

Q&A November Power Hour - Economics of Draught Quality

Q: What is the name of the color changing chemical that detects organics? And where can I get it?

A: **Desana Max – from Thonhauser – available through www.Thonhauser.net**

Q: Has the % volume growth in the WI Draught Improvement study been adjusted for beer "waste" associated with draught line cleaning?

A: **No – but the loss of beer in cleaning is typically 1% or less (1% if you assume 80 feet of line – ½ oz per foot of line and a keg sold per week). This does reduce “real” volume growth – but it still would be 3+% (remember, you also have to account for loss in existing cleaning schedule – we assumed two months). In addition, cost of lost beer was figured into the cost-revenue analysis.**

Q: What was the reason for the large decreases in caustic concentration? Caustic/CO2 interaction?

A: **When caustic solution is introduced into the retail draught beer system the water in the draught lines may not be fully drained so the water is mixed into the caustic solution diluting the solution. Proper understanding of chemical mixing and handling is important when cleaning.**

Q: What is the name of the chemical that changes color in relation to soil and who is the manufacturer?

A: **Desana Max by Thonhauser**

Q: what is the chemical you introduce to detect organic matter?

A: **Desana Max by Thonhauser**

Q: What are the 5 cardinal sins?

A: **Limited diversity of beer list (25% said this was the biggest red flag)
Dirty beer lines (23%)
Dirty/frozen glassware (21%)
Unknowledgable servers (27%)
Lack of pairing menu (less than 1%)**

So to put this in perspective, clean beer lines were very close in importance to beer list and server training for poll respondents.

Q: As a consumer, what can you do to protect yourself when at a retail location? Is it good form to ask the pub staff how often they clean their lines??

A: It never hurts to ask and have a conversation at retail. You are the customer and they are in business to satisfy customers.

Q: How much should a line cleaning business cost per line to clean?

A: Cost will range based on location/quality of service, etc. In our survey, we found \$8 a line was fairly standard, though costs ranged from \$5 a line to almost \$20 a line.

Q: Prior to cleaning a long-draw, is there a typical way to capture (sell) the beer in the length of the lines?

A: With recirculation all the beer is flushed to a drain. @ \$0.05 to \$0.07 per ounce it may add up over time, but at what cost... \$20.00 of beer is 285 oz. of beer and would fill a 5/16" barrier line that is 570 feet long... or 10 lines at 57 feet long each... Your sales pitch is "this is the stuff we had before we cleaned"... might want to rethink the message on this. Save \$520.00 every year by this idea, How much draft beer do you sell? What is the Gross Profit from Draught beer? $300 \frac{1}{2} \text{ bbls} \times 132 \text{ pints} \times \$4.00 = \$158,400.00$... would \$520 or 0.003% of gross sales be worth it? Simple answer - NO

Q: Has there been any study to show that increased line cleaning means increased beer loss from losing what's in the line when cleaning is started? Would be interested to see if this offsets increased beer sales?

A: See above. The loss of beer in cleaning is typically 1% or less of total beer volume (and often MUCH less if you go through a lot of draught beer). That means growth would still be 3+% (remember, you also have to account for loss in existing cleaning schedule – we assumed two months). In addition, cost of lost beer was figured into the cost-revenue analysis.

Q: In your study has the cleaner always been diluted NaOH? Have you ever looked at formulated cleaners? If so, what difference did you see between the NaOH?

A: We only used Micro Matic beer line cleaner and Thonhauser Desana Max for verification of beer line organic build up. Micro Matic Acid line cleaner was used quarterly.

Q: What is the position/opinion of the BA in regards to requiring wholesalers to maintain draught lines vs. requiring retailers vs. encouraging a third party (independent line cleaning service) industry?

A: It is important to have all members of the industry engaged in the draught line cleaning process. No matter what the configuration of the market everyone should be working with the Brewers Association recommendations at a minimum and maintain the integrity of the draught system so the flavor of the draught beer is consistent throughout the time at retail.

The word “require” is far too strong -- the BA has no governance over wholesalers, retailers, or third-party cleaners. The BA does, of course, have strong *recommendations* encouraging a strict adherence to a two-week line cleaning cycle and specific processes outlined in chapter 8 of the Draught Beer Quality Manual.

State-by-state, there are laws that dictate whether a distributor is allowed to provide line cleaning as a service. There are approximately 37 states that allow distributors to provide this service (I say approximately, because there are some areas where “practice” is not in complete alignment with “allowances”).

In the 13 states that do not allow this service, brewers and distributors have little to no resources to overcome poor draught quality of one of their beers. In most cases, if a brewer/distributor finds one of their beers are bad because of poor draught quality, it is illegal for them to clean the line, it is illegal for them to replace the keg, and it is illegal for them to discontinue sales to this account.

In the states where this service can be provided, brewers can work with their distributors to establish a set of standards that are right for their beers. In these states, both brewers and distributors have recourse to remedy poor draught quality; and retailers still have complete freedom to clean their own lines or hire a third-party to complete the work if that is their preference.

There are many retailers and third-party cleaning companies that do excellent work, and conversely there are those who do not. Generally speaking, states allowing this service to be provided by a distributor, allow for an additional layer of accountability to help protect draught beer and encourage the growth of this category.

Q: Do you take into consideration formulated caustics with detergents / surfactants or strictly % NaOH?

A: We select chemicals that are built to industry recommendations and often have detergents / surfactants in them so they clean effectively and rinse completely to ensure draught line integrity.

Q: Depending upon volume of beer sold, is it possible that there are situations where cleaning bi-weekly would still be insufficient for adequate cleaning?

A: Volume of beer sold has no effect on cleaning. Once beer touches a beer line it needs to be cleaned every 14 days at a minimum. If a system is “neglected or has signs of age” then a more frequent line cleaning regimen is recommended. A 3% caustic solution cleaning process removes 2 weeks of build up... so if a system has been cleaned every 28 days for 2 years then weekly cleaning in theory is needed for a year to catch up.

Q: Do you disassemble and soak each faucet with each 2 week cleaning?

A: Yes every time. Faucets are exposed to air the most, nightly water flushing and putting a faucet cap on to prevent fruit flies is commonly used at bars to improve faucet hygiene.

Q: Is it recommended to disassemble and clean the sanke couple every week as well?

A: Scrub the outside of the coupler with clean water to remove bio-film. Yearly you want to remove the coupler and use food grade lubricant on the internal seals so the coupler works properly.

Q: Were your sales increase numbers based on retailer sales to consumers or wholesaler sales to retailer?

A: Wholesaler sales to retailer. We are assuming retailers aren't ordering more beer unless they are selling it to the consumer.

Q: What are your thoughts on the chemical penetrate? I will soak our lines for 20 minutes and pull the faucets apart and soak, then run penetrate through before I rinse with clean water. I do this every week

A: Be sure to know the working caustic % in solution. Recommended Beer line cleaning is made up of 2%-3% caustic solution, 20 minute soak time (15 minute recirculation), 80°F to 120°F temperature and minimum every 14 day frequency.) All four play a vital role in maintaining draught beer flavor integrity.

Q: What is the 4% growth attributed to? Less foam? More pints sold?

A: More pints sold is the assumption - consumers liking draught more and ordering more of it.

Q: Is there an average feet of line or measurement used in these studies to show gain and loss? I work at an establishment with 24 lines each 150 ft. long. My previous place was 12 lines with 370 feet of lines and cleaning was an undertaking to say the least.

A: We assumed 80 feet. Longer lines will increase beer cost - but those are usually typical of larger accounts that gain other efficiencies in cleaning.

Q: in Wisconsin what percentage of bar / pub volume is draught beer versus bottled beer?

A: No exact data known at this time. 15% of beer sold in WI is draught beer. That number is the only published number we have and that is based on beer shipped to distributors.

Q: Does a FOB affect a circulation cleaning regimen?

A: A FOB in line will require removal from the system twice a year, disassemble and hand scrub to remove any bio-film. You can clean through FOBs by making sure they are in the "clean" mode and purging any unfilled space with cleaning solution during the regular cleaning cycle.

Q: How can you convince a retailer that has you clean "your" own lines, but switches lines up because other distributors do not clean their lines, to keep your lines where they are so that you can enjoy the benefits of routine cleaning and maintenance?

A: One very quick way to sure up this is to stop service until they maintain your line... is your line. People want what they can't get and by standing firm they will respect the statement. If not, do you really need your beer on a dirty line? Business partners don't do this to each other. Build the relationship and convince them to pay you to clean all the lines if ok by local laws. (you may have a second business opportunity and not know it...) If the competition wants your clean line you should profit from it!

Q: Did this additional growth come from new business or was it a move from bottled beer (or wine or ??) to draught?

A: Great question. There likely is some substitution, but most consumers have fairly fixed bottle vs. draught preferences, so it is likely that it is primarily increased draught sales.

Q: The growth numbers were derived from which study?

A: Our own study based on a distributor in Wisconsin. It should also be noted that these confirm similar findings from Quain (2007) in UK pubs.

Q: What is the growth potential versus added expense in going from a 2 week cycle static cleaning to a 2 week cycle recirculation cleaning?

A: A study by a leading brewer in the US stated recirculation cleaning is 80 times more effective vs. soaking. It would be worth researching... We have done some unpublished research with side by side 10 line soaking vs. 10 line recirculation cleaning following the Brewers Association recommendations we can shave 15 minutes off the time (60 minutes to soak and clean compared to 45 minutes to recirculate clean... not scientific at this time, yet we made the switch to recirculation due to safety concerns as soaking often caused splashing of chemicals)

Q: what is the best way to advertise if you are a line cleaner?

A: Posting signage behind a bar that states the draught system is maintained to the Brewers recommendations works well in beer bars. Put your service schedule on the entrance of the keg cooler.

Q: Where can I get the parts for recirculating? Specifically the hose barbs to hook into the faucet end of the shanks.

A: Most draught suppliers have the hook ups for recirculation (Micro Matic, Perlick, ect.)

Q: Are distributor's line cleaners okay to use? Are distributors aware of this in Colorado?

A: Distributor line cleaners are often aware of the Brewers Association recommendations. If you are having consumer complaints, be sure to have a trained professional review your system. (dactyl and/or lactobacillus are common off flavors in draught systems, a trained palette is needed to detect these off flavors)

-Tyler Jones (darthbrewer@gmail.com) - 1:54 PM

Q: If the sales increase #'s are based on wholesale to retail, couldn't the increase be attributed to beer in the lines being dumped in order to clean the lines?

A: A small portion, yes - but lost beer is typically 1% vs. 4% volume growth.

Q: How would you recommend handling the situation where a retailer has very old and poorly maintained lines that no amount of cleaning can help?

A: Taste the beer from the taps and then taste beer directly from the keg on line. A taste difference should be noticeable. Once this change is recognized look to replace lines with newest lines with an eye on 5/16" or 1/4" lines to minimize beer at risk during cleaning and dispense. If you can save 30% or 60% of beer from a system it pays for itself to replace the lines due to technological advances in the industry.

Q: Any special recommendations for complex brewpub operations with single pumps serving multiple taps on multiple floors? We've got 147 taps on 8 bars on 5 floors.

A: Pumping chemicals is effective if CO2 is not present in the beer line. CO2 neutralizes caustic and reduces the effectiveness of cleaning. Due to some system restrictions recirculation may not be feasible. When looking to remodel consider maintenance efficiencies as a cost of doing business and it will lead to a more efficient system.

Q: I am an independent line cleaner, using BA procedures, in Washington. Our situation is sad. Tips in getting the breweries involved in pushing line cleaning?

A: It takes success stories to build upon success stories. One account at a time sounds like a small number, however over a three year period by sharing these stories we have seen a nice return on investment. 4% growth in the beer industry is a big deal! Control what you can control and educate your accounts to the best practices. Brewers will join you, reach out to brewers who sell in your area for support.

Q: Are the studies themselves publicly available?

A: They will be soon. Members will be able to access the slides via BAMO on BA.org and the slides will also be available via draughtquality.org

Q: Is cleaning the lines and faucets weekly over doing it

A: Some brewers recommend daily flushing of beer lines. Maximum biological growth occurs between day 10 and day 14 in the cleaning cycle. To prevent flavor change it is recommended to clean at a minimum of every 14 days.

Q: What is the value of acid chem cleaning?

A: Acid cleaning quarterly removes the "beer stone" or calcium oxalate from the draught beer lines. This is a recommended practice in the Brewers Association Draught Quality Manual.

Q: We currently use static line cleaning. Does recirculation pose any potential risks for cross contamination? For example we have had a chili beer on one line that would leech the line, and the only way to remove it would be to just replace the line.

A: At this time we have no known contamination due to the limited time spent in the line during cleaning.

Q: Are the recirc times recommended by BA the same for less lines than in the slide of distributors surveyed?

A: The BA has not set a time for recirculation cleaning. New Glarus Brewing Co. timed the line cleaning practice at the brewery 6 draft lines of 65 feet each at 45 minutes start to finish.