

# Fast and Easy Cooler Mash Tun Build

This is my version of a very simple mash tun build. There are many ways of building a mash tun but to me this way provides a robust and simple method for making a mash tun that will last. There are perhaps cheaper ways of doing it (the AHA has one posted on their website) but I like to use parts that I know are going to hold up for years to come. This design is very similar to Denny Conn's design...which you can Google.

I sourced almost all my parts from Lowe's. I've included part numbers when I could.

You have to supply your own cooler. I recommend using a Coleman Extreme Cooler or an Igloo MaxCold Cooler. But almost anything will work. You can brew almost any 5 gallon batch in 40 to 70 quart cooler. Just for reference: a 40 quart cooler is good for 10 gallons of 1.050 beer or for 5 gallons of a 1.100 beer.

If you save the hardware from the cooler you can always put the cooler back together again and use it as it was intended. On the same note you can upgrade to a larger mash tun with the existing parts listed below!

Store the mash tun with the lid slightly cracked open...or it will smell due to things growing from remaining moisture.

**Total cost of this build (minus the cooler): ~\$30.**

## Parts Needed

1) Washing machine valve. In the plumbing area: (Lowe's Part # 367488)



### Optional Part:

1/2" Boiler Drain with Long Shank. (Lowe's Part # 56964)

Why I didn't use it: shank is too short to put in extra sealing – which may not be necessary, but I don't like leaks. Requires an extra coupling due to the length. More expensive.

Why you should consider it: Higher flow through the valve.



2) Water Heater Connector. In the water heater area: (Lowe's Part # 379107 or 379108)

(Choose the length you want .... I usually get the longest that will fit)



3) Stainless Steel Clamp #8. In the plumbing area: (Lowes Part # 47670)

(Size is important! **Pay attention!** 7/16" to 29/32")



4) Garden Hose Adapter. In the plumbing area: (Lowes Part # 416835)

Note: The part shown and part number are for an adapter with a 3/8" hose size. Most of the hoses homebrewers use are 3/8". You can save some money on the adapter by buying one for a larger hose (1/2" or 5/8") – this will also give a higher flow rate.



### Optional Parts:

Garden Hose Adapter: Lowes Part # 29381

Why I didn't use it: It's plastic. 5/8" hose size = REALLY large diameter!

Why you could consider it: Save ~ \$5.

Garden Hose Mender: Lowes Part # 93423 (in Lawn & Garden Area)

Why I didn't use it: 5/8" hose size = REALLY large diameter!

Why you could consider it: Its Brass. Save ~ \$7.

Garden Hose Mender: Lowes Part # 604460 (in Lawn & Garden Area)

Why I didn't use it: It's plastic. 5/8" hose size = REALLY large diameter!

Why you could consider it: Save ~ \$5.



## The Build

- 1) Cut off the ends from the Water Heater Connector hose. We are interested in using the outer stainless steel braid as a a mash filter. This will be the most difficult part of the entire build and may take some time.
  - a. Tape off the cut location to prevent fraying
  - b. Cut through the hose using a hacksaw or a Chop Saw



- c. Peel back the braid slightly from the plastic core. Grab the core with some pliers and pull it out.



- d. Bend over and crimp one end of the braid



- 2) Remove the drain bung from the cooler. The outer flange is threaded on and comes off pretty easy. No tools necessary. Press the remaining bung out into the cooler.



- 3) Remove the nut from the washing machine valve. Press/twist the washing machine valve into the drain bung hole. Optionally you can put a washer (3/4" ID) and an o-ring between the valve and cooler to prevent potential leaking – it may not be necessary but I don't like leaks. There is a rubber seal on the inside of the hole that needs to remain.



- 4) Inside the cooler, thread on the nut that you removed from the washing machine valve. Make sure the nut is fairly tight, pliers are likely required to hold the nut on the inside while you twist the valve on the outside. Optionally you can use another o-ring between the cooler and nut for sealing...I don't know what size though.



- 5) Almost done! Slide the clamp over the open end of the stainless braid. Slide the open end of the braid over the end of the washing machine shank. Make sure your clamp is positioned over the shank and start tightening up the clamp using a flat head screw driver.



- 6) Thread the garden hose adapter onto the output of the valve. You probably don't want to store the cooler with the garden hose adapter installed on the valve. It hangs down below the bottom of the cooler.



7) Make beer.

