

Just before full steam production a small amount of bubbling and water will occur.

Beware of hot water discharge prior to steam emission.

If unit requires refilling, unplug cord and allow to cool for at least 2 minutes before removing filler cap - <u>Beware of steam.</u> When finished, allow to cool completely and empty unit. Always store unit empty.

## **SAFETY CUT-OUT**

A safety cut-out is fitted to prevent overheating the element if the water boils low. If unit stops boiling during use this may be the cause. Wait for 2 minutes before removing filler cap then re-fill with water. The cut-out will self-reset and steam be produced again within 5-15 minutes. The cut-out will not protect the element if a part-filled unit is tilted during use in a way which enables part of the element to be out of the water for longer than 15-20 seconds.

## **DESCALING**

To maintain peak performance of the unit, particularly in areas of hard water, it may be necessary to descale the element in the unit. Proprietary kettle descaling products can be used in your unit - always follow the manufacturer's instructions.

Always wear gloves or mitts for added protection.

## How to Build a Steam Box - Safety Instructions

Bending wood with steam can be <u>dangerous</u> and should only be performed by experienced woodworking enthusiasts. <u>Thick, heat-resistant gloves</u> are recommended as the steam can easily burn unprotected skin on contact. Also keep your face clear from any areas where steam may escape and burn you.

Steam is a very effective medium for bending wood. Most hardwoods will bend better than softwoods.

Steam boxes can be built using plywood or hardwood; just make sure that it can stand up to moisture and heat. Your steam box should be tight, but not too tight. The steam should be able to surround your wood-piece and flow through the steam box. The steam box could build up pressure and **possibly explode** if the steam does not adequately flow through the steam box and pressure relief holes.

The best way is to build a relatively tight box and **drill steam holes** in the base so that the steam and condensation can escape. You should have a **steady stream of steam escaping through all vents**. You will need to make sure that your wood pieces are supported in your steam box and that the steam surrounds your wood on all sides. **Dowel rods work the best** as metal rods can heat up and burn your wood as well as yourself.

As a wooded steam box, you can use common 1  $\times$  6 material or 3/4" thick plywood. A 5"  $\times$  5" interior dimension with a 3'-5' length for use with your Steam Generator. You should have a **door opening with hinges and a latch**. A rubber weather stripping can be used to seal a leaky door.

The brass-threaded fitting that is supplied with your Steam Generator is designed to fit a 0.531" dia hole. Drill this hole in your steam box and separate the fitting, placing one end through the steam box with the thread that will connect to the hose sticking out of the steam box. Screw the other part of the fitting onto the fitting inside the steam box and tighten up to ensure a good seal. There should be no movement of the connector once tightened up.

Ideally the steam box should be on a slight incline for condensation to drain to one end and exit the steam box.

Fill your steam generator with clean water, do not add any additives. **DO NOT FILL ABOVE MAX LEVEL LINE** on Steam Generator base. The steam up time will be controlled by how much water you fill the Steam Generator with and the temperature of the water. The Steam Generator is designed to provide two hours of steam. If you only require one hour of steam then half fill the Steam Generator.

Place your wood-pieces into the steam box and connect the hose to the steam box and Steam Generator. Plug the Steam Generator into a grounded outlet, preferably one protected by a GFCI or ALCI. The Steam Generator will automatically start to heat up.

When starting we recommend that you insert a **meat thermometer** through a small hole to read the temperature. You want to reach 212°F, or as close as possible. Once you have reached this temperature start timing how long your wood needs to be steamed.

A general rule to follow is that you should steam the wood for 1 hour per every inch thickness of the wood. So for ½" thick pieces you should allow 30 minutes.

You will need a mould or jig to hold the wood in place until it dries out after you remove such from the Steam Box.

\*This is a general outline on building a Steam Box.\*

\*There are many websites available to use for more detailed instructions.\*