Updated 6/13/24

Smoky Lake Maple Products™
SmokyLakeMaple.com

# Raised Flue Pan Set

## SAME SIDE REVERSE (SSR) CONFIGURATION


YouTube *Check Out Our Instructional Videos On YouTube.*

## INCLUDES

A | **SSR Draw-Off Manifold w/Brace & Food-Grade Gaskets**

B | **Positive Drain Draw-Off Boxes** *(Finished syrup is drawn off near the rear of the Syrup Pan where the heat is most concentrated).*

C | **Eleven 7" Flues** *(On 2' wide pans)*

D | **Angled Thermometer Ports w/One Maple Thermometer**

E | **Three Stainless Steel Plugs** *(¼")*

F | **Two Stiffened Gaskets** *(Not visible here. See p 2)*

G | **Built-in 360º Handles**

H | **Float Boxes w/Fittings & Drain** *(See p 3)*

J | **Ports for Optional Sight Glasses** *(See p 3)*

K | **Stainless Draw-Off Valve w/Food-Grade Gaskets** *(Not shown here)*

- **Reversible Front Pan by Swinging Two Handles**
- **Structurally Formed-in Syrup Pan Dividers**
- **22 ga. Mirror Finish Stainless Steel**
- **Lifetime Limited Warranty on TIG Welds**
- **Smooth, Hemmed Edges**
- **Handcrafted in USA**

# CONTINUOUS FLOW

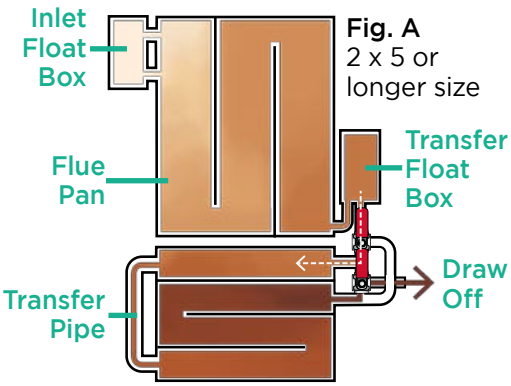



**Fig. A**
2 x 5 or longer size

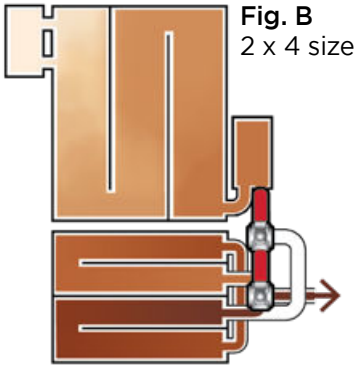


**Fig. B**
2 x 4 size

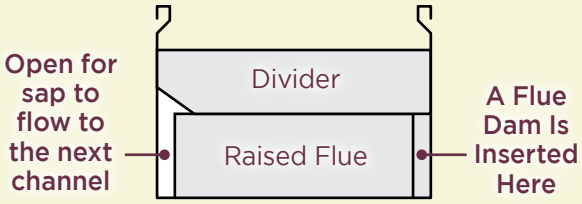
- The raw sap enters via the inlet float box at the rear of the evaporator, and makes its way through 3 consecutive channels in the flue pan.
- Sap exits the Flue Pan via the Transfer Float Box and then enters the Front Pan via the SSR Manifold.
- Your current SSR setting determines which direction the sap travels through the four channels of the Front Pan. *(See Fig. A and B above, and "Switching Direction" on page 4 for more details.)*
- Syrup draws near the back of the front pan where there is the highest concentration of heat.
- NOTE: The front pan of a 2 x 4 size pan set is configured slightly differently, but operation is the same.

# FLUE DAMS

These preinstalled blocks direct the sap through the channels of your flue pan for continuous flow boiling.

If you remove the dams during cleaning, you will need to reinstall them before boiling again. They are friction fit.

## Cross Section View of Your Flue Pan




# TRANSFER PIPE CONNECTION

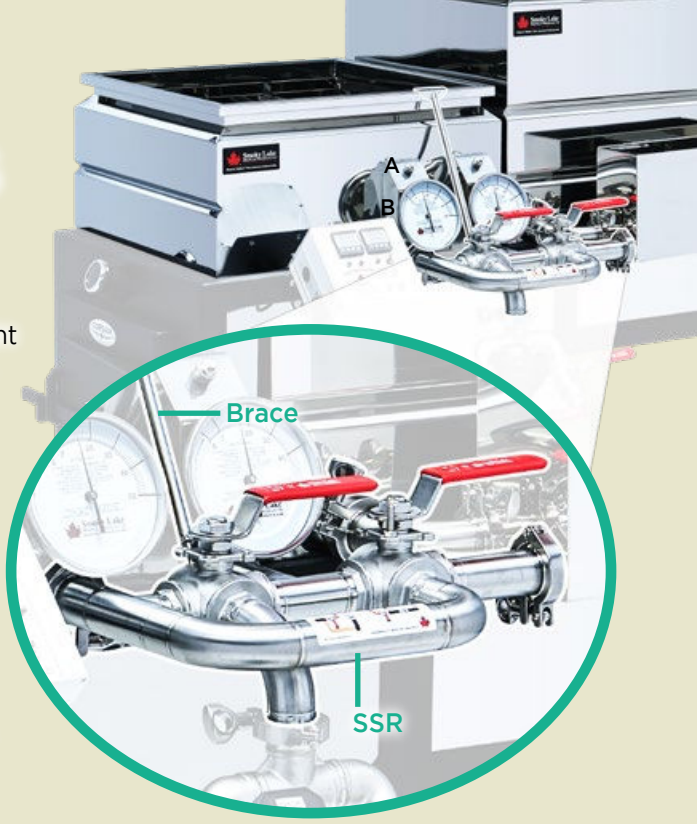
The Transfer Pipe connects the front-most and back-most channels of the Front Pan. Connect this pipe using the Sanitary Clamps and Food Grade Gaskets provided. In some cases, this pipe may be located on the same side of the pan as the SSR manifold.

# STIFFENED GASKETS

- One should be placed between the front pan and the flue pan. The second should be placed behind the flue pan.
- For more information, see our website: SmokyLakeMaple.com/stiffened-gasket

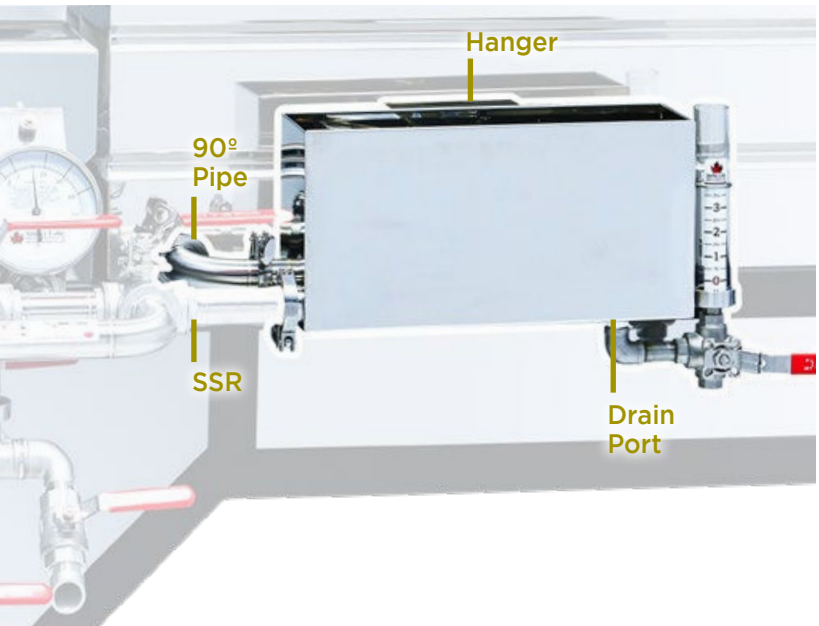
# DRAW-OFF CONNECTIONS

- The SSR manifold connects the Transfer Float Box to the Front Pan. It dictates the flow direction and serves syrup to the Draw-Off Valve.
- Connect the stainless steel Brace to help support the weight of the SSR. The Brace hooks onto the rim of the Front Pan.
- Attach the SSR to the Draw-Off Boxes on the Front Pan and to the Transfer Float Box using the Sanitary Clamps and Food Grade Gaskets provided.
- The upper 1/4" ports on the draw off boxes [A] can hold a Syrup Probe for an optional Auto Draw-Off System. When not in use, these ports can be plugged. Use plumber's tape to enhance seal and prevent thread binding.
- The lower 1/4" ports on the draw off boxes [B] will hold your Maple Thermometer. Install the thermometer into the channel that is currently being used to finish the syrup. *(See SSR diagrams on Page 4.)* Use plumber's tape to enhance seal and prevent binding. Do NOT over tighten.




# TRANSFER FLOAT BOX

- This Float Box regulates sap depth in the Front Pan.
- Hang the Float Box on the bracket near the front of the Flue Pan.
- Use the 90º pipe to connect the Float Box to the Flue Pan. Connect the second 1-1/2" port to the Same Side Reverse Assembly. Use the Sanitary Clamps and Food Grade Gaskets provided.
- Connect a Ball Valve or Sight Glass to the 1/2" drain port on the bottom of the Float Box.




# INLET FLOAT BOX

- This Float Box regulates sap depth in the Flue Pan.
- Hang the Float Box on the bracket near the rear of the Flue Pan.
- Connect the two 1-1/2" ports to the Flue Pan using the Sanitary Clamps and Food Grade Gaskets provided.
- Connect the top 3/4" port to your Head Tank of sap. Never exceed 10 feet of head pressure.
- Connect a Ball Valve or Sight Glass to the 1/2" drain port on the bottom of the Float Box.


*See our video for more details:*
*SmokyLakeMaple.com/inlet-float-box*

# WARNINGS

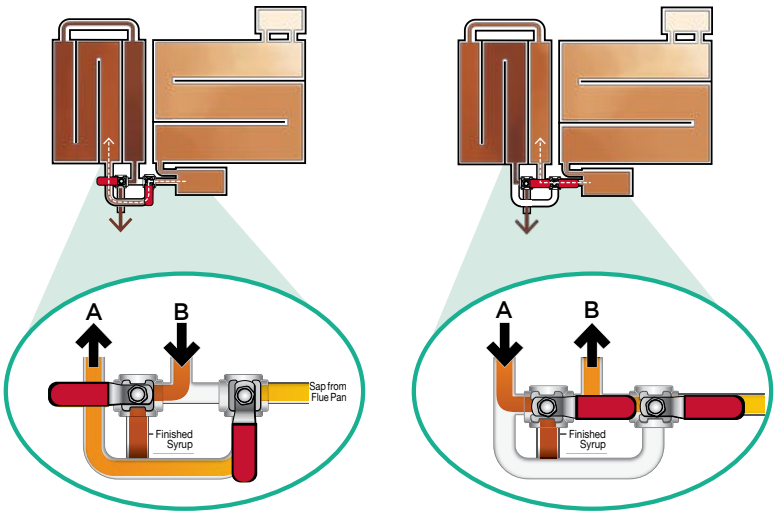
- **Maintain 2" sap depth throughout the system; especially until you have gained experience.** *(In the flue pan, you need to maintain 2" ABOVE the flues.)*
- Use plumber's tape on all threaded connections to enhance the seal and prevent thread binding.
- BEFORE lighting the evaporator, review the Start Up Checklist. SmokyLakeMaple.com/start-up
- Wear protective clothing such as leather gloves and a face shield.
- Keep a spare bucket of sap or water on hand.
- Keep a fire extinguisher handy. Make sure all of your helpers know where it is and how to operate it.

# REVERSING THE DIRECTION OF THE FLOW

- **WHAT IS NITRE?**
  In the front pan, it is very common for nitre — also called sugar sand — to build up on the floor of the pan. This collection of minerals precipitated as the sap became more condensed. You will find that the amount of nitre in the sap will vary geographically as well as year to year.
- **WHY IS IT IMPORTANT TO REMOVE THE BUILD UP?**
  A large build-up of nitre can harm your front pan and create off flavors in your maple syrup.
- **WHY CHANGE THE DIRECTION OF THE SAP FLOW?**
  When less dense sap travels in the opposite direction it is able to pick up nitre from the pan floor.
- **HOW DO I CHANGE THE DIRECTION OF FLOW?**

  The sticker on the Same Side Reverse System tells you which direction the handles should be facing to reverse the flow. A system with left side draw-off will be different than right side draw-off. The gradient of color in the diagrams represent the density gradient. i.e. The lighter color represents sap with low sugar density while the darker brown is higher density sap. *(See page 2.)* You do NOT need to drain the pan before reversing the flow. The density gradient will reestablish itself on its own.

### SSR Diagrams for Evaporators with RIGHT SIDE Draw-Off




# CLEANING

### Prior to First Use

Make sure all of the protective vinyl has been removed from the stainless steel (if applicable). Then, rinse the pan with clean water.

### After Use

- **Natural Method:** PRE-mix a 50/50 solution of white vinegar and hot water. Soak for up to 24 hours, drain and spray out with a hose.
- **Barkeeper's Friend:** Many folks have reported good results with this common household product. The manufacturer's website confirms that it is safe for use on cookware.

### More Tips

- Visit SmokyLakeMaple.com/cleaning-pan
- In addition to cleaning the pans, periodically clean all hardware and connections. Eliminate all nitre build-up.
- NOTE: Excessive exposure to **any** cleaning agent/acid — including vinegar — could harm stainless steel.