#### How to Anodize Steel

When you want to prolong the life of your steel parts or simply give them a nicer appearance, you need to know how to anodize. To perform this procedure, you must have equipment to protect your eyes and various ingredients, such as sulfuric acid. Once you understand the steps you need to complete, you can anodize steel in about two hours.

## Things You'll Need

- 12-volt charger
- Rubber tubs
- Water
- Sulfuric acid

- Sodium hydroxide
- Steamer
- Tongs
- Charging rods

• Dye

# Step 1

Establish the five stations you need. The electrolysis station is the first station you require, and it needs to have a tub made from rubber. In the tub, you will put sulfuric acid and charging rods attached to a 12-volt charger. The rinsing station must have a rubber tub and sit next to heated water. The station where you perform the dying process needs to have a big, heated pot that contains a strong fabric dye. The station where cleaning takes place also has a rubber tub that contains sodium hydroxide. The last station you need will have a vegetable steamer.

### Step 2

Wash off your steel at the cleaning station. Allow the steel to remain in the sodium hydroxide solution for about 30 minutes.

### Step 3

Take the steel out of the cleaning station. Put the material in the electrolysis station. Warm up the sulfuric acid at the station to approximately 70 degrees F and ensure that your charging rods sit in the solution after you turn on the actual charger. Leave your steel underneath the liquid at the station for approximately 120 minutes.

### Step 4

Dye your steel. Put the steel into the fabric dye and allow the solution to boil for about half an hour. Take out the steel, wash off the metal with hot water, and allow the die to set by putting it in your steamer for approximately 30 minutes. Each time you transfer the steel from one location to another, use tongs to prevent any damage to your body.

### **References & Resources:**

• SUPERIOR METAL TECHNOLOGIES: Anodized Aluminum or Stainless Steel?