Skills Ontario 2023 Robotics Q and A Document

Updated: December 19th 2023

A. General

A.1- What is this document?

This document is a supplement to the competition scope that answers specific questions teams may have about ambiguities in the scope. This document supersedes the current version of the scope found on www.skillsontario.ca.

A.2 – What is the Mail list?

The mail list is the fastest way to receive information about the competition. It is recommended that at least 1 team member or coach should be receiving email updates. Email dan.kurz@dsb1.ca to be added to the mail list.

B. The Court

B.1 – Should teams be ready for variations in the firmness of the balls?

Yes. There can be quite a bit of variation in the firmness of the balls. Teams should make sure any ball handling mechanisms can accommodate firm and squishy balls.

B.2- Appendix A has the grove in the snow piles listed with a width of 1.5", is this right?

No. The width of the grove is 1". See rule 7.3.3.1.3

B.3 - What happens if balls get jammed in the trees?

Teams are not expected to deal with jammed balls, if this does happen during the match, the judge will treat it like any other court failure and will request a replay of the match if the outcome is significantly affected by the jam. For more information, please see: https://www.skillsontario.com/files/www/2024_Scopes/Ball_Jamming_Fix.pdf

B.4 – Not all ABS wye pieces are the same. What are the absolute heights of the taps?

The heights off the top of the 3/4" plywood tree base to the center of each of the taps are 11", 17" and 23". Note: The court is only guaranteed to be built with a ½" tolerance.

C. Game Play

C.1- Do red balls need to go to the boiler before the maple taffy zone to qualify for points?
No. All scoring is done based on the final state of the court.

C.2 – Can snow piles be in any orientation to qualify for delivery points?

Yes. As long as they are fully within the maple taffy zone. Note: For red balls to count for maple taffy points they must be on the top surface of a snow pile is in its starting orientation as described in rule 8.3.2.2.

C.3 – Can taps (dowels) be used by teams once removed from the trees.
Yes. Taps are considered "game pieces" like the balls and snow piles.

C.4- Do taffy piece (red balls) that are suspended between 2 snowpiles or between a snow pile and a wall count for points?
No. The bottom of the ball must be above the top of the snow pile to be counted. (This is the NTC Ruling on the question) Note: balls sitting in the grove are a sperate case and are ok.

C.5 – Can teams remove balls from the tops of the pipes?
Yes.

C.6- Can a tele-op bot drive into the autonomous zone.
Yes.

C.7 - If a robot is driving over a "Rock" or the bottom cap of a "Sapling" and it is knocked loose from the court surface what happens?

Knocking the cap off the floor may be considered damage to the court. (7.5.3.1.1). However, the rocks/sapling bases are meant to be driven over and will need maintenance over the tournament. If a team is intentionally removing the caps, it would fall under rule: 4.3.3.2 -"Damaging the court area is prohibited. If a robot's design causes damage to the court elements, then it will not be allowed to compete until it can operate without causing damage."

C.8 – What happens if a tree is knocked loose?

This will be considered "damage to the court" and fall under rule 4.3.3.2. (Quoted in C.7). However, if the judge determines that the damage was not a direct result of the team's action and has a significant impact on the final result, a replay can be requested.

D. Robot Design

D.1 - Can an autonomous bot extend beyond the vertical plane formed by the edges of the boiler?

No. Autonomous bots must remain completely within the boiler, defined by the vertical planes extending up from the outside edges of the boiler for the whole game. See rule 7.4.5.2 and 8.3.1.3

D.2 – Can a tele-op robot have autonomous functions?

Yes.

E. The Skills Ontario Competition