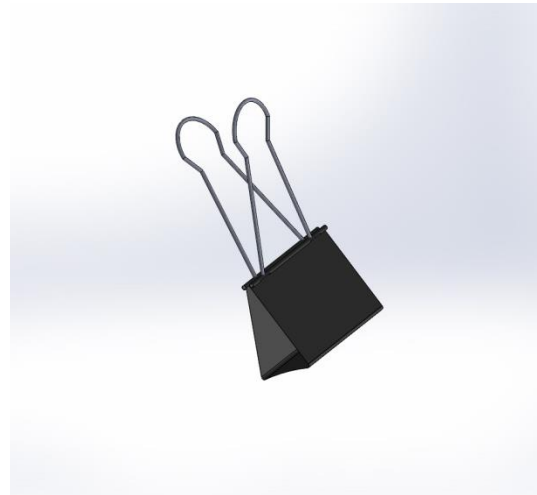


Binder Clip

When trying to decide on what to make for my solid works (CAD) project, I was unsure of what I wanted to make. I looked around my room for some inspiration. On my desk I saw pencils, pens scissors and some binder clips. I began to think about the binder clip and the thought that went into designing it. Tension along the base of the triangle forces the two sides closed, and the loops prevent the sharp steel edges from cutting into the paper. The loops also serve to hold two pieces of stiff



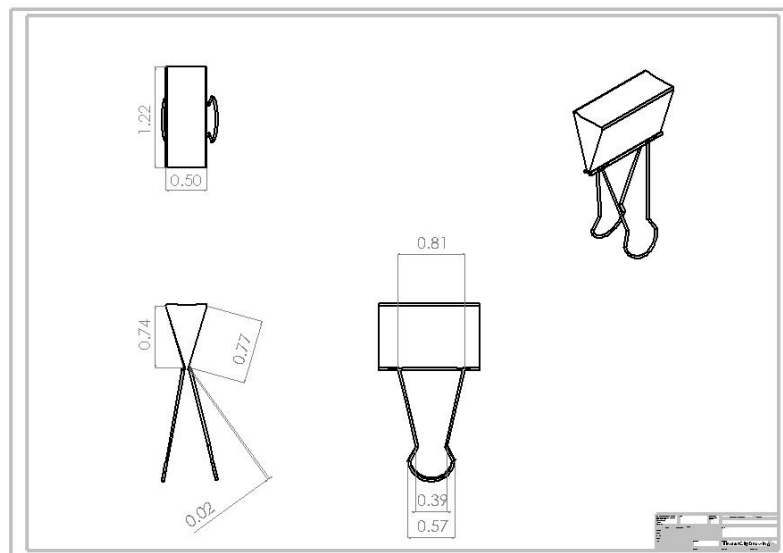
wire used as handles. The two slots cut in each loop are shaped so that the wire handles can be folded down once the clip has been attached, and the spring force of the wire holds them down on the surface of the paper. This holds the clip relatively flat, for easier stacking of paper. One handle can also be folded down while the other remains up to allow the stack of papers to be hung up. As compared to a paper clip, the binder clip is able to bind sheets of paper more securely. The design of the binder clip is kind of ingenious. Someone created the idea in their head and drew it out on paper with all the details and dimensions (It was before

computers). This is similar to what I could later do as a mechanical engineer. To identify a problem (in this case the inability of paper clips to hold thicker stacks of paper) and to brainstorm ideas, select a concept, create a visual model and eventually implement the design.

When making the actual binder clip, I faced a few difficulties. Trying to draw the shape of the side of the base was tricky.

Getting the edges to curve into loops was especially hard. Once I had the base designed, I had

to make sure that the wire would be dimensioned properly to fit into the loops of the base. This project caused me to learn a lot about solidworks and its functions, something that will greatly benefit me later in my career. I actually did have fun doing this project; I found it the program fascinating and look forward to using it in the future.



<http://everydaythingsetc.com/2011/05/31/the-humble-binder-clip/>