Intro: Build a Foamcore CNC Machine

Build a low-cost CNC machine in your kitchen, for under $120, using tools obtainable at your local art and hardware stores.

The goal of this project is to explore the bottom end of CNC machine construction. It utilizes foamcore - an easy to work with and cheap material - for its structural components. This constraint has led to mechanisms which are different than on most CNC machines. More general information on the project can be found here:

http://web.mit.edu/imoyer/www/portfolio/foamcore/index.html

The machine shown at this link, as well as in the video below, is an older version to which some changes have been made.

Hopefully this will be an ongoing project as I develop a controller suitably under-engineered to match this machine.

Foamcore CNC from Ilan Moyer on Vimeo.

This Instructable only covers the construction of the physical machine, and does not go into the electronics necessary to control it. There has been a lot of work done on developing DIY stepper motor controllers, and the motors chosen for this project should be compatible with almost any driver out there.