



chapter 7

serving draught beer

properly designed and appropriately operated, your draught system pours perfect draught beer from its faucets. But the consumer's experience can still be ruined by improper pouring, glass residue and unsanitary practices. In this chapter, we review the serving practices required to deliver high quality draught beer.

To achieve the qualities the brewer intended, beer must be served following specific conditions and techniques. Let's review some of the critical conditions necessary for proper draught dispense.

- Beer stored between 34° - 38°F
- Beer served between 38° - 44°F
- To accomplish this, the glycol cooling the beer lines in a long-draw system should be set to 27° - 32°F.
- Balanced draught settings (pressure = resistance)
- Normal flow rate of 2 ounces per second

Glassware Cleaning

A perfectly poured beer requires a properly cleaned glass. As a starting point, glassware must be free of visible soil and marks. A beer-clean glass is also free of foam-killing residues and lingering aromatics such as sanitizer.

A freshly cleaned glass should be used for every pour. We recommend that accounts never refill a used glass.

Two systems deliver effective beer glass cleaning:

1. Manual cleaning in the three-tub sink, or
2. Dedicated automatic glass washers.

Each approach requires specific techniques and a certain degree of discipline. Let's look at what's involved with each one.

Manual or Hand Cleaning in the Three-Tub Sink

1. Clean sinks and work area prior to starting to remove any chemicals, oils or grease from other cleaning activities



2. Empty residual liquid from the glass to a drain. Glasses should NOT be emptied into the cleaning water as it will dilute the cleaning solutions.

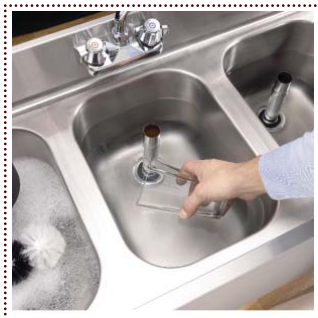


3. Clean the glass in hot water and suitable detergent. Detergent must not be fat- or oil-based. Detergents suitable for beer glass cleaning are available through restaurant and bar suppliers.

4. Scrub the glass with cleaning brushes to remove film, lipstick and other residue. Rotate the glass on the brushes to scrub all interior and exterior surfaces. Be sure to clean the bottom of the glass.

5. Rinse glass bottom/butt down in cold water. Water for the rinse should not be stagnant but should be continually refreshed via an overflow tube. If time permits, a double dunk is recommended and preferred.

6. Sanitize in third sink filled with hot water and an appropriate sanitizer. Sanitizers typically contain chlorine so check the pH and chlorine con-



tent of the sanitizing bath periodically to maintain proper conditions. Water temperature should be at a minimum 90°F. Chlorine concentration should be 100 ppm or at the required local health department concentration.

Automatic glass washing machines

1. Dedicate this machine to cleaning bar and beer glassware only. Do not subject it to food or dairy product residue.

2. Use correct detergent, sanitizer and rinse agents in properly metered amounts.
3. Check concentrations once each day using kits or follow detergent and sanitizer supplier recommendations.
4. Use water temperatures of 130° to 140°F. High temperature machines designed to operate at 180°F can be used without additional chemical sanitizers. Please check your health department for local requirements.
5. Maintain the machine to assure good water flow through the system including free flow through each nozzle and washer arm.
6. Regularly service the machine based on the manufacturer's or installer's guidelines.

Handling Clean Glasses

Keep glassware clean and odor free after washing:

1. Air-dry glassware. Drying glasses with a towel can leave lint and may transmit germs and odors.
2. Dry and store glasses in a stainless-steel wire basket to provide maximum air circulation. Similar deeply corrugated baskets or surfaces also work.
3. Do not dry or store glassware on a towel, a rubber drain pad or other smooth surface, as they can transfer odors to the glass and slow the drying process.
4. Store glassware in an area free of odors, smoke, grease or dust.



5. Store chilled glasses in a separate refrigerator away from food products such as meat, fish, cheese or onions as they can impart an odor to the glasses.
6. Store beer glasses dry in a chiller. Never use a freezer. Chill glasses at 36° – 40°F.

Testing for “Beer-Clean” Glass

Beer poured to a beer clean glass forms a proper head and creates residual lacing as the beer is consumed. After cleaning, you can test your glasses for beer clean status using three different techniques: sheeting, the salt test and lacing. Let’s review each technique.

1. **Sheeting Test:** Dip the glass in water. If the glass is clean, water evenly coats the glass when lifted out of the water. If the glass still has an invisible film, water will break up into droplets on the inside surface.
2. **Salt Test:** Salt sprinkled on the interior of a wet glass will adhere evenly to the clean surface, but will not adhere to the parts that still contain a greasy film. Poorly cleaned glasses show an uneven distribution of salt.
3. **Lacing Test:** Fill the glass with beer. If the glass is clean, foam will adhere to the inside of the glass in parallel rings after each sip, forming a lacing pattern. If not properly cleaned, foam will adhere in a random pattern, or may not adhere at all.

Glassware Temperature

- Serving between 38° to 44°F delivers the best taste experience for most beer styles. Domestic lager beer can be enjoyed at 38° to 40°F if served in a chilled glass. Beer served at near-frozen temperatures retains more CO₂ gas (resulting in a more filling experience for the consumer) and blinds the taste experience (taste buds are “numbed,” resulting in a bland taste experience) in comparison with beer served at recommended temperatures.
- Room temperature glasses are preferred for craft beer but may cause foaming on highly carbonated beer.
- Chilled glasses are preferred for domestic lager beer, but they should be DRY before chilling. Wet glassware should not be placed in a freezer or cooler as it may create a sheet of ice inside the glass.
- Frozen glasses will create foaming due to a sheet of ice being formed when the beer is introduced to the glass. Extremely cold glass surfaces will cause beer to foam due to a rapid release of CO₂ from the product.
- Water mist devices may be used to pre-wet and chill the glass interior prior to dispense. Glass interior should be mostly free of excess water before pouring.



Sheeting



Salt



Lacing

Pouring Draught Beer

Proper serving of draught beer is intended to have a “controlled” release of carbonation to give a better tasting and sensory experience. The evolution of CO₂ gas during pouring builds the foam head and releases desirable flavors and aromas.



Technique

1. Hold glass at 45° angle, open faucet fully.
2. Gradually tilt glass upright once beer has reached about the halfway point in the glass.
3. Pour beer straight down into the glass, working the glass to form a one inch collar of foam (“head”). This is for visual appeal as well as carbonation release.
4. Close faucet quickly to avoid wasteful overflow.

Pouring Hygiene

- In no instance should a faucet nozzle touch the inside of the glass
 - Nozzles can potentially transfer germs from one glass to another.
- In no instance should the faucet nozzle become immersed in the consumer’s beer.
 - Nozzles dipped in beer become a breeding ground for microorganisms.
- Importance of one-inch foam collar:
 - While retailers struggle with customers who demand their beer “filled to the rim,” brewers prefer beer poured with about a one-inch collar of foam (“head”).

- A one-inch head maximizes retailer profit, as foam is 25% beer. Filling glass to the rim is really over-pouring.
- A proper head on a draught beer delivers the total sensory experience, including the following sensory benefits:
 - Visual appeal of a good pour
 - Aromatic volatiles in beer released
 - Palate-cleansing effect of carbonation enhanced
 - Textural and sensorial qualities of beer better presented to consumer

Free-Flow Pouring

- Beer pours best from a fully open faucet.
- To control the faucet during operation, hold the handle firmly at the base.
- Partially open faucets cause inefficiency and poor quality, namely:
 - Turbulent flow
 - Excessive foaming
 - Waste (inefficiency)

For notes on proper dispense hygiene when using a cask ale “beer engine,” see Appendix D. ■