The Importance of Draught System Cleaning

In addition to alcohol and carbon dioxide, finished beer contains proteins, carbohydrates and hundreds of other organic compounds. Yeast and bacteria routinely enter draught systems where they feed on beer and attach to draught lines. Minerals also precipitate from beer leaving deposits in lines and fixtures.

Within days of installing a brand new draught system, deposits begin to build up on the beer contact surfaces. Without proper cleaning, these deposits soon affect beer flavor and undermine the system's ability to pour quality beer.

When draught systems are properly serviced using the right solutions and procedures outlined in the Draught Beer Quality Manual, line cleaning prevents the buildup of organic material and mineral deposits while eliminating flavor-changing microbes. Thus, a well-designed and diligently executed maintenance plan ensures trouble-free draught system operation and fresh, flavorful beer.

How Clean Is Your Beer System?

As a retailer, you may or may not clean your own draught lines, but you have a vested interest in making sure the cleaning is done properly. Clean lines make for quality draught beer that looks good, tastes great and pours without waste.

Take the time to review the guidelines on the reverse and monitor your draught line cleaners—no matter who they are—to ensure that your system receives the service it needs to serve you and your customers well. Simple checks like using a straw to scrape the inside of a faucet and checking keg couplers for visible build-up will help to ensure your beer lines are being properly maintained and serviced.

Electric Pump Cleaning: The Recommended Cleaning Procedure

The industry currently uses two primary beer line cleaning procedures: re-circulation by electric pump and static or pressure pot cleaning. Electric re-circulating pump cleaning is recommended as the approach for nearly all systems. Re-circulation pump cleaning uses the combination of chemical cleaning and mechanical action, to effectively clean a draught system, by increasing the normal flow rate through the beer lines during the cleaning process.

While static or pressure pot cleaning is an alternative, it is a less effective and is not a recommended method for cleaning. This procedure requires additional time to ensure that the cleaning solutions have the right contact time in line, to make up for the lack of mechanical force. For more detailed descriptions and complete step-by-step procedures visit Chapter 8 of the Draught Beer Quality Manual at www.draughtquality.org.

Sonic Cleaners

Devices that purport to electrically or sonically clean draught lines are not a suitable substitute for chemical line cleaning. Although some sonic cleaners may inhibit bacteria and yeast growth, they have little or no cleaning effect on the draught system's hardware and fittings.
Beer-spoiling bacteria will ruin a beer’s flavor and aroma, and will inevitably lead to lost repeat business and potential sales. While these micro-organisms are not health risks, they will cause buttery off-flavors called diacetyl, or sour and vinegary off-flavors called acetic acid.

When draught beer systems are not properly cleaned, anaerobic and aerobic micro-organisms like lactobacillus, pediococcus, pectinatus, and acetobacter will begin growing in beer lines and associated equipment.

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Summary of Draught System Cleaning and Service Recommendations

These guidelines reflect the key actions needed to maintain draught systems and pour trouble-free high-quality beer. Before performing these actions, please read the detailed recommendations found at www.draughtquality.org as they contain many details important to effective and successful cleaning.

Draught Systems Cleaned and Serviced - At a minimum every two weeks (14 days) - as follows:

- Clearly posted documentation of line cleaning and servicing records is recommended in all keg coolers (visit http://www.draughtquality.org/f/CleaningLog.pdf for a printable line cleaning log).
- Turn off your glycol system if possible, and push beer from lines with cold water.
- Clean lines with caustic solution at 2% or greater concentration for routine cleaning of well maintained lines, or at 3% for older or more problematic lines. Contact your chemical manufacturer to determine how much chemical is needed to achieve these recommended concentrations. If you use non-caustic based cleaners such as acid based or silicate based cleaners, be sure to use the cleaning concentrations recommended by the manufacturer. For best results, maintain a solution temperature of 80º - 110 ºF during the cleaning process.
- Using an electric pump, caustic solution should be circulated through the lines at a minimum of 15 minutes at a flow rate of up to 2 gallons per minute. If a static or pressure pot is used (though not recommended) the solution needs to be left standing in the lines for no less than 20 minutes before purging with clean water.
- Disassemble, service and hand clean faucets; hand clean couplers.
- After cleaning flush lines with cold water until pH matches that of tap water and no visible debris is being carried from the lines.

Acid Cleaning - Every three months (quarterly) - as follows:

- Disassemble, service and hand clean all FOB-stop devices (a.k.a. beer savers, foam detectors)
- Disassemble, service and hand clean all couplers.
- Perform acid cleaning of draught lines using the same procedures as outlined above

For more information on draught system cleaning or other components of a draught beer system, visit the Brewers Association’s Draught Beer Quality Manual at: www.draughtquality.org