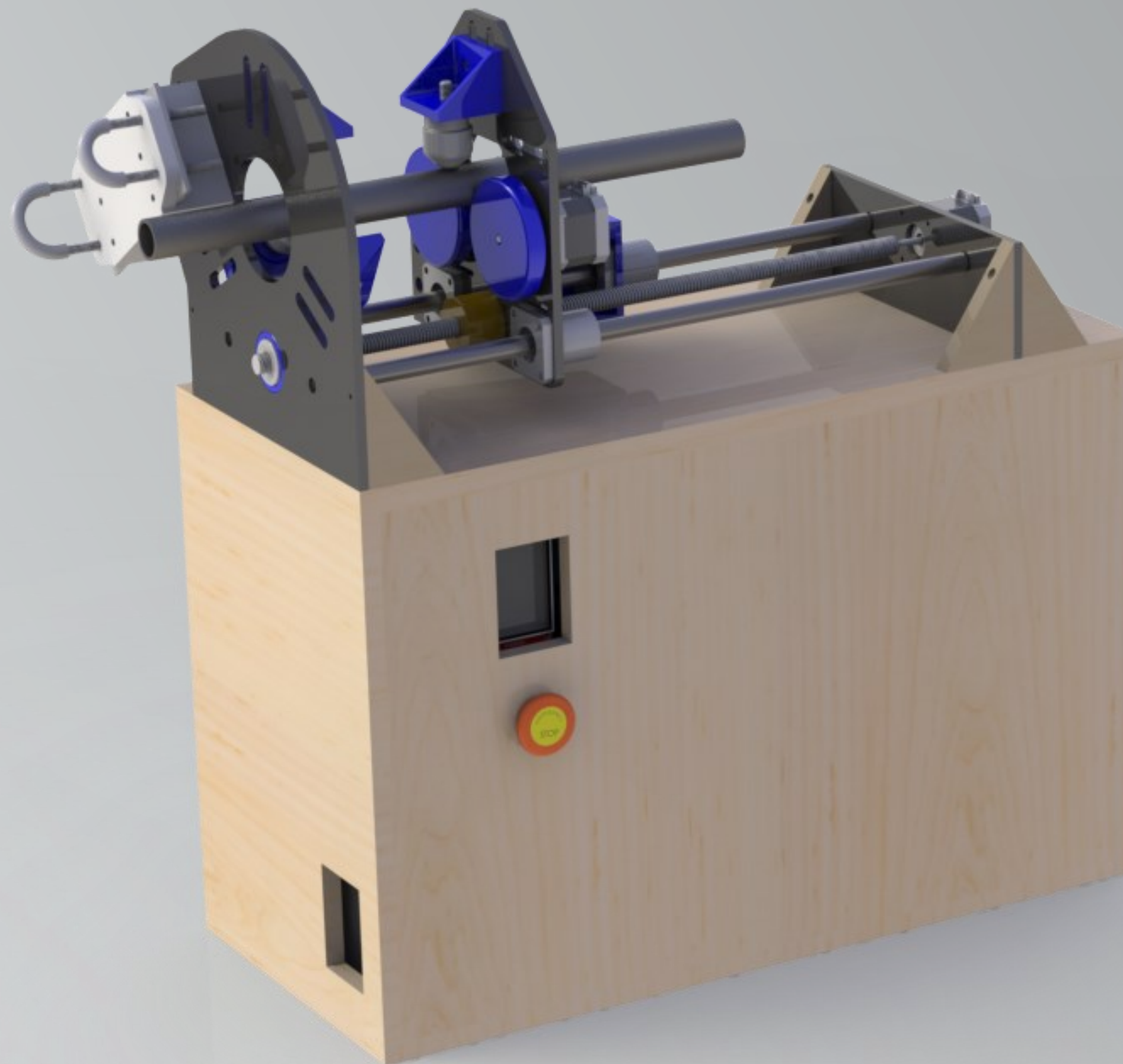
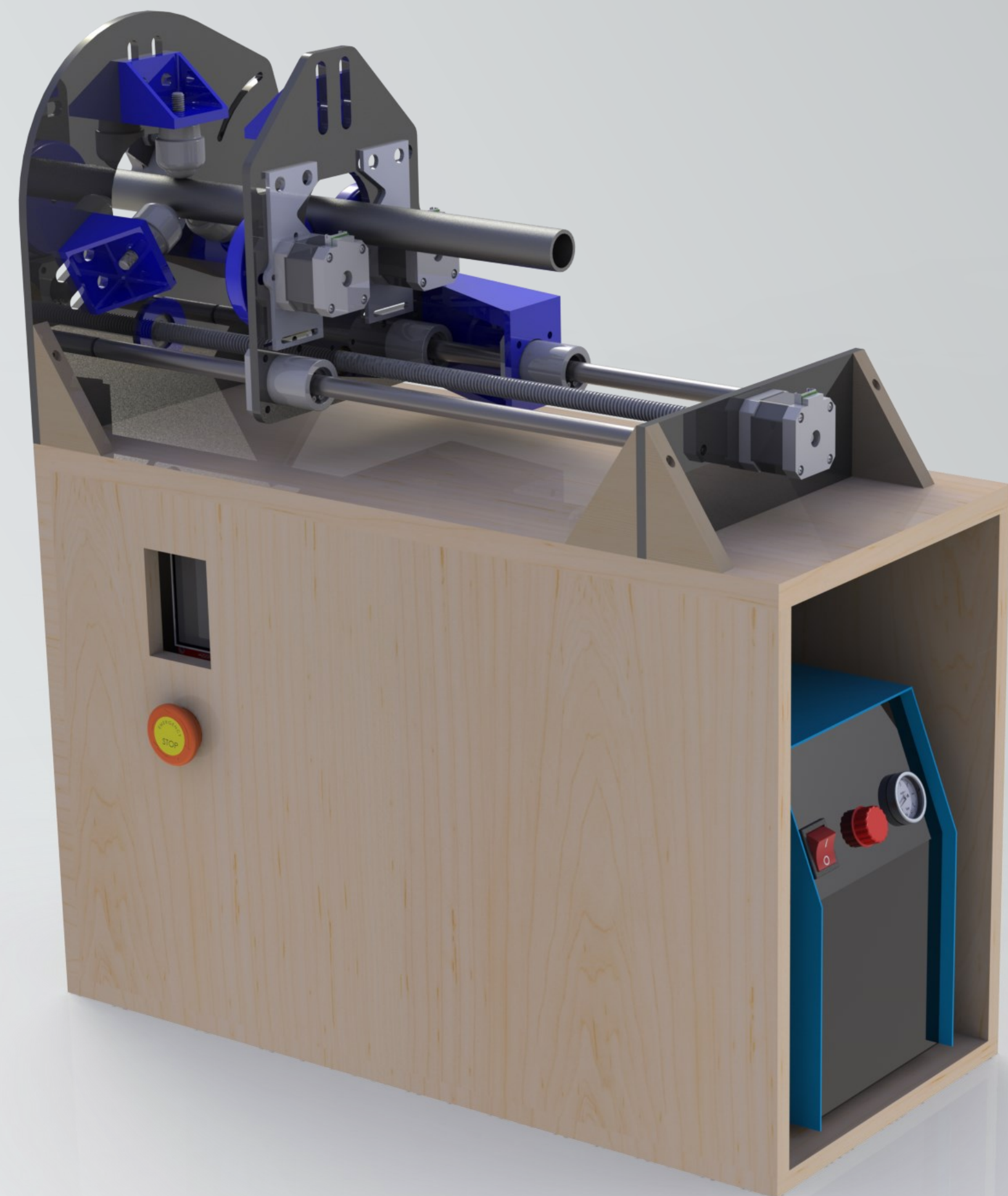


Bx3C



What's Bx3C? Who's it for?

Bx3C is a plasma powered, computer numerical controlled (CNC) tube notcher. It is designed to precisely cut a profile into metal tubes that allow for a clean and angled butt connection.

The beauty of Bx3C is that it can be used as a traditional plasma cutter to cut flat plates, which is an essential part of every garage, job shop, or machine shop. This is a tool for hobbyists, collegiate competition teams, and small shops alike and this product solves both the need for a general plasma cutter and a tube notcher in one package.

What problem does it solve?

Currently, the solution to getting a tube notched for angled mating is either sending it off to a third party, doing it painstakingly by hand or with a jig, or already owning a CNC tube notcher. Current CNC tube notchers are out of reach of Bx3C's target consumer primarily due to cost constraint.

These old solutions can be time consuming, cost inefficient, imprecise etc. Bx3C is a solution that solves all the aforementioned problems while being functional as a traditional plasma cutter. If a plasma cutter is needed for any reason, this product might as well be the one.

How much will it cost?

The price is expected to be less than \$2,000 USD. Many higher end plasma cutters cost the same without tube notching functionality. This is compared to other "entry level" CNC plasma cutters which can cost \$20,000 **refurbished**.

This price gap exists because there is a vacuum in the market for entry level CNC tube notchers.

It is expected that materials, hardware, and electronics will scale extraordinarily well. Because of this and logistics planning in shipping consolidation, this extremely accessible price point is feasible.

Technical Details

What can it cut?

- Tubes with diameters ranging from 5/8" to 2"
- Angles from 10 to 90 degrees
- Most conductive materials
- Up to a thickness of 1/4" steel

Notcher mechanism and plasma cutter both use 120VAC
UI utilizes an LCD touch screen
ARM Cortex-M7 Processor @ 600MHz
Emergency Stop Switch included
Total weight approx. 60 pounds

Operation Procedure

Mount tube. Input the OD of tube being cut, the OD of the mating tube, thickness of the tube being cut, and desired mating angle in degrees. Bx3C will automatically turn on the plasma cutter and begin cutting the appropriate profile for the desired cut. Note that the profile leaves only the inner wall to touch the mating tube.

Support for G-Code will be added in the near future. This will allow for virtually any cut to be made for any and all unconventional mating. This will make multiple tubes mating at a single point possible as well as even mating round with square tubes.

Pictures of the machine and tubes actually cut by it are displayed below.

