

**Skills Canada Mobile Robotics
Quebec 2024
Competitor Questions and Answers Document**

March

Mar.Q1:

Q: Do balls contained within a tele-op robot that is parked in the (autonomous) boiler zone at the end of the match count for points?

A: As per Oct.Q10, teleop robots are permitted to drive into the autonomous zone. As per 6.3.1.3: "Sap Pieces" are considered to be within this area as long as they are fully within the area, as defined by the vertical plane extending upward from the outside barrier of the "Sugar Shack Boiler".

Therefore, yes, "sap pieces" (golf balls) contained within a teleop robot that is parked in the boiler zone at the end of the match do count for points, as long as they are within the vertical plane limits described.

Mar.Q2:

Q: Can robots intentionally drop parts?

A: This would be the "Independent Autonomous Element" designation (Section 1.2) which would define this as an independent autonomous elementz, particularly

1.2.4: Stationary Independent Autonomous Elements are considered any autonomous element that does not move about the court.

This would then fall into the Autonomous Zone rules, particularly:

3.2.4: Teams may also use a maximum of ONE Independent Autonomous Element as part of their entry.

3.2.4.1. This must start and remain in the designated autonomous zone.

From these sections, intentionally dropping parts off the robot would mean they are using an independent autonomous element, and it must start and remain in the autonomous zone at all times.

Mar.Q3:

Q: Can motors be spinning at the start?

A: Yes, motors can be spinning at the beginning of the match, as long as the robots remain in compliance with the size restrictions and the starting positions.

Q: Drivers have to stay in the drivers zone. Can they slide controllers back-and-forth on the floor or toss them back-and-forth in the air?

A: No, there will be no swapping of controller's between drivers during a match

Mar.Q5:

Q: Some of the links in Appendix A seem to not be working for everyone. Can we get those links provided?

A: Yes:

Here are the links to the specific pieces required:

https://www.amazon.ca/dp/B093D81HL9?asc_source=01H46KZSDWCBMDCJ6HP43Y3B9J&ref_cm_sw_r_apan_dp_2DTR6C3BNQEJDDS231S0&tag=namespaceca179-20&th=1

https://www.amazon.ca/PrideSports-Practice-Balls-12-Count-Yellow/dp/B00466W9X0/ref=sr13?asc_source=01H46KZSDWCBMDCJ6HP43Y3B9J&ie=UTF8&keywords=foam+golf+balls&qid=1527010522&s=sports&sr=1-3&tag=namespaceca179-20

https://www.amazon.ca/Wilson-026388010011-Championship-Tennis-3-Pack/dp/B001FZCVTM/ref=sr_1_6?crd=2X643M50A7G4I&keywords=tennis%2Bball&qid=1690953211&sprefix=tennis%2B%2Caps%2C465&sr=8-6&th=1&psc=1

https://www.amazon.ca/Plated-Finish-Threads-Across-Height/dp/B0093OFI7Y/ref=sr_1_2?asc_source=01H46KZSDWCBMDCJ6HP43Y3B9J&c=ts&dchild=1&keywords=Hex+Nuts&qid=1595289233&refinements=p_n_feature_fourteen_browser-bin%3A11433996011&sr=8-2&tag=namespaceca179-20&ts_id=16409981

https://www.homehardware.ca/en/1-12-abs-slip-on-test-cap/p/3252615?utm_source=rakuten&utm_medium=affiliate&utm_campaign=bl3pFuC5e6s&utm_term=clk6gBxVq1GTXkTrJVcsRSw9zSrPjVr2pCk74rR5qrwezY4mzeuQcWjePt&ranMID=47290&ranEAID=3972578&ranSiteID=bl3pFuC5e6s-2lfv9zGIBVzAWG72eu6Z8g

<https://www.homedepot.ca/product/lesso-2-in-abs-45-degree-wye-h-x-h-x-h/1000116345>

<https://www.homedepot.ca/product/owens-corning-foamular-ngx-c-300-xps-rigid-foam-insulation-board-2-inch-x-24-inch-x-96-inch-r-10-sl-edge/1000155124>

The wood listed should be pretty standard and available at any store that sells lumber:

2"x6"x16' (or 2"x6"x8' x2)

2"x6"x10'

2"x4"x8'

2"x2"x8'

1/2" round wooden dowel

3/4" standard sheet of plywood (4'x8')

Pipes should also be available at any hardware store:

2" x12' ABS pipe

1.5" x6' ABS pipe