SOFT SERVE MACHINE BUYING GUIDE

How to choose the right Ice Cream or Frozen Yogurt Machine for your business



Learn the differences:

- Air Cooled vs. Water Cooled
- Single Phase vs. Three Phase
 - Gravity vs. Pressurized
 - USA Made vs. Imported
 - Single Plug vs. Two Plug





What machine is right for me?

Choosing the right machine is a fairly complicated process, but we will try to simplify it by reviewing the things you need to take into consideration.

How much is a new or used machine:

A brand **new** 2 flavor with a twist (3 handles) machine will cost you between \$10k and \$18k, depending on the model and brand. Some higher capacity machines can go for as much as \$30k. Anything that is advertised for less, you have to be very careful about buying. Remember the old saying, you get what you pay for. Not saying you can't make a good buy at a lower price, you just need to know what you are doing. We can help you make the right choice if you want to go new. If you go with a **used** machine, you are looking at \$5k to \$10k on average, depending on brand, model and age.

Machine Basic terminology:

Hoppers: the tanks on top of the machine where the liquid mix is poured into. Larger capacity machines have bigger hoppers, so that you don't have to keep pouring mix in as often.

Cylinders: The round steel area below the hopper, where the liquid mix drips into and gets frozen. Larger Capacity machines have bigger cylinders, hence have more 'frozen ready" product.

Beaters: The things inside the cylinder beat the yogurt or ice cream inside the cylinder and scrape it against the cold cylinder walls in order to freeze it.

Air Tubes: sit inside the hopper tanks and serve to manage the flow of yogurt liquid mix from the hopper into the freezing cylinder

Used vs. New

Soft Serve machines are expensive. There is no way around that fact. In my opinion, the better road to take is to buy a good quality used machine if you can get your hands on one. Just make sure you buy it from a reputable dealer. Buying from individuals is taking a bigger risk because most of them are interested in selling you the machine they own, so they aren't necessarily offering what you what works best for your business and your customers. Buying from Ebay or Craigslist, is also very risky. At TurnKeyParlor, we will help walk you through the machine that makes most sense for your business AND your budget.

ELECTRICAL THINGS YOU NEED TO KNOW ABOUT

110/115V vs. 208/230V

99% of soft serve machines are 208/230 volt. You can't just plug them into a standard outlet.

You will need to have an electrician wire them to make sure it's done properly. You are essentially manufacturing ice cream quickly, and that requires higher level electrical power than a standard ice cream dipping freezer or blender for example.

A handful of lower volume/capacity machines with 115 volt electrical do exist. These machines will plug into a standard outlet. But keep in mind these are VERY light duty machines. You only want to go with a 115v machine if you simply don't have any other choice. 115V machines are only made in single flavor. In other words, since they are low power, low capacity, they can only handle one flavor. You won't find a good quality two flavor with a twist machine that is made with 115v power and a standard plug. If you find machines on the market that advertise 110V power, with 2 flavors, run the other way. We know these machines, and they aren't very good.

60HZ vs 50HZ

All machines manufactured in the USA are 60HZ, matching the country's electrical frequency, which is 60 HZ. Machines manufactured for many international countries are 50HZ. **WARNING**: If you are an international buyer (outside of the USA) please make sure your country uses 60HZ electricity (also known as 60 cycle or 50 cycle). If your country is runs on a 50HZ electrical frequency, you won't be able to buy used machines from the USA. You will be limited to buying new USA machines. If you are totally confused, please call us before you make any purchase. In the most basic terms, if your country's electrical frequency is 60HZ, you are in luck, because you can take advantage of our great deals on used machines.

Single phase vs Three phase

All locations have single phase power, but they may not have three phase power. Most commercial locations typically have 3 phase power. Older buildings normally don't have 3 phase power. Machines come in either single phase or 3 phase. So if you aren't sure if your location has 3 phase power, you may not be able to use a 3 phase machine. You can always use a single phase machine

Why do 3 phase power machines exist? 3 phase power is a little less expensive to run as far as electrical usage. Three phase machines also run on less amps. So if your electrical service is low amps, you might be better off with 3 phase machines (again,

assuming you have it in the building) Three phase won't save you that much when you are running only a couple of machines, but when you are running a lot of machines, it can help reduce your electric bill.

In certain situations, a customer's location might not have 3 phase power in the electrical box, but there is 3 phase power in the building, so it may not cost that much to have an electrician put 3 phase in the breaker box. This is one situation where you might say, "that's a great deal for that 3 phase machine, and it's only \$500 to have the electrician wire 3 phase into our electrical box, so let's do it. But again, remember, putting 3 phase in the panel is only going to be a low cost deal if there is 3 phase coming into the building off the outside power company electrical pole. If there isn't 3 phase power connected to the building to begin with, then forget about 3 phase machines. It could cost \$15 to \$20k to bring 3 phase into a building. In this situation, just understand that you are limited to single phase machines.

If you have questions about soft serve ice cream and frozen yogurt machines, feel free to give us a call. We sell all the major brands new and used.

Air cooled vs Water cooled

If you have good ventilation, you can go air cooled. If ventilation and heat are an issue, water cooled is a better option. If water isn't super expensive (as in California) you might be best off hooking the machines up to city water. The water bill will not be real high, and you will save the water cost on a lower electric bill (less air conditioning). If you have more than 6 machines, there is a water cooled option called a "glycol system" which might be a good option to consider. It's not cheap at an approximate installed cost of \$15k, but it protects the machines and keeps your air conditioner from working overtime. The glycol chiller works sort of like a radiator works in a car.

Single plug vs. two plug machines

Most machines have a single power cord, so require a single outlet (remember, you will need an electrician to do this right). Some higher capacity machines have 2 power cords and will require 2 dedicated outlets. Please refer to the spec sheet to see whether the machine you are considering is a single plug or a 2 plug machine.

Single flavor vs two flavor and a twist

Pretty self explanatory. Machines either come in one flavor (one freezing cylinder) or Two flavors with a twist in the middle (two cylinders, the twist is fed by the two cylinders together). When you see 3 handles, that is 2 flavors with a twist in the middle, not 3 actual flavors. These days there are now machines that have 3 actual cylinders, but I suggest you stay away from them. They are unproven and problematic.

Independent cylinder temperature control vs. one temperature control for both cylinders:

The cylinders are the two round cylinders where the mix is frozen. The hopper is where you pour the mix in. The mix is liquid in the hopper, and feeds down into the cylinder, where it is turned by the beaters and frozen. Most of the inexpensive imported machines have one temperature control for both cylinders. So if you are buying new machines, and they are "cheap" in comparison to others, chances are you are buying a one temperature control machine for both cylinders. Why is this an issue? Some flavors like to be colder than others. If you have a flavor that likes to be warmer on one side, and one that likes to be colder on the other, the marriage doesn't work well. The workaround is to try and marry two flavors that work well together at the same temperature. This can be managed, but it can be a pain to do so. Dual cylinder temperature controls will simply make your life a lot easier. Almost all American made machines feature dual cylinder control. When inexpensive machines from China hit the market, they did so with single cylinder control machines, to help them keep the entry price point lower.

Counter top model vs. floor model

Floor models are a full body machine, with wheels on the bottom. Counter tops are the same exact thing except they are smaller in length and aren't on wheels. There is really no difference in cost. I highly recommend you stick to a floor model if you have a choice. They are so much easier to deal with. You can move them around easily and therefore they are much easier to clean around easily. Countertop models don't weigh much less than a floor model, so once they sit on a counter, one person will NOT be able to move it.

Gravity fed vs. Pressurized Air Pump

The majority of machines out there are gravity fed. Gravity fed machines are named as such because the mix is poured in these tanks (hoppers) on top of the machine and the liquid mix drips into the cylinders below the hoppers where it gets frozen.

Air pump machines normally have buckets under the cylinders, where the liquid mix is fed upward into the cylinders using a pump.

Why choose one vs. another? Gravity fed machines are less expensive than pressurized machines. Gravity fed machines are easier to clean, because they don't have the pump mechanism in them. Pressurized pump machines deliver a firmer product. For example, you can't really use a gravity fed machine if you are going to be dipping ice cream cones in chocolate shell coating, because the product will not be firm enough. The air that is pumped into the mix makes it firmer. Places like Dairy Queen and McDonald's use pressurized machines not only to yield this firmer product but also to pump more air into their mix, yielding a lower product cost. Gravity fed machines will

yield a little bit "wetter" product, with less air in it. Arguably, the wetter product with less air is tastier and is of better quality (denser). If you are selling by weight, you don't have to worry about pumping air into the product, because you are selling by weight, not by the cup.

In closing, unless you are going to be offering a lower line ice cream mix, maybe best to stick to a gravity fed machine. You can still make a good looking cone with a gravity fed machine and at the end of the day you will most probably be offering a tastier product. Most Frozen Yogurt stores use gravity fed machines.

USA made vs. Imported

The big 3 USA made machines are Taylor, Stoelting and Electro Freeze. These companies have been around for a long time and chances are pretty good they will be around for a long time to come. It is tough to match the quality of a USA made machine. They have been improving the technologies over many many years. Imported machines from China are not all created equal. Some are better than others and some come close to performing as well as a USA machine. That said, there has been an explosion of machine manufacturers in China, making it really difficult to tell who is going to be around in the long term. And if you want to go with a China made machine, you are best off picking a brand that has been in the USA for at least 5 years and has a solid USA base for parts and service concerns. Talk to us about this. It's important. We know which machines are good bets and which ones definitely aren't.

Refrigerated hoppers vs. non-refrigerated hoppers:

This one is pretty simple. Older machines don't have refrigerated hoppers, meaning you need to empty the machines every night. Most newer machines (2005 and newer) have refrigerated hoppers, meaning the mix can be kept inside the machine overnight. So you only have to empty out the mix when you are cleaning the machine (which is about twice a week)

Certifications (for health department inspectors)

Machines that are operated in the USA should be certified (stickers on the back, and on the spec sheet) by NSF or ETL or UL Sanitation. If it only says certified by CE, that is a European standard, and you might be in trouble when the health inspector shows up. NSF and ETL are relatively safe bets, and UL Sanitation should work too, but check with your health department inspector before you buy anything. If you are opening a store internationally, you are probably fine with most certifications, but is a good idea to check with your local health department or regulatory institution to make sure you know what certifications will pass locally.

Easy to clean machines (is there such a thing?)

No. Haha. All kidding aside, some machines have less moving parts than others, but they are all a pain to clean. Any sales person that is telling you their machine is easy to clean is not being straight with you. Once you get good at breaking a machine down, cleaning and sanitizing it, then rebuilding it, you are looking at a minimum of 45 minutes per machine, and they need to be cleaned about 2 times per week. Just be aware of this fact. If you or your employees don't have the time to do this, then you don't want to be in the soft serve business. That, or make sure you have a handyman that is willing to come in a couple of times a week and do it for you.

Please call us at 877-817-5716 or email us equipment@turnkeyparlor.com We are here to help you buy the right machine!

