

## Why should I purchase the Clear Beer Draught System?

**Your beer will look, smell and taste better!** Isn't that the goal of homebrewers? We all put large amounts of time, effort and money into producing the best beer we can. Then the beer gets racked into a keg, and what's consumed comes from the dregs at the bottom of the keg via the long dip tube. It doesn't make sense. No more! The Clear Beer Draught System consists of a floating intake that draws beer from the upper layer of beer in the keg. That's where the clearest, cleanest, best tasting beer is. Gravity will naturally draw suspended particles towards the bottom of the keg, leaving the intake port where the good stuff is. It does take a **little** time for the particles to fall below the level of the intake at the top of the keg. But obviously, you'll be pouring clear, clean beer much quicker than having to wait until the particles drop below the opening of the long dip tube at the bottom of the keg. That could literally take months! And God forbid you move the keg at that point in time. With the Clear Beer Draught System installed, you **can** move your keg to parties, events, or within your homebrewery without the worry of stirring up and drinking the sediment from the bottom of the keg. For the Hopheads out there, you can toss pellet hops directly into the keg for dry hopping. Once they've done their job, they'll settle to the bottom. Yeast is probably the biggest creator of these quality issues. Next time you brew, stick your finger in the leftover yeast from your fermenter and take a taste. Yummy. Take a nice deep whiff. Pleasant. Probably not. That is why professional brewers expend large amounts of time and money to remove these particles. Protein hazes can also affect taste and aroma. You can filter your beer on a homebrew scale, but it is quite an involved process, and you could end up stripping the beer of some flavor components. So, it's not just about the visual aspects of the beer. It doesn't matter whether you're brewing a midnight dark stout or a Munich Helles. The cleaner beer you'll be serving will taste better, look fantastic, have a pure aroma, and will be a true representation of the beer you brewed. The Clear Beer Draught System is manufactured in the USA from high quality USA sourced stainless steel. All of the silicone parts are certified by the FDA and NSF. It is easy to install without modifying your keg, it completely disassembles for easy cleaning and sanitizing, and for about the price of 1 batch of beer, it will last you a lifetime.

## How Will the Clear Beer Draught System pay for its self?

**You will no longer be pouring beer down the drain!** When using the Clear Beer Draught System, you get to consume all the beer you produced, from the first pour to the last. Obviously, this saves you money with every keg you fill. After a normal amount of time chilling and carbonating your beer, a lot of particulates will have settled to the bottom of the keg. With the long dip tube installed, the first couple of pints will be a murky, milky mess that will get poured down the drain. And this is not a linear 1 time event. Your keg does not drop clear all at 1 time. Even if you remove the first couple of pints off the bottom, remaining particulates will continue to drop to the bottom, and they will continue to affect the taste and clarity of your beer. Using the Clear Beer Draught System, the particulates are constantly dropping **away** from the intake. Finning the beer with gelatin, if done properly, works great, but it is not an exact science. How much suspended yeast do I have vs how much gelatin to add. Too little, the beer won't clear, too much, you have a large goeey cloud on the bottom of the keg. Either way, there will be more beer poured down the drain when using the long dip tube. I have used gelatin with great results in conjunction with the Clear Beer Draught System. If you have a really stubborn beer that won't clear, using gelatin with the Clear Beer Draught System will give you clean clear beer in a matter of hours! And it will allow a conservative amount of gelatin to be used, so by the time the Clear Beer Draught System reaches the bottom of the keg, there should be a compact yeast cake allowing you to draw clean clear beer until the keg pops. **No beer poured down the drain.** If you rack to the keg via the out port (the preferred method) when using the Clear Beer Draught System, there will be a couple of ounces of cloudy beer stored in the silicone tubing. I think you'll agree, tossing a few ounces per keg vs a few pints is quite an advantage. The Clear Beer Draught System is built to last a lifetime, and rather quickly, it will more than pay for its self.

## Will the Clear Beer Draught System work in all keg sizes?

Yes. The only difference will be the length of the silicone hose. The hose that's supplied is dimensioned for use with a 5 gallon ball lock keg, the most common type of keg in the home brew industry. It is also the tallest of the available 5 gallon kegs. (10 or 15 gal keg users send a request from the contact page) To use the Clear Beer Draught System with smaller sizes, the hose will have to be cut to length. Cut the hose a little at a time so that when it's slid onto the dip tube, and the float base is upright in the middle of the keg, there is at least an inch or more of slack in the hose. The hose is going to shrink in length  $\frac{1}{4}$  to  $\frac{1}{2}$  inch when chilled to serving temperatures. If you cut the hose too short, the float will not settle in the middle of the keg and you may leave some precious beer behind. Conversely, if the hose is too long, it may not be drawn to the middle of the keg as it empties. Error on the long side and adjust as required until you find the perfect length for your keg.

## Does the system ever get tangled up?

**No.** Through seven years of trials and continuous use, in many different scenarios, there has never been an instance where the tubing got tangled up. Install the system as per the instructions, and there will be no problems.

## Secondary Fermenter? Not necessary!

After primary fermentation is complete, many homebrewers rack their beer into a different vessel to remove it from the yeast cake and to give it time to clear before racking it to the keg. This can create problems, mainly the increased possibility of oxygen and or contamination introduction into the beer. It is practically impossible not to expose the beer to oxygen during the racking process. Oxidized beer will have the unmistakable odor of wet newspaper/cardboard. This problem gets worse as the beer ages. Why not use the keg as the secondary fermenter? If you rack to the keg immediately after primary fermentation, (still faint signs of life in the airlock), there are still many millions of active yeast cells in suspension. While having completed primary fermentation, they are still active enough to consume remaining sugars and oxygen. If life gets in the way and you racked later than planned, it wouldn't hurt to throw 10 or 20 carbonation drops into the keg before racking the beer to wake the yeast up for oxygen removal. This is the exact reason many major craft breweries bottle/can condition their beers. The remaining yeast will also remove the substances that can cause buttery/butterscotch aromas and flavors (diacetyl). True, the yeast will do the same things in a secondary fermenter. But they will not be as active by the time the beer is racked to the keg when more oxygen will be introduced. When using the Clear Beer Draught System, the yeast will begin settling **away** from the intake port, rather than **towards** it soon after the beer is put into the keg. By this time, they will have consumed any remaining oxygen and diacetyl. Let the keg sit at room temperature for 3-4 days after racking. This gives the yeast time to do their thing. You'll also start naturally carbonating the beer. If you're going to fine the beer, wait until the yeast have completed their job. This tried and true method is very effective. This process will not only save you time and work, it will improve the flavor, aroma and shelf life of your beer.

## Lagers

Lagers are beautiful beers, with subtle flavor characteristics that the lager yeast is well suited to bring forth. Lagers celebrate the flavor of malt! In other words, the yeast is supposed to be in the very distant background or non-existent as far as flavor and aroma are concerned. Lager yeast will attenuate further than ale yeasts as they can consume sugars that ale yeasts can't. That's what gives a dry, crisp pilsner its great drinkability. The ability to do all of that means lager yeasts are generally not very flocculent. If a manufacturer says their lager strain is flocculent, that is in comparison to other lager yeasts, not ale yeasts. Lagers take more time in every phase of the process, but it's worth it, so: **Do not drink cloudy lagers!** It's a waste of time and money. Have the patience to appreciate what you have created. When using the Clear Beer Draught System with lagers, you will have to allow more time. But, if that same lager was dispensed using the long dip tube, it would take a **very, very** long time before a clean, clear, crisp lager was delivered. Generally, homebrewers are not that patient. I know, I'm one of them!

### **My beer does not seem as clear as it should be, is the system not working?**

If the Clear Beer Draught System was installed as per the instructions, and the laws of gravity apply where you live, it will be working properly. All beer will have some level of cloudiness when racked to the keg. Obviously, if your racking procedures result in large amounts of trub getting transferred to the keg, the time it takes to clear will be longer. The Clear Beer Draught System does require some time for the particles to drop below the level of the intake. It will take at least 10-15 days for a 5 gal keg to fully carbonate at normal serving pressures and temperatures. By this time you should be pouring acceptable beer. There are many factors involved in the brewing process that have an effect on beer clarity. Let's discuss yeast first. Many strains do not flocculate at an acceptable rate. Check the yeast manufacturer's specifications for the strain you're using. They all rate the flocculation rate of their yeasts. Be sure your pitching rates and temperatures are correct. **Over** pitching and insufficient levels of **calcium** in the brewing water will adversely affect the yeast flocculation rate. Brewing ingredients will also play a part in clarity. Higher levels of wheat and adjuncts will leave proteins in the beer that will cause cloudiness which will remain with the beer for some time. If you did not remove enough proteins from the brew kettle by obtaining a good hot and cold break, and by using kettle finings such as Irish moss, you will have high levels remaining which will result in cloudiness. Pour some beer in a glass and let it warm to room temperature. If it clears, you have chill haze. If you mash your grains, you must be sure you're getting full conversion of the starches into sugar. Any starches remaining will cloud the beer. Check the above mentioned brewing processes and correct any flaws. **Always remember this, If the beer being drawn from the top of the keg is still a little cloudy, imagine what would be coming out from the bottom of the keg.**

## **I like brewing cloudy German and Belgian style beers, should I still use the Clear Beer Draught System?**

Yes. You can easily re-install your kegs long dip tube and proceed as usual. But remember, these cloudy styles of beer should be just that, slightly cloudy/hazy, with a little translucence. They should not be completely opaque. That is what you will get when drawing from the bottom of the keg unless you wait quite a while. The beer will not taste as it should with that much suspended yeast and proteins. These styles of beer should be consumed as fresh as possible, quicker than any beer style there is. So having to wait until you're not pouring completely opaque beer means you will not be consuming it at the height of its freshness. Using the Clear Beer Draught System with these beers lets you reach the desired level of cloudiness in an acceptable time frame. This lets you consume the beer in its proper state at the height of freshness.

## **Can I use clarifiers with the Clear Beer Draught System?**

Yes. If all your brewing parameters and processes are acceptable, you can be pouring amazingly clear, great tasting beer in a very short period of time when using fining agents in conjunction with the Clear Beer Draught System. These agents **will** strip the beer of some hop aroma and flavor. For this reason, you may want to adjust up your late and post boil hop additions. If you're dry hopping, use the finings, let the beer clear, and then add the dry hops. This process will probably add back a little haze from the hop oils, but that is acceptable in hoppy styles of beer. For best results, you will want the beer at room temperature when dry hopping. Using clarifiers does involve more work and costs on your part. If you have the ability, and you're in a hurry for clear, clean carbonated beer, give the 30/30 method a try. Set your regulator to 30 psi and the temperature to 30-32 deg. F. for 3-4 days. Purge the keg pressure, set your regulator at normal serving pressure, reconnect to the keg and let sit @ 30-32 deg. F for another day or two. Before serving, put the keg in a room temperature environment and let it warm to serving temperatures for this to work correctly. Now put the keg in your kegerator, connect the lines and you're ready to go. This process will send residual yeast and other haze producing particles on their way to the bottom of the keg. The colder temperature will also accelerate the carbonation process. Since the Clear Beer Draught System is drawing from the top liquid level in the keg, you should be pouring visually acceptable, carbonated beer. As always, take good notes on your carbonation times and pressures and adjust to fit your particular draught set up. Note: starch hazes will not be removed by fining agents.

## **Don't chase the crud!**

We've all been there, "Man, this beer is really tasting good", then 4-5 pints later, the keg blows. Bummer. The reason for the great taste was that the beer was finally clear and clean. When using the Clear Beer Draught System, that's a thing of the past. But even with our best efforts, Mother Nature doesn't always cooperate. As has been stated, yeast are organic critters, and will behave as such. If for whatever reason, the yeast and other particles are being stubborn and don't want to drop, there is not much you can do at that point in time. You can either wait until they drop, and they will because they must obey the laws of nature, or you can fine the beer. The point is, if you're truly after the best taste the beer you brewed can provide, don't chase the crud and waste  $\frac{3}{4}$  of a keg of beer. Wait a little longer until you are drawing clear, clean beer from the top surface. This means you now have separation of the clear from the cloudy within the keg. Once again, if you're a little early to the party, what's being drawn from the top surface will always be cleaner than what's drawn from the bottom.

## **The silicone parts have picked up color and aroma. Will this affect subsequent brews?**

No. Cream ales have followed IPA with no trace of transfer. The physical properties of silicone make it ideal for this application. With that being said, the porosity of the product does lend itself to color and aroma transfer to the tubing. Those aromas or flavors will not be evident in the current beer. If you're still concerned, the best practice is to rack your beer into the keg through the out port and fill from the bottom up. This allows you to leave the silicone tube full of the current batch during the carbonation period. In between brews, soak the silicone parts in the solution you use to clean your draught lines. Rinse thoroughly with water and soak in an acid based sanitizer before use. Eventually, (after many, many, many brews), you will want to replace all the silicone parts as they will lose some flexibility.

## **The inside of my keg has white deposits that won't wash off. What's causing this?**

This means the surface of the metal in your keg is in a condition that will attract mineral deposits. They can come from carbonates in the brewing or cleaning water and/or the use of alkaline based cleansers, (PBW, B-Brite etc). Carbonates in the brewing water are in many instances desirable and are not easily removed. Do not worry about them. The cleansers are fine and do their job well, but they may leave the surface of the metal in such a state that it attracts mineral deposits. Also, oddly enough, if you have a deficiency of calcium in the brewing water, this can lead to the formation of beer stone on your equipment. If you have soft water in your area, add enough calcium chloride to the mash tun or kettle to reach at least 50 PPM in your finished beer. This will not affect the taste of your beer.

To help prevent and cure these problems, the keg requires an acid rinse. Five Star Chemicals Saniclean is a great product for removing deposits and will prevent future deposits. Do not try to remove the deposits mechanically. Remove all of the keg parts and fittings and thoroughly clean the keg. Pour 2oz of Saniclean into the keg and fill to the top with water. Stir thoroughly to create a whirlpool. Let it sit for a day or two, two being better. Stir whenever convenient during this time. Empty the keg leaving about 1 inch of liquid. While wearing protective gloves, scrub the entire inside of the keg with solution and a sponge or soft nylon glass cleaning brush. Rinse the keg with cold water. After each cleaning cycle, thoroughly spray the inside of the keg with a solution of Saniclean at a dilution ratio of about 2ml per 16oz spray bottle (keep the PH at 3 or a little less for best performance). Starsan at the correct dilution ratio can also be used. Keep all surfaces wet for a minimum of 5 minutes. The surface of the metal is now in a state that will not attract deposits. If the keg will not be used for a while, coat all surfaces with Starsan at the correct dilution ratio, invert it and let it drip dry. Before use, rinse the keg and sanitize it and all the parts of the Clear Beer Draught System using Starsan.