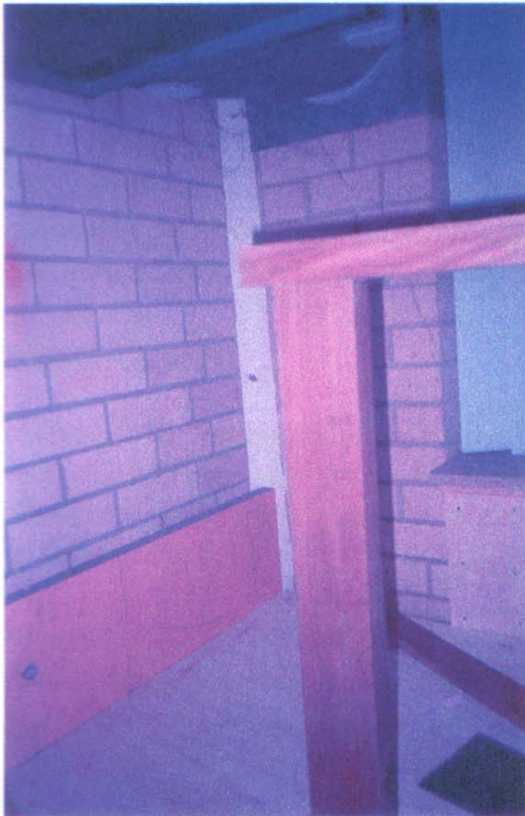


Evaluation

Materials

Brushbox:



I was quite surprised and relieved with the way that the Brushbox fence posts ended up. When I first received them I honestly thought that the quality of the timber would not be up to scratch. This was a major concern, because the role that they played was vitally important. In my project proposal I said that I wanted a product with a lot of sturdiness. This usually indicates that there is a lot of weight in the bench. The Brushbox fence posts were the part of the bench that carried the weight and if the quality of the timber was not up to standard then it could be a great problem.

I selected the timber for a couple of reasons. The first was that I could salvage the timber free of cost, the second was the density of the timber. A dense timber usually means that it is of considerable weight and can support a great amount of weight. I was impressed with the dark, rich finish that the timber gave and the interesting fiddleback grain patterns in certain sections.

Tasmanian Myrtle:

I selected Tasmanian Myrtle on the basis that it was around the density of what I wanted for the bench top. Initially I wanted to use Jarrah for the top until I found out that I could get a good deal with the Tasmanian Myrtle. With the Tung Oil finish on the top the grain of the timber really came out nicely. I liked the varying complexities in the grain, the different depths of colour. I found the timber very good to work with, it was a little hard, but worked well. I believe that the Tasmanian Myrtle

The unfortunate thing with the timber is that I used it for the board jack runner and I found sanding it a problem. The timber was very “stringy” and I found it hard to sand the timber to a nice finish.

Hoop Pine:

The Hoop Pine was used to save money. Initially the edgings were going to be made out of solid Tasmanian Myrtle, but I had to find ways to cut the costs. So I made the core of the edgings out of the Hoop Pine and coated the Pine with the Myrtle.

I also used the Hoop Pine for the drawers, which was another way to save money. The Hoop Pine did what I wanted it to do, it did not play a major role in the overall appearance of the bench, but helped structurally.

Marine Plywood

I was a little disappointed with how the Marine Plywood turned out. The veneer on the top was prone to chipping out. The boxes were always in contact with the ground, which meant that chipping out was always going to be inevitable.

When deciding what timber to use for the boxes, I automatically was drawn to the Marine Plywood because it is waterproof. It is more than likely going to come into contact with some sort of liquids or solvents.

Project and Time Management

I am very happy with the way that I managed my time. I knew from the initial outset that the job that I was undertaking was a massive task and that if I did not manage my time wisely then I would not get finished. I was the first person to obtain timber, which meant that I was the first to get started.

I made sure that I was always working hard at my task and that I was taking advantage of the free time that I had. It was important that I used my free periods to come into the workshop and work on my job, as well as taking advantage of the fact that the workshops were available to me to work after school on Monday and Friday afternoons.

I made the logical conclusion that the top of the workbench was one of the first things that I had to do. The bulk of the work was in the top, there were many processes that were involved. By doing the top first, it was a

The stainless steel rods that extend through the width of the table were selected because my father was able to get them from his work. They also have the added ability of being corrosion resistant.

I decided to round over the edges on the bench because the sharp edges, especially the corners, can be dangerous. It also makes the bench top look a lot better, it gives it a little character.

Manufacturing of Project

I was happy with the way that the leg supports turned out. They provide a very sturdy base for the top. Although, if I were to make this project again there would be one slight variation that I would make to the largest leg support. I would make a third upright which is in line with the uprights. Because there is only 2 uprights (there is one missing in the middle) there is nothing to screw the right-hand box in at the front. By making a third upright, the structure would be more rigid, and there would be greater support for the right hand box.

One unfortunate thing that I found with my manufacturing process was that I had already attached the shoulder vice beam before drilling the hole for the screw and routing the trench for the cap. I made things increasingly difficult for myself by doing this as accessibility was poor.

I also should have allowed more time for the Silky Oak to dry out, because when I glued the block together for the shoulder vice it wanted to come apart after about a month. I then had to coat the top with Megapoxy to stop it from opening up more.

Although the inside of the left-hand box was not important to me as it is merely a storage area, I was disappointed not to get all of the Megapoxy out.

I believe that in all aspects of the manufacture has met my project proposal. The main focus of my project proposal was to have a bench that remained sturdy during vigorous work and had a decent amount of work. In every aspect that workbench has exceeded my expectations.

Environmental Evaluation

A solvent-based finish, such as varnish and lacquer, contains a good deal of organic solvents, which can affect the environment as well as your health. It's also highly flammable. True oil is a surprisingly good