

Shirron^{INC.}

Wort Plate Chiller

Congratulations on your purchase of the Shirron, Incorporated Wort Plate Chiller! This chiller is similar to those used in professional breweries, but is designed to work with your home brewing system.

This chiller consists of 10 plates of 316 Stainless Steel. Pure copper sheets are inserted in between each plate and heated in a furnace which melts the copper. This process makes a water tight seal in between the plates. Each chiller is pressure tested to check the seal quality of each pocket.

Set up

The Wort Plate Chiller is very simple to use. Once it has been cleaned and sanitized you are ready to start chilling. The inlets and outlets are specific to home brewing applications. The water side of the Plate Chiller is a standard 3/4" garden hose thread.

The wort side of the Plate Chiller uses 1/2" NPT threaded fittings. This is a very standard thread that gives the home brewer a number of different options on what type of connection to use. Anything from a simple threaded attachment with a barb to a quick disconnect will work. As with any NPT thread, it is important to use Teflon tape to ensure a good seal. These attachments and tape can be bought at any hardware store. Quality quick disconnects can be purchased through many homebrew shops.

Once you have all of the connections attached to the Wort Plate Chiller, it is recommended that you turn on the water prior to chilling the wort. If you encounter any minor leaks, you may want to tighten your connections or check the seal of the Teflon tape.

The performance of the Plate Chiller is dependant on a number of different factors. These factors are:

1. Temperature of water used for cooling
2. Temperature of wort
3. Tubing size
4. Flow rates
5. Gravity feed vs. Pump feed

The Plate Chiller has been tested in a number of different locations from Minnesota to California and has been successful at cooling wort to yeast pitching temperatures at a rate between .75 to 1.25 gallons/minute. Again, these results may vary depending on the configuration of your brewing system.

It is recommended that with first use, the flow of the hot wort is slow until you figure out how quickly the Plate Chiller will work with your system.

Usage

Gravity:

If you are using gravity for draining your boil kettle, all that needs to be done is to connect the Plate Chiller between your boil kettle and fermenter.

Boil Kettle → Wort Plate Chiller → Fermenter

Pumps:

If you are using a pump for draining your boil kettle, you must put the pump BEFORE the Wort Chiller.

Boil Kettle → Pump → Wort Plate Chiller → Fermenter

IMPORTANT!

It is highly recommended that you use a screen or filter of some kind in your boil kettle. Ideally, you want to leave as much hot break and hop material in the boil kettle. This solid material in large quantities can possibly clog the unit. Failure to do so may cause permanent damage to the unit.

Cleaning and Sanitizing

It is important to make sure that the chiller is thoroughly clean and sanitized before each use. Prior to its first use, it is recommended that you soak the Plate Chiller in a percarbonate cleaner. To make sure the cleaning solution fills the Plate Chiller, place it in a bucket of solution with the fittings facing up. Tip the Plate Chiller back and forth to release any air that is trapped inside.

After an hour soak, thoroughly rinse the chiller with fresh water.

Sanitizing is just as simple. Place the entire unit in a bucket of sanitizer and tip the unit back and forth to release any air that may be trapped inside. Leave the Plate Chiller in the solution the required amount of time depending on your sanitizing solution requirements.

The Plate Chiller can also be boiled to sanitized/cleaned.

It is important that the Plate Chiller is thoroughly cleaned immediately after each use. Once the Plate Chiller has been cleaned and back-flushed, make sure that you drain all liquids from the unit before storing. If there is any water left inside the Chiller and it is allowed to freeze, there is a possibility of damaging the internal plates.

Warning/Safety

As with all aspects of home brewing, please use your best judgment when handling hot liquids. Take the appropriate precautions to avoid any accidents. Above all, have fun and keep on brewing!