

**Agitation:** Start agitation by inverting the tank, holding it inverted for 1 second, then turning it right side up for 1 second. Everyone develops their own favorite technique, so you'll want to experiment. That said, we've found that 4 inversion cycles every 30 seconds is a good starting point.

**Emptying the tank:** remove the *Vent* cap to allow air to enter the tank while pouring out the *Fill/Drain* port.

*We like to hold the tank with the palm of our hand and wrap our thumb around the Vent port to ensure that the lid stays down while pouring.*

*Depending on far you tilt the tank, a small amount of liquid may remain inside after you empty it; tilt the tank just past horizontal for a second and then dump out any residual liquid.*

**Final Wash:** Our recommended wash procedure:

1. Fill with fresh water, wait 10 seconds and drain; repeat two more times.
2. Refill, cap, agitate gently for 30 seconds, drain.
3. Refill, cap, agitate gently for 1 minute, drain, Repeat two more times.
4. Refill, cap, agitate gently for 2 minutes, drain.
5. Add 4-6 drops of *SP-H2O Flow II*, install caps and agitate for 30-60 seconds. The film should now slide out of the holders with almost no resistance.

Of course, your results may vary, we recommend testing with a residual fixer test kit.

More information is available on our websites:

<https://www.stearmanpress.com>

<https://shop.stearmanpress.com>

Email us at: [info@stearmanpress.com](mailto:info@stearmanpress.com)



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# SP-645 Max

## 4" x 5" Sheet Film Processing System

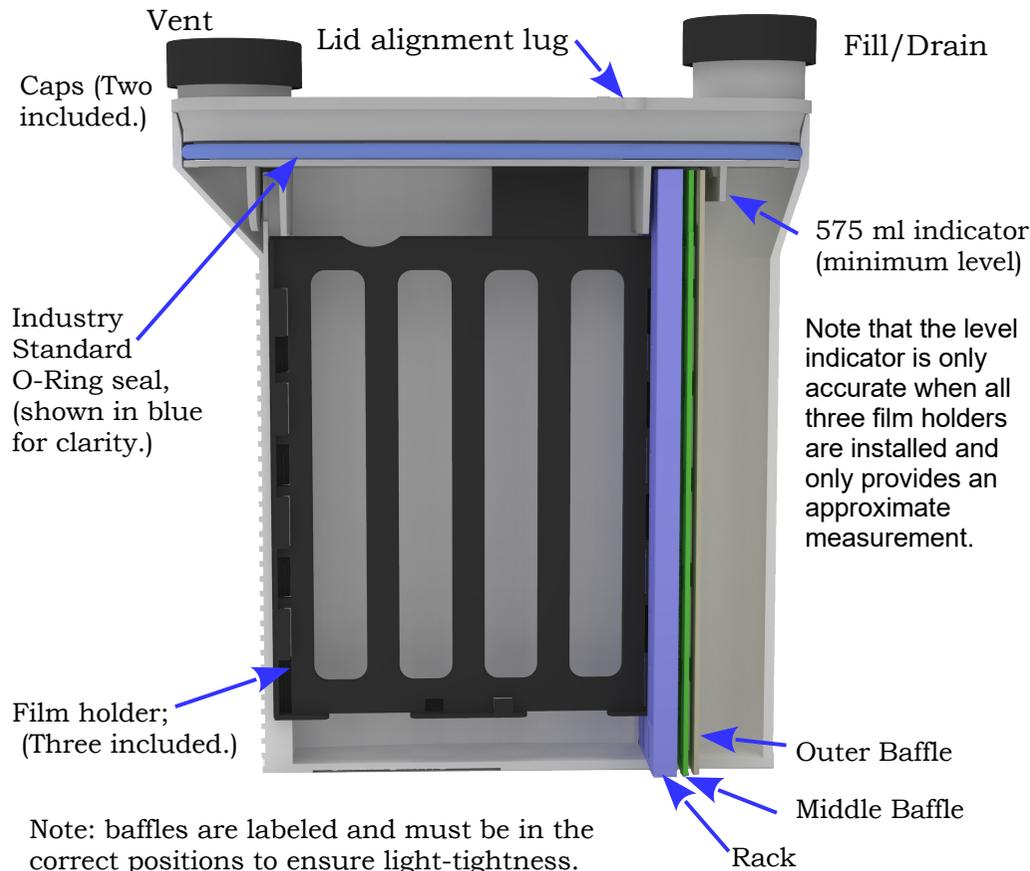


- Process up to six sheets of 4x5 film.
- Uses only 20 oz (600ml) of solution.
- Loads just like a film holder.
- Daylight safe.
- Fills and drains quickly.
- Inversion agitation.
- Textured for better grip.

### Getting started checklist:

- Make sure the O-ring seal is properly seated in the groove.
- Check that the "Rack" is orientated with the slots for the film holders facing toward the inside of the tank.
- Confirm that the baffles are in the correct slots (see diagram).
- Check to make sure that the film holder's "fingers" are free from any molding "flash".
- Make sure the notches in the hold-down lugs allow the lid to close with the film holders in place.
- Wet the O-ring with water and seat the lid several times to make sure everything slides together easily. Use the alignment lugs to determine the orientation.
- Verify that the caps have seals in them and that they fit correctly on the lid. Don't over tighten.

# Inside the SP-645 Max



Note: baffles are labeled and must be in the correct positions to ensure light-tightness.

**Warning: DO NOT USE AN SP-445 LID ON THE SP-645 MAX!**  
*The hold-down tabs are too long and it won't close!*

**Replacement parts:** Parts are available from our online store. Note that the caps and the O-ring are *off-the-shelf* and available from numerous sources.

Caps: 33/400 Phenolic / ploy dome  
O-ring: dash 242; 0.139" NBR

## Warranty:

**Use at your own risk! The SP-645 is warranted to be free of manufacturing defects for 90 days. Warranty limited to refund or replacement. Under no circumstances is Stearman Press liable for any additional damages. Standard terms and conditions apply.**

# Using the SP-645 Max

*We suggest that you practice loading the film holders in daylight with scrap film. You should also practice loading the film holder into the tank. Now do it with your eyes closed.*

## Loading the tank:

Remove the lid, make sure rack and baffles are correctly installed. Insert the film holders into the tank.

*Starting with all the film holders in the tank ensures that:*

- a) you can find them easily in the dark.*
- b) you won't cross-load a film holder in the wrong slots.*

*You probably need to do the next steps in complete darkness.*

Remove a film holder and carefully slide a sheet of film into place, emulsion side up. (See the video on our website for a demo of the slickest way to load.)

Repeat for the other side.

Place the film holder into the tank.

Repeat with the other film holder.

Use the locator nubs to align the lid with the tank.

Press the lid into place.

*Note: one port is marked Fill/Drain and the other is marked Vent.  
Always fill and empty the tank using the Fill/Drain port.*

## Filling the tank:

1. Remove both caps.
2. Quickly fill the tank via the *Fill/Drain* Port.
3. Start your timer. (It is important to be consistent.)
4. Tap the tank firmly on the bench to dislodge any air bubbles.
5. Install the *vent* cap.
6. **While gently squeezing the tank, (the liquid level in *Fill/Drain* outlet rise a bit), tighten the *Fill/Drain* cap and then release the squeeze. We call this the "Squeeze Play" and it is **EXTREMELY** important! Atmospheric pressure will now press the sides of the tank against the O-ring forming a water-tight seal. The pressure will also hold the lid on the tank; eliminating the need for a latching mechanism.** A small gap between the lid and the top of the tank is normal and won't affect the seal.