



FIRST® Tech Challenge Robot Shipping Case

Your robot shipping case is an important component for your team to consider. Your case should be sturdy enough to withstand the rigors of shipping and being moved multiple times by multiple carriers. Be sure to follow the instructions, specifically the size and weight parameters. Failure to do so may result in damage, delay and/or heartache, something no one wants to experience!

FIRST allows each team attending a Championship event to ship only one (1) Robot Shipping Case containing their robot. If your team has a need to ship any pit materials, your team is responsible for all the shipping and drayage costs for the additional crates/boxes/packages.

Our friends at FedEx generously sponsor the cost of shipping the robot shipping for every team who attends FIRST Championship. **Be sure to say thank you to FedEx!**

Sizing Information

Your Robot Shipping Case needs to follow these restrictions:

- **Not be taller than 30” high.** Crates that are taller than 30” run the risk of being turned on their side during shipping.
- **Have a footprint no greater than 30” x 30”.** The footprint is the measurements of the bottom or base of the crate.
- **Weigh less than 150 pounds when loaded.** This limit includes the weight of the crate itself.

Robot Shipping Case Information

All Robot Shipping Cases should meet the following requirements:

- **Has a Hard-sided Exterior.**
- **Sit flat on a floor and are balanced to avoid tipping.**
- **Can withstand stacking during transportation and storage or be labeled as “non-stackable”.**
- **Must not contain holes or have unprotected areas that access the interior** unless required by shipping regulations.
- **Remove any wheels.** It is recommended that if you have wheels on your case and can remove them, that you do so. If you cannot remove your wheels they must be secured so the case cannot roll freely.
- **Do NOT use any wood materials to build your case.**

Here are a couple of examples of Robot Cases that are acceptable for shipping:

- <https://www.robosource.net/specialty-parts-robot-cases-more/robot-cases/347-robosource-robot-case>
- <https://www.pelican.com/us/en/product/cases/cube-case/protector/0350/>



Robot Shipping Case Information

Team Crates should only contain the competition robot.

- **Do not ship any tools, first aid kits, t-shirts or other items in your robot shipping case.**
- **For teams shipping across international borders**, shipping these additional items causes clearance delays and other problems. Do not run the risk of your robot not arriving to your event in time by adding items that do not belong.

Attach relevant signage and proper labeling to your crate.

- **Remove signage and labels for previous seasons** or are not relevant for the event being shipped to.
- **Attach the proper labeling to your crate.**
 - For any battery shipped, the team is responsible for getting their own proper signage for the crate according to the IATA standards.
- **Attach the proper shipping documentation to your crate.**
 - Teams approved for shipping to Championship will receive signage and shipping documents. Attach additional copies of shipping documents to your robot.
 - For teams shipping across international borders, include additional copies of the Commercial Invoice and other required documents.

Additional guidelines for shipping batteries.

- It is not mandatory that you ship your batteries with the robot. However, if you choose to ship the 12V Slim batteries in the robot shipping case with the robot, IATA regulations require teams to follow the instructions below:
 - If the battery is installed in the robot, packaging must prevent short-circuits and accidental activation.
 - If you are shipping spare batteries:
 - Place batteries inside their original box or carton packaging.
 - Terminals must be covered with insulating tape and/or individually packaged to prevent short circuits.
 - Do NOT tape multiple batteries together
 - In the description section of your shipping paperwork, write “NIMH batteries – not restricted as per Special Provision A199”.
 - Do not ship Lithium-Ion Batteries in your crate. For more information, see this info about [Lithium-Ion Batteries](#).

Other Important Information

Decorate your Robot Shipping Case to be identifiable and reusable.

- **Have “TEAM # XXXXX” (insert your team number) painted or stenciled in letters at least 6” high on at least one side of the crate.** Shipping labels and paperwork often get lost in shipping. Painting your team number clearly on the case will help to ensure that it arrives in your team’s Pit Area on time.
- **Have a method of attaching and displaying shipping documents on the outside and on each side.**
 - Affix sheets of polycarbonate, plastic, or a sheet protector securely to the outside of your crate for a place to put the shipping documents before shipment. Failure to do this may result in lost or delayed robots, due to missing or ripped shipping documents.
 - We recommend purchasing a Job Ticket Holder ([one example can be found here.](#))

Borrowing Robot Shipping Cases for *FIRST* Championship

- Teams are allowed to borrow a crate from other teams to ship their robot to the *FIRST* Championship, however the following items must be followed:
 - Cover original team number
 - Affix or apply your team number
 - Cover or remove any other stickers, labeling, or documentation
 - Ensure the sturdiness of the crate you are borrowing.

Questions?

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