Honey Stick Machine
Complete Kit
HH-100

MANN LAKE
WE KNOW BEES

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Now that you have decided to make Honey Sticks, there are a few things you should know:

1. You are going to get sticky - anytime you work with bees or honey, it is inevitable. Protect your clothes and work surface accordingly.

2. The time it takes to fill the straws is directly related to the amount and temperature of the honey in your pail. Working with room temperature honey in the spring is going to be different than working with room temperature honey in the middle of the hot summer. Working in a heated room or with a bucket heater on your pail will increase the flow of the honey and make the process go faster.

3. Sealing the Honey Sticks at the base (the second seal) is going to result in a “burnt” honey smell when honey gets onto the sealer. Have a container of hot water and a wash rag handy to clean off the sealer between fillings.

Now, let’s get started!

Make sure before you begin that all equipment is clean and wash any as necessary with warm water and a soft cloth.

You’re going to need straight and phillips screwdrivers, socket wrench with a 9/16” deep socket, and an adjustable wrench.

Note: you are provided with 10 male adapters; 1 is extra in case one breaks and needs to be replaced. Teflon tape is optional to place around the male adapters.

Install the hose adapter into the shut-off valve using an adjustable wrench to tighten.
Install one end of your hose assembly onto the hose adapter and slide the clamp as far up onto the hose adapter as possible. The clamp should go up to the hose adapter. Tighten with a straight head screw driver.

Install the opposite end of the hose assembly to the hose adapter located on the bottom of the pail. Again, make sure the clamp is moved all the way up to the hose adapter.

The easiest way to install the male adapters is with a 9/16” deep socket. If you don’t have one available, use an adjustable wrench. Tighten them until they stop turning. Note: you will still see some threads between the adapter and the ball valve. This is normal.

Next you will assemble the pole to hold the bucket. It comes in 2 pieces that need to be joined. The fitting is already installed on one end. Just slide the hooked end into the fitting and tighten with the flat head screwdriver.

Once the arm pieces are joined, slide the bottom of the arm onto the table bracket. If there is a screw through the end of the arm, align the screw with the slot in the bracket. Once you have installed the bracket onto the table or counter you will be using, you can adjust the direction of the pail using the upper connection from the previous step. Simply loosen the screw and reposition the arm to the desired direction and retighten.

Attach the bracket to your work surface and tighten well.
Add your sealer to your work surface and you are ready to begin.

First and foremost, turn off the red shut-off valve and the ball valves.

Fill your pail with honey, keeping in mind that the temperature of your room and your honey play a large role in how quickly the honey moves. Attaching a heat lamp (available at a farm store designed to keep chicks warm) to the pole will aid in warming the honey and increasing the flow rate.

Place one straw on each of the male adapters. Turn on your red shut-off valve and each of the ball valves. The honey will start to flow into the straws. Especially on the first set of straws you will see some air bubbles, that is normal and unavoidable. You can squeeze that honey back into your pail if that is unacceptable to you. The honey flows at a pretty consistent rate with the straws closest to the shut-off valve filling first. Fill straws to be within about 1/2” (1.27 cm) of the top of the straw. Stop the flow when the straws are filled by either the shut-off valve or the individual ball valves. Small amounts of leakage between the straw and the male adapters is normal.
Now that the straws are filled, pick up the manifold and hold the ends of the straws in the sealer. Seal as close to the honey as you can. Press the sealer down and hold it until it cycles (you can hear it), lift up just a little and push it down again and hold it for several seconds after it cycles off. This gives the seal time to cool, making it much more reliable.

Check and see that the seal is viable. Now push the straws into the sealer until the male adapters are just outside the sealing area. Repeat the sealing procedure as above on the base of the straw. Remember that in some instances there is honey between the layers of the straw. It might take a little more time, and you will smell burnt honey that gets on the sealer. You can seal above the honey level and have a small air pocket in the straw if you so choose.

While the sealer is closed and after the seals have cooled, pull the manifold away, and the straws will come off of the manifold.

You now have 9 honey straws. Place the sealed straws in a sink or dish pan of warm water. This will clean off any honey on the outside of the straw. Once you are finished filling all that you want, take the straws from the sink/pan, dry them and trim the ends.

We produced straws that were around 6” in length after being trimmed. These straws contained approximately 4.8 grams of honey. At this rate you would produce approximately 100 straws per pound of honey.

### PARTS IN THE BOX

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<tr>
<td>1</td>
<td>CN-400</td>
<td>1 GALLON PAIL W/LID AND FITTING</td>
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<td>1</td>
<td>HH-101</td>
<td>COMPLETE MANIFOLD W/FEET</td>
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<td>HH-102</td>
<td>HOSE &amp; CLAMP KIT</td>
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<td>1</td>
<td>HH-103</td>
<td>½” EMT L BRACKET W/HARDWARE</td>
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<td>1</td>
<td>CN-405</td>
<td>500 CNT JUMBO STRAWS</td>
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<tr>
<td>1</td>
<td>HD-304</td>
<td>16” HEAT SEALER</td>
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