Grinding Trochus Shells, Pearl Shells and Dugong Bones.

You need special equipment to grind, cut and polish these shells and bones. Do NOT try this at home!

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The Dangers of Shell Grinding

The equipment used could dangerous if not used correctly. There are large and small saws and grinders that can easily take skin off.

If used properly it is safe. It is important to wear safety glasses, a hair net and face mask (respirator).
Another danger is the carcinogenic (cancer causing) dust that comes from the shells when you grind or cut them. The equipment used is always watered down so that the dust turns to mud and is caught in a tray and then flows down a drain.
Where I was taught

While I was at the One Arm Point School I was taught how to operate the machinery involved in turning an ordinary Trochus shell, Pearl shell and piece of Dugong bone into something amazing.
The pearl shell and dugong bone necklace that I made at school.
First Step – Gathering

The first step is to gather the materials. We go down to one of our local beaches where the tide washes up Dugong rib bones. To get Trochus shells you can find them on the beach or dive for them. It is controlled as to how many can be brought out. To get a mother of pearl shell you either have to dive for them or be given one by the pearl farm. The big old pearl shells are hard to find in the wild, so most of them are donated to the school by the pearl farm. (The one I polished is 20 years old).
Second Step – Deciding

The next step is to decide what you want to do with your shell or bone. With a Trochus shell you can’t do much to it other than grind, smooth and polish it.
With a bone you can do anything. You need to pick a base shape then decide if you’re going to cut it, glue things on or engrave it. I made the first and last designs.
With a Mother of pearl shell you can do a lot of things as well. You can keep the original shape and grind and polish it or you can cut out a shape and use it on a necklace.
Third Step – Grinding and Smoothing

There are two grinders to use. The first one is coarse so it takes off more of the shell/bone than the finer grinder. You would usually use the coarse grinder first.
The second finer grinder is used to smooth down and take out scratches made by the first grinder. It is used to give you the smooth rounded edges of shapes.
Third Step - Sanding

This step requires you to sand the shell/bone with wet and dry sand paper to get the fine scratches out. You will never get all of the scratches out but you try to get the most noticeable ones out.
Fourth Step - Buffing

The shell/bone isn’t going to stay shiny unless you buff it. To buff you use a big machine with a fluffy wheel on the end. You have to turn the buff on and while it is spinning put buffing chalk on it.
The Buffer is very strong and can throw the shell/bone to the floor if you’re not careful. This process makes the shell/bone shiny but also makes the scratches stand out so if you aren’t happy with the scratches you can sand the scratches out and buff it again. You can do this until you are happy with the shell/bone.
Fifth Step - Waxing

This step is like buffing but you use a different machine. The piece on the end spins and as it spins you need to put wax on it. Then you just push your shell/bone against the waxer to put wax on your shell/bone. The wax stops it from getting scratched.
Sixth Step - Engraving

This step is optional. To engrave your name on your shell/bone you need to use the hand-held electronic engravers. These things are big, heavy and awkward so they are very hard to use. As long as you can read it you have done a good job.

This picture is not our model, ours is thicker.
The End