

Insider's Guide

Line Cleaning

It is an investment, not a cost.





This guide is one component of the BetterBeer.com Insider's Guide Series.

Used by clients of Better Beer to help understand and troubleshoot their draught systems, these guides also provide tips and techniques on preventative maintenance.

If you have questions or comments about the material contained within this guide, please contact us at (888) 811 - 2337 or support@BetterBeer.com

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Line Cleaning

It is a good time to mention that we do not clean lines, install draught systems, nor do we sell equipment. We are not trying to solicit your line cleaning business; we simply want to make sure you are getting it done properly.

Also, *we do not recommend cleaning your own lines.* **Ever.** The cleaning solution is highly caustic and the use of it by yourself or your staff usually is not covered by the standard procedures outlined in your restaurant's insurance policy. Forgetting to rinse the cleaning solution out of the line means that it ends up in a guest's pint and that is a bad day for everyone. **Hire a professional company to clean your lines.**

Line cleaners are responsible for cleaning the inside of the lines, FOBs, couplers and faucets. You are responsible for cleaning the walls, shelving, gas and beer line exteriors, regulators, towers, trunk line exteriors, and everything else that they don't clean.

Your bar needs to be on a regular line cleaning program. Period, no discussion, no hesitation. View it as an investment, not a cost.

Why You Should Clean Your Lines

In simple terms, dirty lines are caused by "beer stone" developing inside the lines and equipment. These beer stones are little calcium deposits (beer contains calcium) that look like grains of sand.

Beer also contains yeast that attaches itself to this beer stone. Over time, yeast will create Diacetyl (pronounced: die-ass-ah-tall) which gives the beer a buttery taste and a slick mouthfeel. If your beer tastes like butter and it feels like you are eating a Werther's

candy, it is usually from dirty draught lines.

It won't kill you, but it gives you an exaggerated hangover and an upset stomach; you'll feel like you had ten pints, but only had two.

In the images below, you can see the beer stone and growth inside.



Who Should Clean Your Lines?

Line cleaning should be done by a Draught Service Technician, who has:

- Liability insurance
- A commercial grade cleaning solution
- The correct equipment

Every city has several of these companies. Unfortunately, every city also has several companies who claim to clean lines but don't have insurance, training, or the correct equipment.

They should also be using a commercial grade cleaning solution that is only sold to professionals.

Bleach, baking soda, vinegar, or anything that you can buy won't cut it. This isn't a kegerator in Joe Public's basement they're cleaning, it's a complicated system in a bar.

It should take at least an hour to clean ten lines and cost about \$10 per line. You get what you pay for.

How Do They Clean Your Lines?

The method used to clean the lines will have an impact on the quality of the beer. There are two ways to clean beer lines:

Static Method - Pots

This is the easiest (read: "most-popular and least-expensive") but not the best method. It is really only to be used on Direct Draw units (where the kegs are in a self-contained fridge with the tower directly above).

However, almost all line cleaners in Canada use pots on both Direct and Long Draw systems for their speed and simplicity.



The cleaning pots (aka Cleaning Cans) look like a small 20L keg, but with a removable lid and four keg connectors on top.



Pots can be purchased with any combination of four of the six different coupler fittings. Most companies have several pots with four “D” fittings for domestics and then one or two pots with the other fittings, which are not as popular.

**It should take a minimum of one hour to clean 8 – 10 lines
when using pots if done correctly.**

Where line cleaners take shortcuts when using pots:

- Use cold water with the cleaning solution.
- Don't use commercial cleaner – instead they use the low grade, less caustic cleaner that you should use for a home system.
- Don't rinse with water, just hook up the kegs and rinse with beer. This wastes much more beer as you are pouring several pitchers of beer instead of a pint.
- Don't fill the FOBs with the solution.
- Don't let the solution soak for a minimum of 15 minutes.
- Don't scrub the couplers or remove and clean the faucets.
- Keep a pot full of cleaner and extra pots for rinse water to save dumping solution and save time. The solution eventually becomes room temperature which lowers its effectiveness.

Re-circulating Pump Method

Not many companies in Canada use the pump, so we won't go into much detail here. Basically, when using the re-circulating pump, the tech creates one really long beer line and pumps the cleaning solution through the long line with a pump. The solution

pulsates through the line, essentially scrubbing the lines with the cleaner as it moves through the lines and FOBs.

The outbound line from the pump connects to faucet one. Each faucet is “jumped” to the faucet beside it with a short line. The exit line is attached to the last faucet that runs into a sink, down the drain. Each coupler is attached to the coupler beside it, thereby creating one really long beer line.

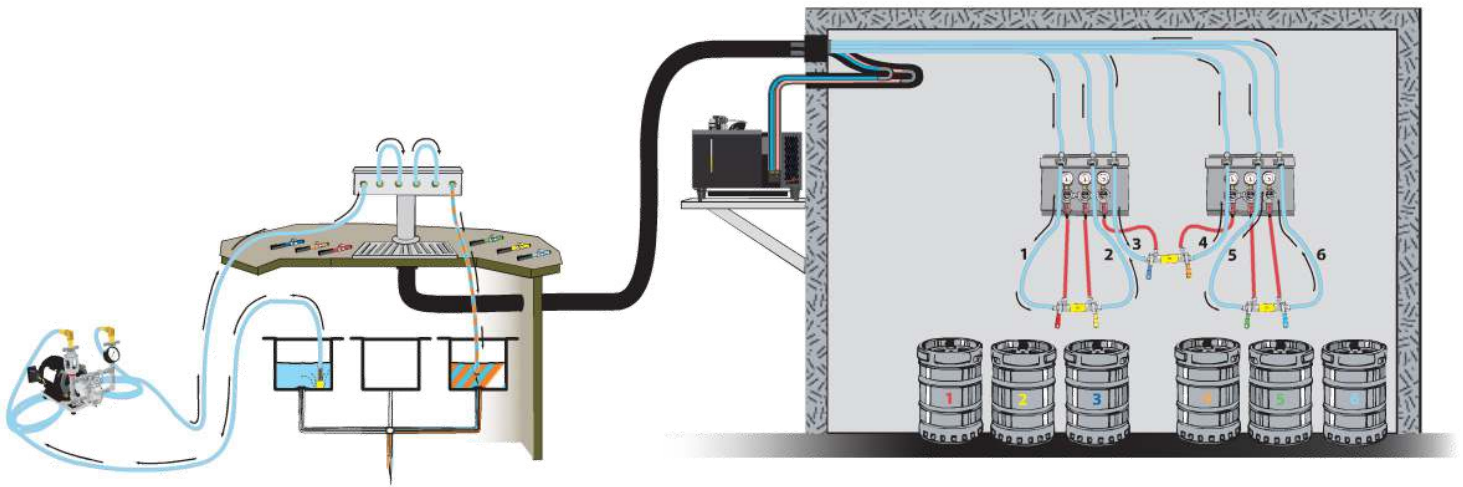


Image courtesy of MicroMatic.

The challenge with the pump is the:

- cost of the pump and jumpers.
- extra time it takes to set up and clean the lines. Cleaning up to 8 lines takes almost two hours.
- length of the one long line cannot exceed about 700 feet as it creates too much resistance and the pressure of the pump is lost near the end of the line.
- pump cannot be used on any lines that are “y’d” (one keg going to two or more taps).

Chemicals Used For Line Cleaning

There are two different types of cleaning chemical used for line cleaning.

1. A Caustic solution that removes the organic growth (yeast and diacetyl).
2. An Acid solution that removes excessive beer stone.

A good line cleaning program will use a caustic cleaning every month and an acid cleaning every six months. The acid wash cannot be done at the same time as the caustic without a thorough rinse in between the two as they will cancel each other out, so line cleaners tend to skip the acid wash.

Neglecting to remove the beer stone with the acid wash will eventually create small sand-like grains in the guest's pint. If the acid wash is neglected, then once it is finally done, it takes a great deal of rinse water to remove all of the beer stone.

You should speak with your line cleaning technician to ensure that they are doing an acid wash every 6 months.

How Often Should Your Lines Be Cleaned?

How long is a piece of string? It depends. That is the same answer to the "How Often?" line cleaning question.

A regular line cleaning program can mean many things. For our certification program, we look for a 4-week cycle. As long as the cleaning is kept up, they are using a commercial cleaning solution properly, your lines are relatively new (\leq ten yrs old), and kept cold - you can clean every month.

If your trunk lines are old and warm, you may be looking at a weekly or bi-weekly cycle instead.

Things To Think About:

Yes, you will lose the beer that is in the line each time the lines are cleaned. There is no way of capturing that beer and re-packing it into the lines. I used to own a draught service company and I spent a considerable amount of time with engineers and inventors trying to figure out that puzzle and you can't. Believe me, if there was a way the Health Board would allow beer to be captured and sold, I'd have a patent by now.

At ten cents an ounce and about a half ounce per foot, **if you have a 60' run, you are losing about \$3 per line each line clean.** $(60 \times 0.5) \times 0.10 = 3.00$.

If you have ten lines, it's \$130 per month for the service and lost beer; \$1,560 per year in line cleaning. If you don't make that investment, then your draught sales will drop, people will switch to bottled beer (less margin) or water (no margin), feel sick from drinking bad draught and blame your food, or never return.



Investment, Not A Cost

If you sell ten kegs a week at \$6 per pint and 100 pints per keg, you gross 6k a week, or 312k per yr from draught sales. That \$1,560 is 0.005% of gross draught sales. Or, look at it this way - 10 kegs per week at 100 pints per is 52,000 pints a year. Split that \$1,560 by 52k pints and it costs you an extra 3 cents a pint. Three cents.

Put your prices up a nickel to pay for line cleaning and put an extra grand in your jeans each year at the same time. A nickel. That's how easy it is.



You May Be The Reason Your Line Cleaner Cuts Corners

If you don't get a Christmas Card from your line cleaner, this may be the reason why.

Being a Draught Service Technician isn't a glamorous job. Compared to other trades, they are underpaid; especially for all the work they do. Most of the time the only recognition they get is when they come in for a service call and save the day by getting your draught pouring again. And usually, that recognition is from your regulars cheering about how "The Beer Guy saved the day!" That makes them feel like they are making a difference. Who doesn't like that?

Here's the problem - you may be the reason that your line cleaner is cutting corners. He has no choice.

Line cleaning is like a parade.

The average tech has to clean 2-4 different establishments in a day. Since they can't come in when you're open to clean lines, their window is from 8-11 am. One hour to clean 10 lines properly means there is no room for error. If the parade (his line cleaning call list) gets backed up, the next day is backed up too. The lines need to be cleaned. If he has three stops in Brampton today and three in Oakville tomorrow, he can't push one from today to tomorrow because now he has four to do tomorrow, in two different cities. #Impossible

So now he has two choices - only do 2 today in Brampton and come back to do the one tomorrow. This means that the three Oakville cleans (and every clean after that) get bumped a day, or he cuts corners during the three Brampton cleans today.

Here's how you are causing the parade to back up:

- He shows up at 8am when your KM is usually in, but the KM is 30 (or more) minutes late.
- The KM / Prep Cook doesn't have the beer fridge keys.

- The bar isn't tidy so he has to spend a few minutes moving stuff around to make room to clean the lines properly.
- The produce order is stacked in front of the beer fridge door, so he has to move it.
- The mop sink is full of garbage cans, bar mats, and buckets full of dirty rags - he can't fill his cleaning pots with water.
- And here is the biggest issue of them all - you have bus tubs and boxes of food on top of the kegs.

This presents a HUGE challenge. What the heck is he to do with a bus tub of raw protein or lettuce or beer pitchers of BBQ sauce/salad dressing, or cases of bottled beer, or... What is the line cleaner to do?

- If he puts it on the walk-in floor and the health inspector comes in, he's in trouble.
- If he accidentally knocks over a container of food, he's in trouble.
- If he knocks over a case of beer (or the bottom falls out from being wet) and the bottles break, he's in trouble.
- If he puts a container of raw protein on a shelf above a shelf of raw vegetables and the health inspector comes in, he's in trouble.
- If he spills anything on the floor or the kegs, he has to clean it up.



I understand why you have to store boxes and bus tubs on top of kegs. It happens because some people who design restaurants have never worked in a restaurant. They are trying to squeeze in extra seats in the FOH and that square foot has to come from somewhere. Also, building one large walk-in is cheaper than building two. So they amalgamate the walk-ins - beer and food in one. Looks good on paper.

Cutting Corners 101.

You leave your line cleaner with no choice. They have to cut corners. Here's what they do:

- They don't soak and scrub the couplers - "I'll get them next month."
- They don't soak and scrub the faucets - "I'll get them next month."
- They don't let the lines soak long enough. (15 minutes minimum)
- They don't vent the FOBs with cleaning solution so eventually you get build up so dense that the only option is replacing the FOB.
- They rinse with beer instead of water (\$\$ Ching Ching! \$\$), which saves 10 minutes.

Here's what you need to do:

- Make sure there is someone there when they should be (8:00 am?) and who has the keys to the beer fridge.
- At closing each night, make sure the bar is clean and tidy, the mop sink and walk-in is accessible.
- Put orders away when they arrive, don't use the kegs as temporary shelving - for ANYTHING.
- If you can ensure someone is there with keys before 8am, let your draught service company know - they can get in as early as you can; the earlier the better for them.

Improper line cleaning isn't always the line cleaners fault.

Do your job so they can do theirs.



Notes:



We started Better Beer because we used to be in the industry, just like you.

We used to struggle with excess foaming, system crashes, and staff training challenges.

Knowing what we know now, *we would have made so much more money* by improving our draught quality, profitability, and sales...if we would have known.

Our services aren't for everyone, but if you want to set up a 15 min online demo to see if we are a fit with you, then simply click [here](#).