



Fabrication: Beginner Building Blocks

Welcome to the Fabrication Building Blocks! Once you have decided on a robot design, the next step is to fabricate the parts you've designed.

1. Here are some commonly used hand tools:

- Wrenches: Adjustable, Open-end wrench, Allen wrench
- Cutting tools: Tin Snips, Flush Cutters, Crosscut Saw, Coping Saw
- Measuring: Measuring tape, Measuring square, Level
- Hammer and Mallet
- Screwdriver
- Pliers
- Files
- Rivet Gun
- Chainbreaker
- Note: This list doesn't include many of the electronics tools that you may also need! Check out the electronics resources for those.

2. Commonly Used Materials:

- [Vexpro VersaFrame](#) Tube Stock and Gussets
- Aluminum Tube Stock
- Aluminum Sheet Metal
- Plastic/Polycarbonate Sheets
- Hex and ThunderHex Shaft

3. Commonly Used Power Tools:

- Drills
- Drill Press
- Bandsaw
- Circular Saw
- Jigsaw
- Belt Sander

4. Team 3847, Spectrum created a list of the first \$1000 of tools they would purchase if they started over from scrap. Keep in mind- this list doesn't include consumables like tape, metal, bolts, robot components etc.

- <http://blog.spectrum3847.org/2017/11/spectrums-first-1000.html>