



Robosota - Tinker league is a low-threshold league intended for fun rather than serious competition.

The league is aimed especially at beginners and hobbyists who want to test their inventions or keep their robots in better condition than in more destructive traditional classes. Many competitors also participate in Tinker league alongside the standard class, as there are fewer robots to repair and more time for multiple matches.

Tinker league strongly encourages imagination and hands-on skills, since robots can be built from almost any material (excluding metals). Construction may use, for example, hand tools, toys, and household items, as well as laser cutting, 3D printing, or CNC machining.

The goal is to provide an approachable, affordable, and safe way to participate in combat robotics by limiting the materials used in construction and restricting robot capabilities to cause less damage.

The weight limit is slightly higher to make robot construction easier for beginners.

Participation does not necessarily require a self-designed robot. Ready-made 3D models can be downloaded from sources such as Thingiverse and CrabCAD. Many schools, libraries, and hacklabs offer access to 3D printers.

The league follows the standard Robosota competition rules, except for the league-specific exceptions listed in this document and in the rules.

- League is designed to be competed in a closed arena.
- Maximum robot weight and size: 200 g, maximum allowed length 30 cm.
- Maximum allowed tip speed of weapons: 20 m/s.
- Construction materials:
 - Chassis and weapon materials containing metal, fiberglass, Kevlar, or carbon fiber are prohibited.
 - Of these materials, only carbon fiber / fiberglass blend filaments are permitted.
 - Metal screws and connectors are allowed only for joints, and they may not be used as weapons or armor.
 - Metal gears are allowed only inside finished electrical components (servos, motors).
 - Metal parts such as counterweights must be covered with materials permitted by the league so that they cannot directly cause damage or come into contact with the opponent.