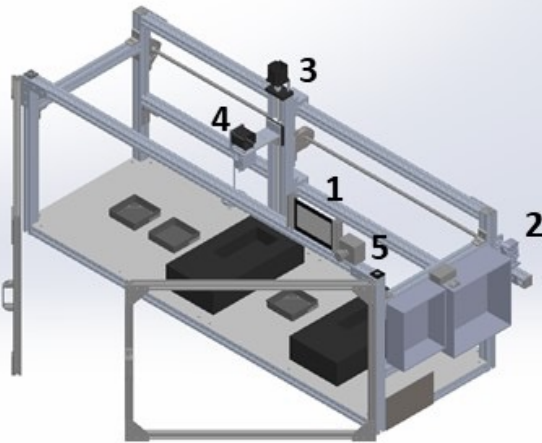


MBot: Making Solder Dipping Easy

The goal of the project was to automate a manual solder dipping process for reliability and replicability. The design had to be capable of incorporating multiple different user choices to accurately select and execute an appropriate dip cycle.



1) User makes selections

User selects part number, number of solder dips, and which cleaning solutions are used

2) First motor moves into place

The moving portion of the device moves to necessary container

3) Second motor dips after sensor readout

The distance sensor determines the exact dip distance

5) Safety features

- Emergency button
- Safety doors & sensor
- Hands-off use

4) Third motor

The third motor (rotational) only operates based on user input at the touch screen