

Sumo – 10 cm

(version 20250321)

Robot Size limit : 10 cm x 10 cm

Robot Weight Limit : 500g

Robot Control : Autonomous

Arena : 79.5 to 80 cm diameter
(77 cm black circle surrounded by 2.5 cm white outer ring, 3.5% tol).

Objective: In this competition two competing robots attempt to push their opponent out of a circular arena. Robots must meet specific weight and size limits.

Robot: The construction materials for the “10 cm” sumo class are unlimited. Competing robots must run autonomously.

General Rules: The rules used for this competition are outlined at <https://www.robotroom.com/SumoRules.html> with the exceptions noted in these rules. If a conflict between the rules at the link above and this document occurs, the rule will be interpreted per this document.

Arena: The arena for all sumo classes in the competition is approximately 80 cm diameter circle. The arena has a black surface except for a white 2.5 cm (~1 inch) wide white line along the circumference of the circle. The arenas surface will be made of either paper, construction foam, or painted wood or other non-magnetic material. It may or may not be elevated above the floor. If the arena is elevated, it will be raised about 1/8 to 1 inch above the floor.

Scoring: Robots will compete with other robots in the competition in a double elimination tournament or best of 3, decided at time of competition.

Judging: The contest will have one or more judges. They will ensure the rules are followed and impose scoring penalties or remove a robot from competition if the robot is operating in an unsafe manner or not complying with the rules. The decisions of the judges are final.