



Divided Pan

A.K.A. CONTINUOUS FLOW PAN



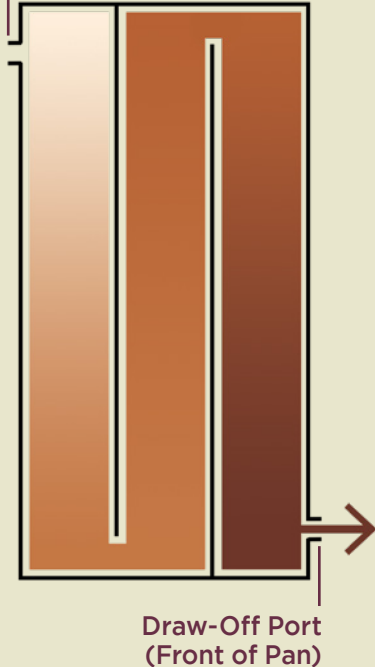
Divided Pans Enable “Continuous Flow Boiling.” Instead of Making Syrup in One Large Batch, Finished Syrup is Drawn Off Periodically.

 Check Out Our Instructional Videos On YouTube.

INCLUDES

- A | Stainless Steel Ball Valve**
Food Grade. Easy-grip handle. NEVER nickel plated.
- B | Angled Port w/Maple Thermometer**
3" dial, 6" stem, 0-50 Scale
- C | Level Assist Feature**
Available exclusively from Smoky Lake Maple Products. This 2" fill line helps you level the pan before boiling.
- D | Built-in, Full Length Handles**
- E | Structurally Formed-in Dividers**
Never tacked in afterward as an afterthought.
- F | Plugs for any unused ports** *(Not visible in photo)*
- ✓ **Reversible** *(See page 4)*
- ✓ **22 ga. Mirror Finish Stainless Steel** *(Superior heat transfer compared to thicker gauges of stainless)*
- ✓ **Lifetime Limited Warranty on TIG Welds**
- ✓ **Smooth, Hemmed Edges**
- ✓ **Handcrafted in Hilbert, WI**

Sap Inlet
(Back of Pan)



PATH OF THE SAP

- The sap is introduced to the system at the rear of the evaporator, at the opposite corner of the Draw-off Valve.
- Next, sap will travel through the three consecutive channels of the pan; making its way toward the draw-off valve. The longer the sap is in the pan, the further along it is pushed through the channels and the denser it becomes.
- Use a maple thermometer or auto draw-off system to know when it is time to draw off syrup. Verify the sugar density with a Hydrometer and Murphy Cup.

CONTINUOUS FLOW

- Rather than waiting for the entire pan to become maple syrup in one big batch, this system will allow you to draw off syrup a little bit at a time throughout the boiling process.
- A “Density Gradient” will develop in the pans. *(See illustration to the left)* As the sap works its way through the channels, it becomes darker and darker *(more condensed)*. The sap near the draw-off valve has been in the system for the longest period of time and is closest to completion.
- See Thermometer Set Up below for more information on drawing off finished syrup.
- At the end of a boil, the sweetened sap remaining in your Divided pan can be drained into food grade buckets. Preserve this sweetened sap by keeping it very cold until you are ready to boil again.

SET UP

Remove all protective vinyl and instructional stickers.

Draw-Off Port (Front of Pan)



- At the front of the pan, connect the stainless steel Ball Valve using the stainless steel Nipple. (A Nipple is a short pipe that has male threads on both ends.) Use plumber's tape on these threaded connections to enhance seal and prevent binding.
- Note: The front and the back of the pan look the same because the pan is reversible. The “front” of the pan is the end nearest the firebox door.
- How to open and close a Ball Valve:
SmokyLakeMaple.com/open-ball-valve

Thermometer Port (Front of Pan)

- To the right of your Draw-Off Valve, connect the Maple Thermometer into the angled, 1/4" port. Use plumber's tape on this threaded connection to enhance seal and prevent binding.
- A Maple Thermometer is calibrated before each boil. It is used to monitor the progress of your sap while boiling. When the thermometer reaches 7°F above the boiling point of water, syrup is ready to be drawn off the pan. See your Maple Thermometer direction sheet for additional details and double check density with a hydrometer and Murphy Cup.



SEE VIDEO: SmokyLakeMaple.com/draw-off-syrup

Set Up Continued on page 3

SAP LEVEL

Level Assist

Using the 2" depth line on each of the pan's end panels will help you protect the pan from overheating and scorching. To use this feature:

- Fill your pan to the 2" depth mark before you begin to boil.
- Make sure the pan is sitting level so that sap depth is consistent throughout the pan.
- Video: [SmokyLakeMaple.com/level-assist](https://www.smokylakemaple.com/level-assist)

While You Are Boiling...

The main purpose of boiling sap is to remove water to condense the maple sugars. The water is removed through steam. This means that **in order to maintain 2" of depth in your pan, you will need to continuously add more sap.** See "Ways to Maintain Depth"

Beware of Foam



Foam will periodically develop on the surface of the sap, masking the actual liquid depth. Eliminate the foam by adding ONE DROP of vegetable oil to whichever compartment needs it.



Fig. A
Feed Pan



Fig. B
Float Box

WAYS TO MAINTAIN DEPTH

A) Feed Pan (A.K.A. Warming Pan)

Trickles prewarmed raw sap into the Divided Pan. Rate of flow is manually adjusted with a valve. See Fig A

B) Float Box

Automatically adds sap to the Divided Pan as it is needed to maintain a constant preset depth. See Fig B

C) Periodically add sap by hand

Slowly pour sap into the Divided Pan at the location of the sap inlet port.

SET UP CONT'D

Sap Inlet (Back of Pan)

- This female port is located at the rear of your pan, in the opposite corner from the draw-off port.
- This port can either be used with an optional Smoky Lake Float Box or be plugged. (A plug is included in the Pan Accessory Kit)

Thermometer Port (Back of Pan)

- To the right of your Sap Inlet is an angled, 1/4" port which can be plugged using the provided 1/4" Hex Plug. Use plumber's tape to enhance the seal and prevent binding.
- Temperature is not monitored at the sap inlet. However, this pan is reversible. See "Reversing the Flow" on page 4.

WARNINGS

- **Maintain 2" sap depth throughout the pan; especially until you have gained experience.**
- 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](https://www.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.

GASKETS

Rail Gasket

- This gasket lays on the top rail of your arch, underneath your pan. (Do NOT glue.)
- Rail Gaskets increase efficiency by preventing cold air from being pulled underneath the pan while boiling.
- Corsair™ Evaporators with Divided Pans work well with a fluffier gasket called “Insulated Rail Gasket”. Alternatively, “Braided Rope Gasket” also works great for 2' x 4' or smaller Corsairs.
- StarCat™ and Dauntless™ Evaporators were designed to be more straight forward and can certainly function without gaskets. That being said, the 1"-wide Rail Gasket with adhesive is a popular upgrade and will increase boil rate. See SmokyLakeMaple.com for details.



Stiffened Gasket

- This style of gasket applies to Smoky Lake Corsair™ evaporators. It is placed behind the pan to prevent cold air from entering, and exhaust from escaping the arch.
- For more information, see our video: SmokyLakeMaple.com/stiffened-gasket



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 had good results with this common household product. The manufacturer's website confirms that it is safe to use on cookware.

More Tips

- smokylakemaple.com/cleaning-pan
- NOTE: Excessive exposure to any cleaning agent/acid — including vinegar — could harm your pan.

REVERSING THE FLOW

- **WHAT IS NITRE?**
Nitre is a collection of minerals that has “fallen out” of the sap as it became more condensed. Learn more at smokylakemaple.com/sugar-sand
- **WHY CHANGE THE DIRECTION OF THE SAP FLOW IN THE PAN?**
When less dense sap travels in the opposite direction it is able to pick up and remove the nitre from the pan floor.
- **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.
- **HOW DO I CHANGE THE DIRECTION OF SAP FLOW IN MY PAN?**
 1. Make sure the fire and coals in your arch are completely extinguished.
 2. Number several clean, food grade buckets. 1, 2, 3, and so on. Draw off the sap into bucket 1. This will be the bucket with highest sugar density. Continue drawing off sap into the consecutive buckets, so the higher the number on the bucket, the lower the sugar density of the sap.
 3. After the pan is drained, turn it 180°. Reconfigure accessories so that sap inlet is in the back and the draw-off and thermometer is in the front.
 4. Reintroduce sap to the pan by gently pouring the highest numbered bucket (the least dense sap) at the new draw-off location. Pour each consecutive bucket into this same location. With each new bucket you pour in, the higher density sap is pushing lower density sap back further into the channels. By pouring the sap back into the pan in this fashion, you are reestablishing a density gradient.