



Morphological analysis



	4	3	2	1		
Base shape	Square	Rectangle	Circular	Triangle	***	***
Metal type	Plastic	Glass	Cork	Iron	MDF	Aluminum
Holes shape	Circular	Square	Triangle	Holes	***	***
Number of wheels	1	2	3	4	6	8
wheel shape	Normal	Spherical	Tracked	***	***	***
Electronic parts protection box	Cubic	Spherical	Inside the base	Under the base	***	***
Motors type	DS	Stepper	Servo	Brushless	***	***

❖ The most appropriate form to choose is Figure 3 .

- The rectangular shape is best suited for the dimensions.
- Aluminum is a durable and light metal at the same time.
- Holes make the body lighter while maintaining the same Quality .
- The number of four wheels maintains the stability of the body while not excessive in the number .
- The natural wheel shape is more abundant, less expensive and lighter for the motors .
- Choosing the cubic or somewhat rectangular shape of the electronic parts protection box is the most suitable to content the dimensions of the parts .
- Choosing the Brushless motor for its speed, it enables the robot to move quickly to get around the opponent.