Brewtools Docs

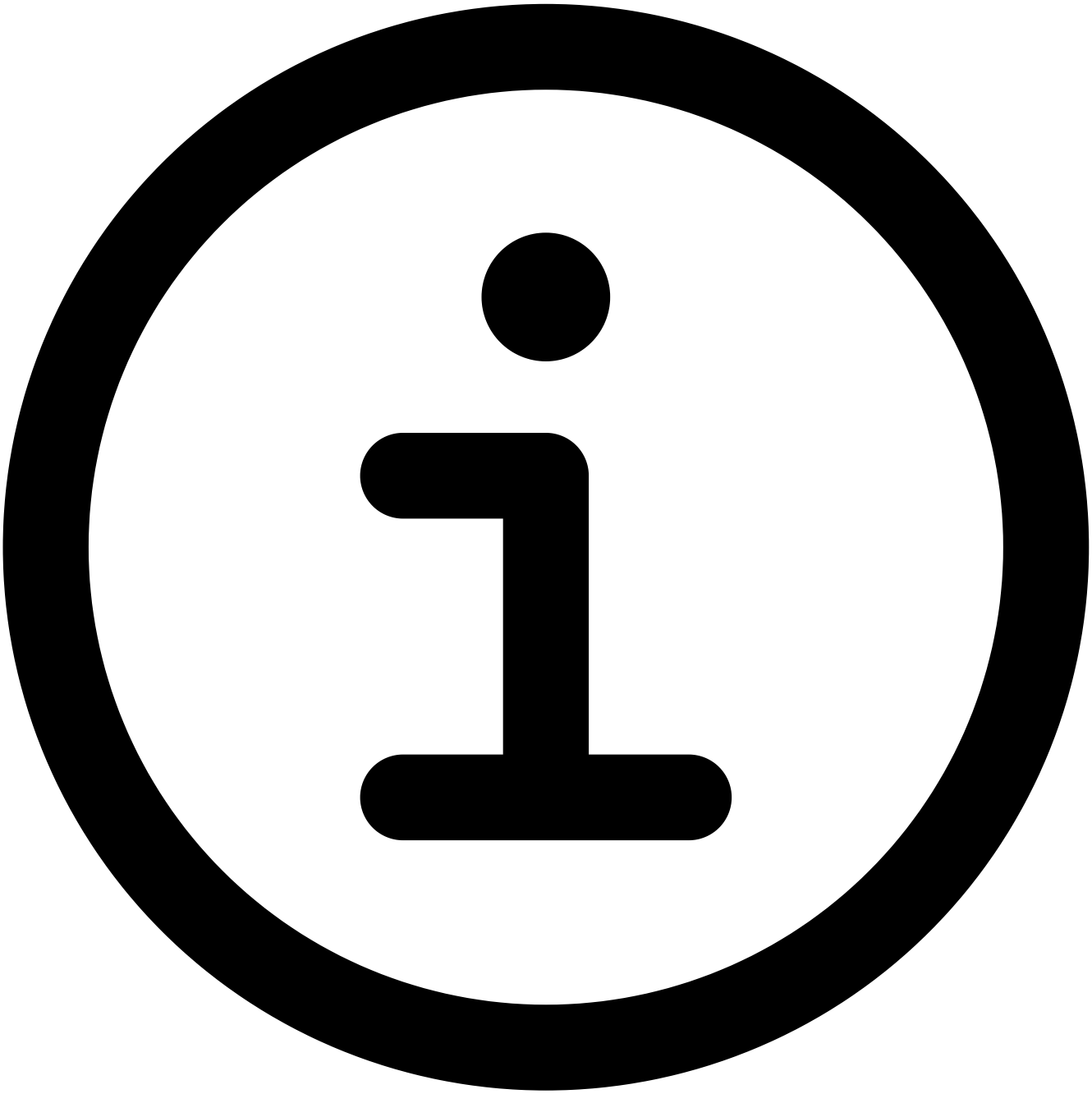
Steam condenser

Our steam condenser fits our steam hats and uses cold water to cool the steam until it becomes a liquid that runs out of the condenser to a bucket or directly to the drain. It is an excellent alternative to a ventilation system.

Assembly

Assemble all parts together according to picture below. All TC connections need a gasket. The nozzle is screwed inside the top 2" to 34mm adapter.

Assemble your water supply parts to the top inlet in order to supply the unit with cold water (sold separately). Remember to use a garden hose or similar that can withstand the normal tap water pressure. Recommended fittings are either a TC34mm to garden connector or a TC34mm to hose barb. Remember to use a hose clamp.



We recommend using one or two TC34mm elbows to ensure the water hose connects on top without bending and reducing the flow of water.

Install a tube to the outlet hose barb on the steam condenser. Included in the kit is a 19mm hos barb adapter which fits our standard 16x25mm silicone tube. As the steam condenser creates a vacuum to suck out the steam, it is important that the drain hose is not causing counterpressure. We recommend letting the condensed steam flow vertically to a bucket or a drain in the floor. If your floor drain is not close enough, use a second hose from the bucket to the floor drain.
Installing the steam condenser to the steam hat requires a 4" TC clamp fitting and gasket (not included).
The unit ships with a nozzle that supplies 1.1 liters of water per minute at 4 bar pressure. We also offer other nozzles that offers higher or lower flow depending on the water pressure where the system is used and other factors (sold separately). A B40pro requires less cooling capacity than the 6kW+ systems so if water consumption is important to you, you can try the smallest nozzle. Note that the condensated water coming out of the steam condenser will have a higher temperature.
The table below expain how much water flow (l/min) the three different nozzles have based on water suppy pressure. The standard nozzle is called 3002.5.

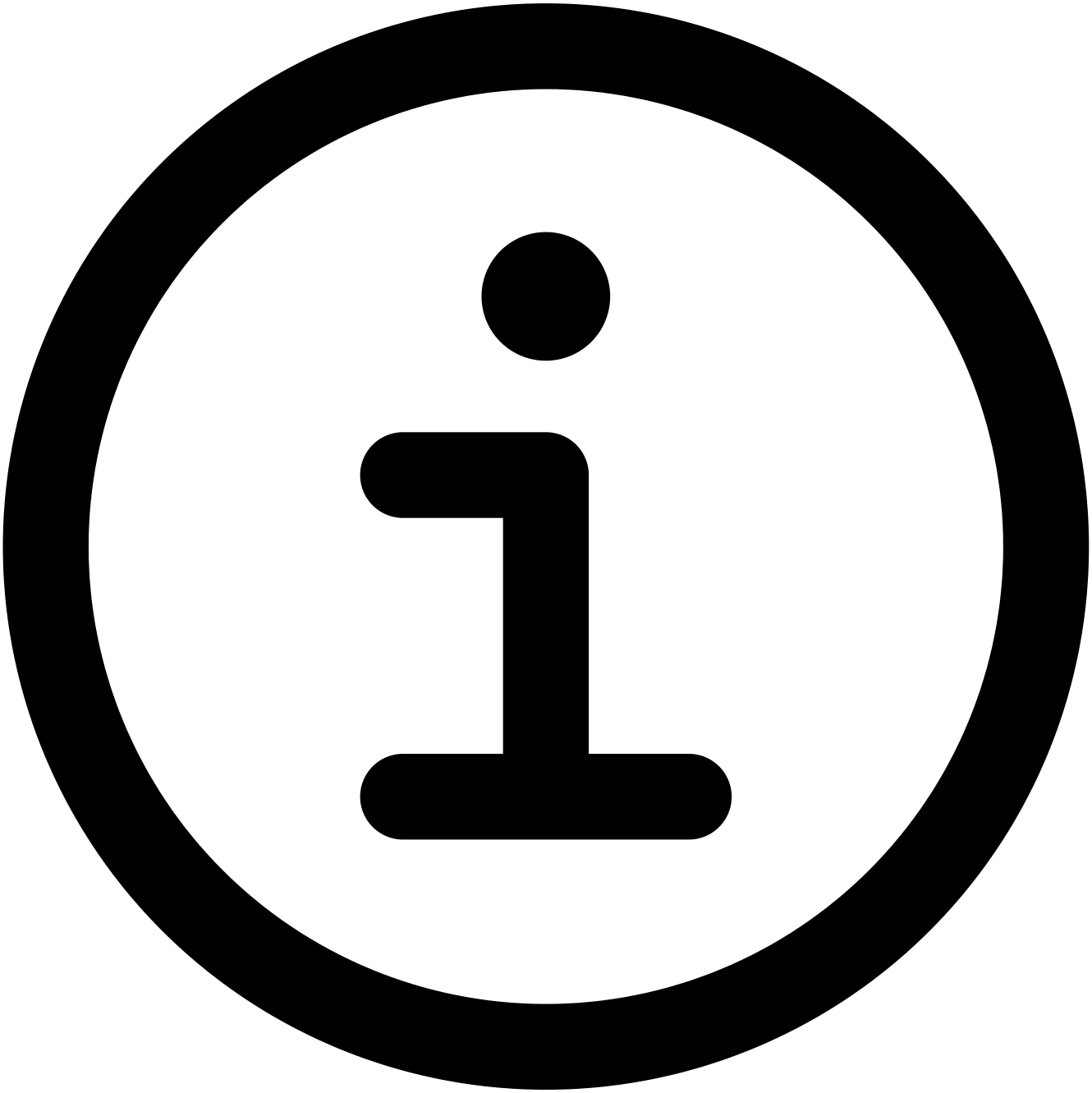
	Flow Rate (l/min)									
Pressure (Bar)	1	1.5	2	3	4	6	7	10	15	20
Pressure (PSI)	15	22	29	44	58	87	102	145	218	290
3001.4	0.32	0.39	0.45	0.55	0.64	0.78	0.84	1	1.2	1.4
3002.5	0.57	0.7	0.81	0.99	1.1	1.4	1.5	1.8	2.2	2.5
3004	0.91	1.1	1.3	1.6	1.8	2.2	2.4	2.9	3.5	4.1

	Spray Angle (°)		
Pressure (Bar)	1	3	7
Pressure (PSI)	15	44	102
3001.4	17	30	31
3002.5	17	30	32
3004	26	30	32

Please take note that you need much less power to keep the boil going with the steam condenser and the risk of the wort boiling over is high when too much power is used. Please reduce boil power accordingly.
To sustain the vacuum, the drain tube from the condenser must not have any counterpressure. We recommend draining to a bucket where the tube is not submerged in the water, or suspend the tube directly over a floor drain.

Steam Condenser assembly

Steam is sucked through the 4" fitting. Condensation happens when the cold water sprays the cold mist downwards. The condensed steam will drain out the bottom.



Tip: Save the hot water coming out of the steam condenser and re-use it for cleaning for save both water and power.

Included in the box

- 1 pcs TC 4" to TC 2" adapter
- 2 pcs 20cm straight TC 2" pipe
- 1 pcs TC 2" Tee
- 1 pcs TC 2" Elbow
- 1 pcs TC 2" 1/8" nozzle adapter with TC34mm input
- 1 pcs TC 2" to 19mm hose barb adapter
- 6 pcs TC 2" Clamp
- 6 pcs TC 2" Gasket
- 1 pcs 1/8" BSP-T nozzle, 30 degrees, 1.1 liters per minute @ 4 bar
- 1 pcs Nozzle extension

You also need

- Steam Hat for your brewing system
- TC 4" Clamp and gasket
- Connection for water inlet (TC34mm to suitable hose barb or Garden connector)
- Hose for condensated water (16x25 mm)