

Quality control for keg cleaning

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Of all the refillable beer containers currently in use, the modern beer keg is certainly one of the most difficult to analyze with standard quality control methods. Other refillable beer containers - bottles, growlers, serving tanks and bright beer tanks - are all relatively easy to inspect internally.

Even the old-style beer kegs had the filling port on the side through which an inspection lamp could be inserted. The modern keg, alas, has no such feature. This leaves the brewer in a bit of a quandary when it comes to verifying the effectiveness of his keg cleaning system.

Brewpubs often face a special challenge in the keg cleaning area, since many of them are not willing to make the large capital investment needed for an automated cleaning and filling system. If this is the case, the brewpub should at least invest in a valve-extraction toolkit, which costs about \$250.

Every brewery needs to have the ability to extract the valve and spear assembly from its kegs. This is best done with a special tool that fits over the valve collar and depressurizes the keg. The tool simultaneously pushes down on the valve enough to allow the removal of the snap ring that holds the valve in place. A special pick is then used to pull out the snap ring.

Simply attacking the snap ring with pliers and a screwdriver invariably leads to broken rings, bloody knuckles, and tool-throwing unhappiness. The modest investment in the right tool pays off quickly. The reason to pull the spear is to look inside the keg. Nothing beats the physical examination of the keg interior. It is amazing what can be found. The spear itself often is not cleaned properly and may have bits of crud baked onto its surface. If so, use a non-metallic scouring pad (a green scrubby) and some foaming detergent to clean the outside.

If the interior of the spear also is fouled, a brush can be run up inside it. Never use steel wool or metal brushes on stainless steel. The resulting scratches will just make cleaning more difficult the next time.

Next use a flashlight wand to examine inside the keg, looking for streaks or deposits. Beerstone and yeast sediment often can be found, especially in kegs that have been unused for a year or two. This point cannot be overstated: Looking inside some of the kegs after cleaning is the best method to verify the cleaning process.

In a brewpub with a limited keg stock and no mechanized cleaning system the best approach is to pull all the keg valves as soon as possible after use to prevent bacterial growth. Then rinse the kegs and spears in hot water (110° to 120° F). If only a few kegs are involved, filling and soaking them overnight with 2 percent caustic solution might be practical.

If many kegs are being cleaned at the same time, it is wise to hook up a little spray ball on a stand to wash the interiors. The spears can be cleaned manually by soaking in caustic, then scrubbing and brushing. Avoid using chlorinated caustic cleaners on the spears, because the rubberized seals in the valve assembly may break down or swell and distort in the presence of chlorine. Excess contact time with chlorine also can corrode stainless steel, forcing you to purchase new spears.

In this small-brewery scenario it is advisable to leave the spears out of the kegs until they are to be used again. This way the kegs can be inspected immediately prior to filling. Put dust covers or aluminum foil on the valve openings to keep out dirt and then store them upside down. Prior to filling, the kegs should be rinsed with hot water, sanitized with iodophor or a similar sanitizer, and rinsed again with cold water. Reassemble, purge with carbon dioxide, and fill them right away. It is not a good idea to let kegs sit around in