

An Even Closer Look At Hops: Advanced Hopping Terminology

The last couple editions of LVEd have focused on English IPA and American Pale Ale—two styles known for expressing hop flavor in all its glory. In the midst of writing these little blurbs, I did a lot of...ahem..."research" to prepare myself. As I drank—er—"researched," I encountered a bunch of hop-related terminology on labels and beer menus that sounded cool, but might be confusing to fledgling hopheads. So this week, I've put together a short glossary of more advanced hop-related terminology that may be useful in your hoppy beer explorations. Check it out:

Hot Side

Brewers use the term "hot side" to refer to the portion of the beer making process that occurs before wort is chilled for fermentation. Hot side processes include mashing, lautering, and boiling. The following terms are associated with hop usage on the hot side.

Aroma Addition – Hops added late in the process of boiling wort are sometimes referred to as an "aroma addition." This is because hops added late in the boil impart tons of their aromatic oils to the finished beer. If they had been boiled longer, those oils may have been driven off, leaving only the hops' bitterness behind.

Bittering Addition – Hops added earlier in the boil lose many of those aromatic oils, but leave behind a lot of their valuable bitterness. Most brewers find a balance between early bittering additions and late aroma additions to get the most out of the hop character in their finished beers.

First Wort Hopping – First wort hopping is an old method of adding hops to beer that has seen a recent revival in popularity. In this method, brewers add hops to the empty boiling kettle before the wort is added. Hot wort is then added to the kettle on top of these hops as the lautering process finishes. Brewers are able to get more bitterness out of their hops, reducing their ingredient costs, and some drinkers report a softer, more pleasing bitterness and different aromatics from this method.

Hop Back – A hop back is a vessel that is filled with hops, through which hot wort is run after it's boiled, but before it's chilled. This allows the wort to quickly take on a last-minute dose of aromatic hop oils, without allowing them to be released from the hot wort.

Hop Bursting – Hop bursting is the practice of adding most or all of a beer's hops during the last 15 or so minutes of the boil. This means that much of the aromatic hop oils are retained, since they aren't boiled for very long, but less bitterness is extracted from the hops. To compensate for this, more hops are used to achieve the desired number of IBUs. Because that makes this a fairly inefficient process, it is more common amongst homebrewers, who are less concerned with cost of ingredients.

Whirlpool Addition – Many brewers employ a technique called "whirlpooling," in which they stir or spin wort after boiling in order to force leftover hop or grain matter to collect at the bottom of the vessel (either the kettle or a dedicated whirlpooling vessel) for easy removal. Brewers can add hops just before whirlpooling to let them remain in contact with the wort during this process. This is referred to as a whirlpool addition—hops impart much of their oils and some bitterness with this technique.

Cold Side

As you might expect, the term "cold side" refers to the things brewers do to make beer after wort is chilled for fermentation. Cold side processes include aeration, pitching, fermentation, lagering, and carbonation. The following terms are associated with hop usage on the cold side.

Dry-Hopping – Dry-hopping refers to the addition of hops to beer after or toward the end of fermentation. Dry-hopping imparts a lot of hop aroma, but little to no bitterness. This is an extremely common practice in commercially-made hoppy beers.

Hop Cannon – The hop cannon is a device that aids in the dry-hopping process. It blasts hops under pressure into fermentation or maturation vessels filled with beer. This lends a potent dose of aromatic hop oils and minimizes the potential for oxidation that occurs when these tanks are opened from the top (as is the practice in most breweries that dry hop but do not have a hop cannon).

Hop Torpedo – The hop torpedo is a torpedo-shaped vessel developed by Sierra Nevada Brewing Company to dry-hop beer. Beer is forced through the torpedo, which contains a mass of hops, and is then pumped back into the tank from which the beer came.

Randall – Developed by Dogfish Head Craft Brewery, the Randall (AKA Randall the Enamel Animal) is a device designed to impart a last-second infusion of flavor into beer as it travels from the keg to the consumer's glass. It is a small container that is spliced into the draft system's tubing and filled with whatever flavoring agent the serving establishment would like to add to the beer. Hops are most common, but folks have added fruit, spices, coffee, and all kinds of other things to beer using the Randall.

Wet-Hopping – Confusingly, wet-hopping is *not* the opposite of dry-hopping. Wet-hopping (sometimes called "fresh-hopping"), refers to the use of freshly-harvested hops that have not yet been dried. Wet-hopped beers have to be made within a day or two after the hops have been harvested in the fall, as the hops will quickly rot in their "wet" form. Wet hops can be used on both the hot and cold side of beer production, but will impart most of their fresh character if used for dry-hopping. Yes, a hop addition can be an example of both wet-hopping and dry-hopping at the same time. Whoa.