles launched by the Standard Robot at a speed of 25m/s will deviate from the ballistic trajectory by 15°±5°. |  |  | V1.0 | Mechanical Engineer: xxx  Hardware Engineer: xxx  Embedded Software Engineer: xxx |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## Member Contribution (5)

| Name | Basic Information  (Major, Grade, Role) | Main Responsibilities | Contribution  (The total contribution of all members is 100%) |
| --- | --- | --- | --- |
| John | Computer science and technology, sophomore, software development lead | Responsible for the embedded system development of the entire robot, including chassis control, PTZ control, embedded environment development of the vision system, etc. | 30% |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## References (5)

# Sentry Robot

# Hero Robot

# Engineer Robot

# Aerial Robot

# Dart System

# Radar

