

Sumo BOT

Component	0 Points	1-10 Points	11-20 Points	Total Points Earned
Design - the design allows for the bot to be both defensive and offensive. It includes the outer hardware and design above the design of the chassis	There is no design above the chassis.	There is elements of a design above the chassis but lacks either a defensive or offensive component	There are defensive and offensive design aspects. To receive full credit students must effectively show how their design allows for defensive and offensive maneuvering in practice	
Chassis -the chassis is the base of the bot and holds together the majority of the components. An ideal chassis is stable and solid, allows for maximum wheel maneuverability and hold the motors stable and in place	There is no chassis present or so unstable as not to work	There is a chassis present that is somewhat stable and solid. The chassis limits the wheel's ability to move effectively	Chassis is stable and solid, allows for maximum wheel maneuverability and hold the motors stable and in place	
Motor Wiring - the motor wires are correctly placed and have two positive and two negative ethernet wires jointly and correctly wired to the motor. Both motors must be correctly wired to receive full credit	The motors are not connected to the controller.	The motors are connected to the controller but do not work.	The motors are connected and at least one is functional. To receive full credit both motors must be correctly wired and functional	
Control Box Design - The control box can be any dimension that can easily be operated. It must include a lid and box. The box must be large enough to hold 12 ft of ethernet cable	Control Box is missing or not assembled.	Control box is assembled but missing one component	To receive full credit control box must be wrapped, complete with lid and box, with box large enough to hold 12 ft of cable	
Control Box Controller - The controller must have markings for two switches on top, two power connectors, and one marking to allow the cable to extend from the robot to the controller.	Controller is missing one component or has no components completed	Controller has components marked but has not handed in controller for drilling	Controller has components marked and all components are in place on time	
Control Box Wiring - Must include two terminals one positive and one negative that have two separate 18-22 gauge wire secured from the terminal to the switch in the correct spot. The	Control box has terminal but no wiring present or terminal is completely absent	Terminal wiring is completed but wiring is not completed or does not follow wiring diagram	Terminal wiring is complete and wiring follows wiring diagram. In order to receive full credit wiring must be	

wiring for the robot must follow the wiring diagram and work to reverse the poles when the direction switch is reversed			tested and DTDP switch is used during practical	
Timeliness - The robot must be completed and in full working order 2 full weeks prior to the competition date.	The robot is not handed in and is incomplete/complete or is handed in and is incomplete on specified date	The robot is handed in and one or more components are incomplete	The robot is handed in with name and title - the robot has been tested and all components are in full working order	
Design Detail Creativity Individuality The robot should have a theme or characteristics that show creativity and or artistry. Students can accomplish this in a number of ways including student design, decoration, or showmanship. This includes 1.) Having an appropriate team name 2.) Having an appropriate robot name 3.) Having a theme or common characteristics 4.) Designing a team logo 5.) Decoration or show of artistry or creativity is the outer design that may or may not be structural 6.) Creation of a team banner with picture	None of the points are reflected in the robot	Students complete 2 or 3 components successfully	Students complete all of the listed components successfully	