



Process & Packaging, Inc.

Sankey Keg Washing, Sanitizing and Filling for the Wine Industry

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So your winery has decided to fill some kegs and get into the Wine on Tap market? That's great news, the category is new to the US and it is receiving a lot of attention from the media because of its numerous benefits to the consumer and on-premise operator. We recommend that before you take the leap, you read this article so that you can ship your wines into the market and have the best opportunity for success.

We've all seen kegs around the cellar at the winery, they're commonly used for "breakdown", when quantities of wine less than a full barrel are held and used for topping other barrels or small tanks. It makes sense that these same kegs could be used for serving wine in your tasting room or a favorite wine bar or restaurant. The kegs can be pressurized with nitrogen or argon, and dispensed from a tap just like a beer. Then you can wash the kegs at the winery and refill them and send them back to the restaurant, right? Not exactly, and selling your wines this way could damage your hard earned reputation in the market as well as affect the sales of your cased goods.

Any good cellar hand can-- along with a simple coupler modified with Tri Clover fittings, hoses and a pump -- wash and fill kegs at the winery. But would you send your wines out into the market in recycled bottles that were used over and over, and then filled by hand under less than sanitary conditions? Probably not, so why send those same wines into the market packaged in kegs that way?

Washing, sanitizing and filling kegs properly is one of the keys to maintaining the integrity of your wines in the Wine on Tap category. Quality control standards are just as exacting as those on a commercial bottling line; good standards are in place, thanks to the brewing industry. Kegs and their washing systems have been designed together to ensure consistent, repeatable and effective results. Beer, by nature is more susceptible to spoilage than is wine, so by utilizing their sanitary protocol we can expect to achieve a high degree of successful packaging of our wines in kegs.

Inside a keg, there is a stainless steel spear tube, which delivers the product through the valve. It is also used during the washing and sanitizing phase. The tolerances of this spear were designed to accommodate specific water pressures, flows and wash solution viscosities in order to provide a thorough wash pattern on the interior wall of the keg and around the outer surface of the spear tube. These precise operations can't be duplicated accurately by a simple coupler and a pump -- specialized equipment is used to wash and sanitize kegs fitted with a Sankey valve.

Once the keg has been washed, it is sanitized. Steam was used for sanitizing in the brewing industry until the early 1990's when the introduction of new direct food contact sanitizing products like Oxine® replaced it—minimizing occupational hazards and damage to rubber gaskets and O-rings in the kegs. The same design properties of the keg, spear, valve, water flow and pressures are utilized during sanitation, to sanitize the interior of the keg and its valve and spear tube. To confirm successful sanitation settings of the wash / sanitizing system, spears may be removed randomly and tested to confirm sterility. After complete washing and sanitizing, the keg is purged with filtered inert gas, counter pressurized, and is then ready to fill.

Aseptic filling ensures spoilage organisms cannot enter the product fill phase. When a keg is connected for aseptic filling, the exterior of the valve is sanitized prior to the engaging of the spear and introduction of product. The clean keg has been evacuated of air and counter pressurized, so wine enters the keg without splashing or foaming; the product flow is shut off at a determined volume in the keg.

This method ensures that the cooperage is clean and sanitary -- prior to filling and the wine that goes into the keg is free of contaminants that could affect the integrity and shelf life of your product in the market.

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