

# HERMS Coil

## Assembly, Operation, & Maintenance

Congratulations on your purchase, and thank you for selecting the HERMS Coil from Blichmann Engineering™. We are confident that it will provide you years of service and many gallons of outstanding beer. This manual will familiarize you with the use, assembly, and the sanitation procedures for the product.

**PLEASE READ AND THOROUGHLY UNDERSTAND THIS MANUAL PRIOR TO USE FOR IMPORTANT SAFETY INFORMATION!**

### About This Manual:

- Warning:** Sections labeled "Warning" can lead to serious injury or death if not followed. Please thoroughly read these sections and understand them completely before use. If you do not understand them or have any questions, contact your retailer or Blichmann Engineering ([www.BlichmannEngineering.com](http://www.BlichmannEngineering.com)) before use.
- Caution:** Sections labeled "Caution" can lead to equipment damage or unsatisfactory performance of the equipment. Please read these sections thoroughly. If you have any questions, contact your retailer or Blichmann Engineering ([www.BlichmannEngineering.com](http://www.BlichmannEngineering.com)) before use.
- Important:** Sections labeled "Important" should specifically be followed to ensure satisfactory results with the product.

Parts List	Quantity
HERMS Coil	1
1/2" QuickConnect™ Elbow	2

## Preparing Your Kettle

This portion of the manual will explain how to mark and drill your kettle to install the HERMS coil. If you have a kettle that has been pre-punched please skip this step.

Install the HERMS coil on the opposite side of a whirlpool fitting.

We recommend the coil placement be with an 8 inch arch length to the left or to the right from the front face of your BoilerMaker™. As shown in **Fig. 1**.

Each kettle has a specific recommended placement for holes. The placement of the HERMS coil will accommodate room for the BoilCoil™ and other Kettle accessories. Refer to (Fig. 2) and the chart below for placement.

Kettle Size	Length 1 (Inches)	Length 2 (Inches)
7.5 Gallon	5.25"	7.75"
10 Gallon	5.25"	7.75"
15 Gallon	5.25"	9.50"
20 Gallon	5.25"	9.50"
30 Gallon	5.25"	9.50"
55 Gallon	10"	9.50"

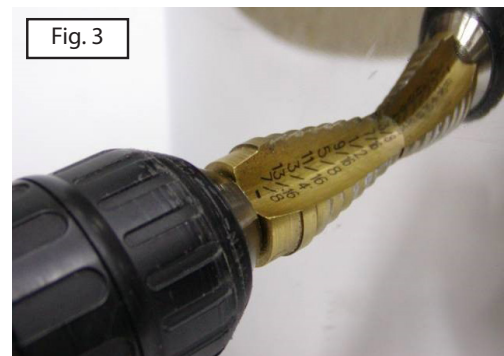
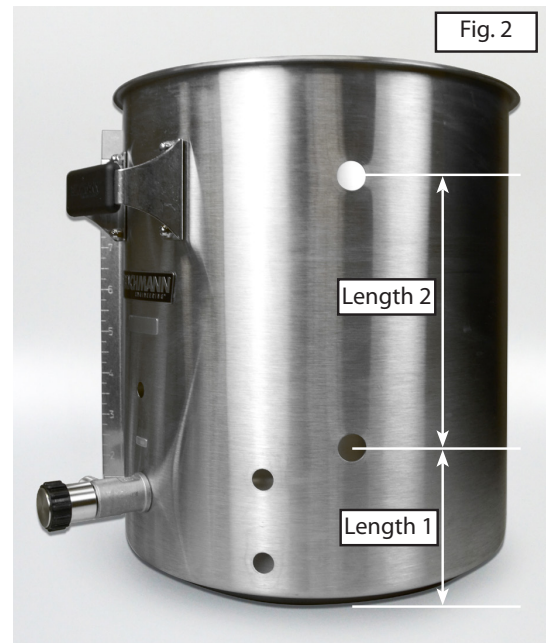
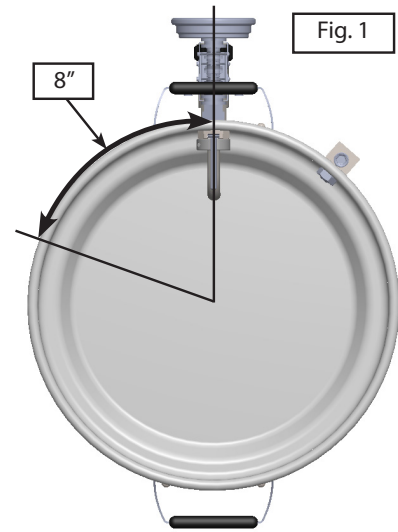
Mark the kettle with your measurements and use an automatic center punch to indent the location to guide the drill.

**Warning:** Always follow manufacturer instructions and safety precautions when using hand and power tools.

After marking the kettle with the automatic center punch, use a 3/16" drill bit at moderate speed to make a pilot hole at each center punch mark. Excessive speed will damage drill bits quickly. Make certain the center punch marks are indented deep enough to prevent the drill bit from moving off the mark when you start drilling. If necessary, use the automatic center punch multiple times to increase the depth of the indentation.

Use a step drill and enlarge the hole to 13/16" as shown in **Fig. 3**. Step drills are available through most hardware/home improvement centers or through McMaster.com (part# 8841A24 or 89315A42 for TiN coated).

Alternately, a 13/16" knockout punch (McMaster.com part 3449A999) can be used.



## Installation

Install the HERMS Coil with an adjustable wrench while holding the coil on the inside. **DO NOT** over-tighten.

## Operation

With the coil installed, heat the HLT and recirculate wort through the HERMS coil. This will allow you to maintain a constant temperature.

We recommend using a whirlpool in the HLT to improve heat transfer to the HERMS Coil. This will increase efficiency of your strike temperatures. Review the charts below for heating data.

### Using a Whirlpool in Your HLT-

- Reduces time to strike by ~30%
- Reduces HLT-MT Temp differential by a few degrees

HERMS Heating Times for 7.5-55 Gal MT & HLT					
	HLT-MT set differential F°	Strike water vol. gal	HL Vol. (gal)	Time to reach strike temp.	Time to reach within 5 deg of strike temp.
55 Gal Kettle without Whirlpool	5	40	48	6 hrs 28 mins	2 hrs 40 mins
55 Gal Kettle with Whirlpool	3	40	48	4 hrs 20 mins	2 hrs 8 mins
30 Gal Kettle without Whirlpool	5	20	25	3 hrs 15 mins	1 hr 20 mins
30 Gal Kettle with Whirlpool	3	20	25	2 hrs 10 mins	1 hr 5 mins
20 Gal Kettle without Whirlpool	5	15	17	2 hrs 25 mins	1 hr
20 Gal Kettle with Whirlpool	3	15	17	1 hr 40 mins	50 mins
15 Gal Kettle without Whirlpool	5	10	13	1 hr 40 mins	40 mins
15 Gal Kettle with Whirlpool	3	10	13	1 hr 5 mins	30 mins
10 Gal Kettle without Whirlpool	5	7	8	1 hr 10 mins	30 mins
10 Gal Kettle with Whirlpool	3	7	8	45 mins	20 mins
7.5 Gal Kettle without Whirlpool	5	5	7	50 mins	20 mins
7.5 Gal Kettle with Whirlpool	3	5	7	30 mins	15 mins

*Test results for a mash target strike temperature of 150°F and hot liquor set temperature of 155°F or 153°F when using whirlpool.*

Large & Small HERMS Coil Flow Rate and Pressure Drop			
Large HERMS		Small HERMS	
Flow Rate (gal/min)	Pressure Drop (psi)	Flow Rate (gal/min)	Pressure Drop (psi)
2.25	6.8	2.5	6.4
2	5.4	2	4.5
1.5	3.8	1.5	2.9
1	1.7	1	1.5
0.5	0.9	0.5	0.9

## **Cleaning and Maintenance**

Drain the liquid from coil and rinse with water. Circulate Powdered Brewery Wash through the coil and rinse with water. Drain water from the coil and let dry. Clean the outside of the coil with Powdered Brewery Wash and a brush. Rinse outside and let dry.

## **Blichmann Engineering Product Warranty**

### **A. Limited Warranty**

1. Blichmann Engineering warrants to the original purchaser that this product will be free from manufacturing defects in material and workmanship for a period of one (1) year from the date of purchase by the customer. Proof of purchase is required. Blichmann Engineering's obligation to repair or replace defective materials or workmanship is the sole obligation of Blichmann Engineering under this limited warranty.
2. The limited warranty covers only those defects that arise as a result of normal use of the product and does not cover any other problems, including, but not limited to, those that arise as a result of:
  - a. *Improper maintenance or modification;*
  - b. *Damage due to incorrect voltage or improper wiring by customer;*
  - c. *Operation outside of the product's specifications;*
  - d. *Carelessness or neglect to operate the product in accordance with instructions provided with the product;*
  - e. *Damaging the tamper label on the product;*
  - f. *Damage by over-tightening the fasteners;*
  - g. *Failure to follow cleaning and / or maintenance procedures; or*
  - h. *Exceeding published operational temperatures.*
3. Blichmann Engineering reserves the right to request delivery of the defective component for inspection before processing the warranty claim. If Blichmann Engineering receives, during the applicable warranty period, notice of a defect in any component that is covered by the warranty, Blichmann Engineering shall either repair or replace the defective component with a new or rebuilt component at Blichmann Engineering's option.
4. Blichmann Engineering must be notified within seven (7) days of the delivery date of any shipping damage. Customer is responsible for shipping damage outside of this time period. Approval for return must be provided by Blichmann Engineering prior to any return. Customer is responsible for keeping all original packaging material for warranty returns. Blichmann Engineering is not responsible for damage from improperly packaged warranty returns, and these repair costs will be the sole responsibility of the customer. Shipping costs for warrantee returns are covered only for the contiguous United States.
5. Blichmann Engineering's limited warranty is valid in any country where the product is distributed.

### **B. Limitations of Warranty**

1. Any implied warranty that is found to arise by way of state or federal law, including any implied warranty of merchantability or any implied warranty of fitness, is limited in duration to the terms of this limited warranty and is limited in scope of coverage to this warranty. Blichmann Engineering disclaims any express or implied warranty, including any implied warranty of fitness for a particular purpose or merchantability, on items excluded from coverage as set forth in this limited warranty.
2. Blichmann Engineering makes no warranty of any nature beyond that contained in this limited warranty. No one has authority to enlarge, amend, or modify this limited warranty, and Blichmann Engineering does not authorize anyone to create any other obligation for it regarding this product.
3. Blichmann Engineering is not responsible for any representation, promise, or warranty made by any independent dealer or other person beyond what is expressly stated in this limited warranty. Any selling or servicing dealer is not Blichmann Engineering's agent, but an independent entity.

### **C. Limitations of Liability**

1. The remedies provided in this warranty are the customer's sole and exclusive remedies.
2. Except for the obligations specifically set forth in this warranty, in no event shall Blichmann Engineering be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether or not advised of the possibility of such damages.
3. This warranty does not cover, and in no event shall Blichmann Engineering be liable for, travel, lodging, or any other expense incurred due to manufacturing defects in material and workmanship, or any other reason.
4. Any performance of repairs after the warranty coverage period has expired or performance of repairs regarding anything excluded from coverage after this limited warranty shall be considered good-will repairs and they will not alter the terms of this limited warranty, or extend any warranty coverage period.
5. Venue for any legal proceedings relating to or arising out of this warranty shall be in Tippecanoe County, Indiana, United States, which courts will have exclusive jurisdiction.

### **D. Local Law**

1. This warranty gives the customer specific legal rights. The customer may also have other rights that vary from state to state in the United States or other countries.
2. To the extent that this warranty is inconsistent with local law, it shall be deemed modified, only to the extent necessary to be consistent with such local law.