

Comparing The Pros & Cons of Bulk Oil Packaging

A Discussion For Manufacturers

Hi everyone! Thanks for joining us today for a discussion about bulk oil packaging used in manufacturing settings. My name is Hannah, I work with Centra Foods. Keep in mind, you can find us on Twitter. Our handle is @CentraFoods. You can also find us on Facebook. We would love to meet you and visit with you.

Today we're going to be going over some of the different manufacturing packaging options that are best used in a food manufacturing, body care manufacturing type setting. There's a few different choices.

The most important reason that we're actually discussing these different packaging options is that they have a lot of impact on the way that your production works, how smoothly it works, how easily it works, and how people actually interact with the oil and use it and get it into your product. And it also has a big impact on the final price that you have.

We're going to start at the smallest size and build up the largest, so small business manufacturers listen up now and larger manufacturers-- we'll get with your sizes in just a minute.

35 Lb. Containers

The smallest size that I would recommend is going to be the 35 Lb. Containers. Those are also know as Jug in a Box containers. Essentially, they are about a 1.5 x 1.5 ft or so box that has a plastic jug inside (there is a bag in a box version coming soon). It holds about 4.6 gallons of oil-- whatever oil you decide to go with-- and there are 60 of them on a pallet. So pallets are actually quite large.

When you use that oil, the good thing about this size is that you can take them, you can handle them individually, you can pour them in to your cooking pots (or whatever you end up using). They're very easy to handle manually, so if you have a manual production line this is definitely the way to go.

The downside to them is just additional packaging, which you're always going to end up paying for. In comparison to say, the totes (the larger size), you've got 60 small containers and just like anything on a retail level, the more packaging, the more it's going to cost. But, if it helps your production run smoother it's worth it.

55 Gallon Drums

The next size up is the 55 gallon drums. That's actually the most common size used in manufacturing today. 4 drums come on a pallet, and our drums hold 419 pounds of oil. So keep that calculation in mind when you're looking at your pricing.

Now the advantage to these drums is that if you have to, you can move them manually. It's difficult, they weigh about 500 pounds each including the packaging so it's not something that you want to do. Having a pallet jack or a fork lift makes life a heck of a lot easier with those drums.

The downside to those is that they are a slightly smaller size. Again, you're still paying a little bit more for packaging than you should. But they're easy to handle, they're very standard. The way that you get the oil out of those is there's actually a whole at the top known as a bung hole. And you're going to put a drum pump right into that hole. You can buy that drum pump (we have a few suggestions in our blog for where you can go). Normally a drum pump costs \$50-\$100; that's a one time purchase that you're going to make and you'll reuse it in every drum. It's worth the investment.

So you're going to use a drum pump in that, and just pump the oil out. You can put it into a small reusable container (or however you run your batches). It's quite easy to use.

Totes

The next size up from that is (if you're a manufacturer this is going to be the #1 size that I would recommend), it's known as totes. Don't think of a tote bag, it's much larger than that! Totes are actually typically either 264, 275 (which is the most common size here in the US) or 330 gallons. So picture the layout of a pallet-- it's going to take that entire space and be 4-5 feet high filled with oil.

Now there's a couple different kinds that you can get. The standard kind is a hard plastic with a caged aluminum frame around the outside. Very strong, there's a built in spigot right at the bottom and you can attach to that spigot using a tote pump (or there's actually lots of different ways you can get that oil out). So that's option A.

Option B is actually a Bag in a Box tote. This is a very strong cardboard outer box-- the cardboard is going to be about this thick so it's a very strong material. There's a bag on the inside that actually collapses around the oil as it's used. That's one of the reasons that I love this bag in a box tote because it does help preserve the shelf life of the oil as you're using it because it keeps air out. That comes with an attachable spigot and you do need to ask for that, keep in mind. Unless you already have one, and you should be good; you can use that over and over again with your totes. These attachable spigots, they work very similarly to the caged totes.

The bag in a box totes again, they're very strong, they work very similarly to the caged totes. Except for when you're done with them you can break them down and recycle them. They just disappear into nothing. So that it is actually really nice about the recyclable totes.

The reason that I like this size so much is a) the oil cost is cheaper (in terms of our pricing, it's normally about \$0.02 /lb cheaper) and b) the shipping cost is often going to be cheaper. For

example, if you go with the 330 gallon bag in a box totes and you ship to a location that has a flat pallet rate (now this doesn't always apply but for the most part it does), the advantage to that is that you're going to save about 33% on your shipping costs because you're shipping what is 6 drums worth of oil in the 330 gallon totes across to your location as opposed to the normal which is 4 drums of oil in that one tote. So it does save you money in shipping if it costs the same and it's not a weight based shipment.

In-House Storage Tanks

The next size up from that is quite a big leap, but if you're using enough oil it is a very, very worthwhile leap. The next larger size is actually having an in-house storage tank, be it a large tank or a tank farm that's outside of your facility. Your oil would deliver in flexitanks, if it was an international shipment or tanker trucks if it was a domestic shipment. This would be a large truck that would show up at your facility. You'd use a pump to connect to your storage tank and pump right into that.

Normally off the bat, we see a \$0.10 /lb savings on that oil. Because they're larger shipments, most often it does need to be either contracted or all shipments are based off the current market. So you'd have to get a current quote every time and it's going to change every time you order. Keep in mind, olive oil and all other oils that we deal with are all commodities. So that means that the pricing is changing all the time. Depending on the type of oil, it is by the second, by the minute, by the hour, by the day. So your pricing is going to change, just keep that in mind. That's kind of an inevitable when you're dealing with ingredients purchasing with commodities.

FlexiTanks

The way that these big tankers and flexitanks work is they will show up at your facility. For the flexitanks, you do need to buy an attachable pump. It does not come with a pump. It's actually a large container and it has a removable bladder on the inside. So you'll attach your

re-usable pump that you purchased; it's about a \$1000 purchase, definitely worth the investment because you're paying off that cost just in the first shipment. So you're going to attach that pump, pump right into your storage tank and then you're going to remove the bladder and dispose of it at the end.

Tanker Truck

Now with the tanker, you would get these tankers if you were ordering Canola Oil, Olive Oil from a domestic supply-- anything like that. The tanker would show up at your facility and those actually have a built in pump so you don't need one. Again, that would pump right into your tank.

The advantage with this size is that you can work out routine shipments. If you're going through a routine amount of oil and you know how much you're going to use, we can plan far in advance so that you've got one arriving once a week or whatever it is that you need. If it's once every 6 months, that's fine too.

With that oil, if you already have tanks set up in your facility it's actually worth looking at anyways if you just have tanks sitting empty. If you don't, and you're transitioning from totes moving into tankers and storage tanks in-house, only consider this option if you're using about 250,000 lbs of oil a year or more. That's where you really start to see the price break where the discount in that oil is worth the set up cost. Typically, if you're using about 250,000 lbs or more you're going to pay off the initial investment cost within about 6-18 months. So it's a very fast return on investment. Definitely worthwhile to look at.

If you're using more than that and you're still in the drums, definitely consider doing an evaluation and seeing when and how the transition works and how it's going to make sense for you because it can save you a lot of money. When we do evaluations for customers that are over 250,000 lbs typically we're going to see a savings anywhere between \$10,00 and \$80,000 a year, so it's a very large chunk of money that we're talking about. The initial investment is

about \$30,000 to put those tanks up, so keep that in mind. Still, definitely worth the investment if it's going to save you the money.

If you have any questions about these packaging sizes or you want to talk more about what you're up against as a manufacturer, we'd love to hear from you. Feel free to contact us anytime. Have a great day.