Creating the Rink

The reason I chose a hockey rink is because I have played hockey since I was five and love to go watch the Penn State games. It seemed like a creative idea with a lot of potential for detail and the use of many tools.

I started by just making a block for the ice and began cutting at it to make the rink shape, boards, and glass. I then added lines and circles for the markings on the ice. From there I worked my way out, adding the benches and paths around it. The longest part was creating all of the bleachers. I had over 250 sketches and hundreds of extruded and cut features to create the stairs and bleachers. From there I created many other planes to sketch the railings for the bleachers and then used the sweep tool to create the circular railings. Then I used a new tool. I utilized the mirror tool to flip everything to the other side. Then I connected everything, added some PSU logos, a scoreboard, more stairs, and even windows on the backside. To finalize it all I added some fillets, colors, and a couple more small details. I also created the nets using the loft tool and assembled it all in an assembly.

The hardest part for me was using the mirror tool. I had never used it before and had to keep correcting things before it let me actually mirror everything around. It also crashed on me a couple times because of all the features so that made it rather inconvenient.

I learned how powerful solid works can be. You can create just about anything with it. Even moving features on it. I joined the SAE racing team this year and they also showed me solid works ability to test materials and apply forces. Very glad I learned how to use this software.