

## COUNTERFLOW WORT CHILLER

### Before Use

Before using your counterflow chiller for the first time, give it a thorough cleaning to remove any dirt trapped inside the tubing. Pour a mixture of hot water and dishwashing detergent through the tubing (using a small tunnel) followed by a hot water rinse. Repeat until the rinse water is clear and clean.

### Sanitizing your chiller

It is very important to sanitize your counterflow chiller. Without sanitizing, each use will leave a small amount of wort trapped inside until the next time you brew. Imagine how attractive this is to bacteria, wild yeast and fungus.

Sanitizing your chiller is easy. After each use, simply run a few quarts of boiling water through it, straight into the drain, without any cooling water going through the hose. That flushes out trapped droplets of wort, sanitizing the entire length. Next time you use it, don't turn on the cooling water until you let a cup or two of boiling wort run through the chiller into a bucket or drain (not a glass carboy!) Stop the flow and throw away the first bit of wort. Then turn on the cooling water and start collecting your cooled wort normally.

### Using your counterflow chiller

Set the chiller at a level below the kettle. Connect a water hose to the lower end of the chiller. This supplies the cooling water. Connect a drain hose to the upper end of the chiller. This carries away the hot water exiting the chiller.

After your boil, the hot wort flows from the kettle into the copper tubing at the upper fitting and the chilled wort flows out the lower one into your collecting bucket or carboy. Cold chiller water flows into the lower fitting and the hot water flows out the upper one.

**Kettle tap method:** If you have a tap or spigot in your kettle, connect it to the chiller with a short length of good hose and a couple of hose clamps. Then open the tap and let it flow. You must also have a strainer of some kind inside the kettle to keep spent hops and trub from entering the chiller and clogging it. Hint: A good strainer can be made by fixing a copper pot scrubber inside the kettle with a bit of wire.

**Siphon method:** Wort can be siphoned from the kettle with a sturdy racking cane. Try a length of copper tubing a little longer than the depth of your kettle (not plastic, because hot water can melt it). Fasten a copper pot scrubber to the end of the racking tube as a strainer.

Connect a length of good hose to the racking cane, using a hose clamp. Hold the racking cane and hose so that both open ends are pointing up and even with each other. Fill it with hot water from the tap. Crimp the end of the hose tightly about 2 inches from the end. (This step may take some practice, so try it first with just cold water in your kettle.) Connect the end of the hose to the inlet of the chiller tubing. Then put the racking cane into the kettle and release the crimp. The water should flow through the chiller with the hot wort following. Never start a siphon of hot wort with your mouth. If necessary, fill the chiller with water with a funnel, keeping the outlet closed.

After a cup or two of hot wort has passed through the chiller, turn on the cooling water and adjust the flow so that the wort exiting the chiller is below 80 F. You will need less water flow in winter, since the water entering your home will be cooler.

Always use a heavy duty hose to move hot wort. Hoses reinforced with braiding are generally good, but don't use the thin wall vinyl hoses that are commonly used for racking or boiling.