

Glossary

Following is a brief summary of most of the brewing styles. There are dozens, if not hundreds of brewing styles. But first, the most important distinction...

Q: **HOW MANY "TYPES" OF BEER ARE THERE?**

A: **TWO - ALES AND LAGERS.**

What's the difference? Yeast. All beers are essentially one or the other (kind of like red vs. white wines).

ALES (TOP FERMENTATION YEASTS)

By far the older of the two types of beer, ale production can be traced back more than 5000 years. The word "Ale" comes from the German word alt, meaning old or aged. Like red wines, they are fermented and served at warmer (room) temperatures, usually yielding more intense flavor profiles. Depending on the brewing style, they can be their best when very young (a couple of weeks) to very old (several years).

LAGERS (BOTTOM FERMENTATION YEASTS)

Lagers have only been around for several hundred years and were not even fully understood until after the invention of the microscope. The yeast strains that make them were originally propagated on accident. Like white wines, they are fermented and served at cooler (cellar) temperatures. This limits the formation of esters and other fermentation by-products, producing a clean flavor. Lagers are the most popular big-brewery beers in America, although the version most often consumed here is nothing like the European counterparts.

ALE BREWING STYLES

New World Ales: First of all, "New World" brewing styles are not always ales. Usually yes, but sometimes they are lagers. Mostly this is because the majority of American craft brewers make more ales than lagers, so it's really a laws-of-averages thing and nothing more. Our festival will feature both ale & lager examples. In general, "New World" refers to a brewing style that falls outside classic (European) brewing style parameters. It could be a hybrid (combination of several brewing styles), or perhaps use of unconventional ingredients. In some cases it can simply be a straight forward brewing style that has been developed and popularized in the American craft brewery movement of the last 25 years, which would make it "new" in terms of brewing history. American Ambers and Goldens would be good examples of this.

Abbey Beers: Belgium: A variety of strong ales, similar to the Trappist beers, but not made in monasteries although, in some cases, they have been at one time. The term "Abbey ale" refers more to a relationship with a monastery than it does with a specific beer style. The following sub-categories are just as

hard to define clearly. There are considerable conflicting viewpoints about what makes a tripel a tripel and so forth. It should be noted that due to the great variety in abbey ales, some of them would not fall into any of the four sub-categories listed below. That said, here's our take on the usual suspects:

Single: Also often referred to as a blonde, singles tend to be the lightest in alcohol. They are usually under 6.5% ABV. Often golden, bottle conditioned, and just a bit dry.

Dubbel: Both dubbels and quadrupels tend to be darker in color, but vary in strength and flavor profile. Dubbels are largely malt forward, with roasty qualities. They typically range from 6.5% to 8% ABV.

Tripel: Probably the most pervasive style of these four sub-categories, tripels are lighter in color, yet higher in strength, usually over 8% ABV. It has been written that tripels use three times the normal amount of malt, dubbels twice as much, etc. True or not, tripels are fine examples of a light color/high strength beer style. Tripels can be very dry to very sweet, showing more range within their category than the other sub-styles.

Quadrupel: As one might guess, quads are the darkest and the strongest, with an emphasis on the malt. They tend to be a little harder to find.

Alt Bier: Germany: Originally a term for a top-fermenting beer. Classic Düsseldorf examples are copper in color, mashed only from barley malt, fermented from a single cell yeast, and cold conditioned, with an alcohol content of 4.7% ABV.

Amber: Belgium: This is a fairly broad category, encompassing great range of strength and color. Largely, these beers are between 6%-8% abv and are not flavored additional spices beyond the candy sugars popular in Belgian brewing. As with all Belgian styles, rules are meant to be broken. Another way to describe it might be to say it is somewhere between a dubbel, tripel, and Biere de Garde.

Barley Wine: England/Scotland: Often considered the most prized of all ales. With the strength of wine and the complexity of cognac, these beers show extraordinary richness, depth, and alcoholic warmth. Like fine wines, they benefit from aging, which allows their intense flavors to marry and deepen. Barley wines are very similar to English strong ales, but are usually set apart by more assertive hop bitterness and a high residual malty sweetness.

Berliner Weisse: Germany: The lightest of all the German style wheat beers. This highly carbonated, low alcohol (3%-3.5% ABV), low hopped beer is most famous for its tartness, due to the combination of a yeast and lactic acid bacteria fermentation. Fruity esters are evident as well.

Biere de Garde: France: French style, though often found in parts of Belgium. Often bronze or amber. Originally a strong, top-fermenting, bottle-conditioned beer intended for laying down. May have caramel flavors from long boil. Today, often bottom-fermented and filtered. 5%-7.5% ABV.

Bitters: English: The classic style of British draught ale. Bitters range from gold to copper in color and are characterized by the presence of English hop varieties such as Fuggles and East Kent Goldings.

Ordinary bitter: The lightest of the style generally having low to medium hop aroma, flavor and bitterness, low to medium malty character. These bitters aren't really bitter, with IBU's usually around 20-35. Their strength is typically 3%-4% ABV. Sometimes also called "cream ale", when nitrogen is used to aerate the beer and create the "cascading effect" popularized by such beers as Boddingtons, Cafferey's, and Green King Abbott.

Special bitter: Tends to be more robust than ordinary bitter, often with a pronounced dryness. This is due in part to higher IBU's (28-46) and a bit more alcohol (4%-4.8% ABV).

ESB (Extra Special Bitter): Characterized by medium to strong hop aroma, bitterness (30-55 IBU), and a richer maltiness than special bitter. The combination of both the stronger malt (4.8%-5.8% ABV) and the higher hop value make ESBs the most complex and full-flavored bitter style.

Brown Ales: Belgium & England (...and very different)

Belgian Browns: This classic style from Flanders Belgium combines malty sweetness with a sourness gained from several months of maturation (usually in metal tanks). The most complex examples have a secondary fermentation in the bottle. Oudenaarde is the most famous producing town, located in East Flanders. Oudenaarde's water is low in calcium and high in sodium carbonate, which gives a particularly textured character to the beers. Typical examples of Belgian browns come in three ages and strengths.

English Browns: AKA-"The lighter side of dark". They have a medium body, dry to sweet maltiness, and very little hop flavor or aroma. Often called nut-browns, though they contain none, they are typically around 5% ABV.

Dunkel-weizens: Germany: "Dunkel" means dark. "Weizen" means wheat. In addition to clove and banana-like esters, these wheat beers are also famous for raisin and caramel flavors. More common in southern Germany, this style of wheat beer is highly carbonated with low hop character and brewed using at least 50% malted wheat. They're usually unfiltered, and if so would include the prefix "Hefe" on the label. They tend to be of medium strength, but can be as high as 8% ABV.

Golden/Blonde: Belgium: Often aromatic and fruity-tasting, some of these are at a conventional alcohol content of 4%-5% ABV. Others are stronger. The most famous are the very strong ones like the deceptively drinkable Duvel, at 8.5% ABV. The name is Flemish for Devil. This beer has many competitors, usually with equally devilish names.

Golden/Strong Ale: Belgium: This style is more a reference to strength than anything else. They are not usually flavored as are many Belgians, save for a little candy sugar to help "kick it up a notch" (thanks Emeril) alcohol-wise. Belgian strongs range from golden to brown in color, and could be grouped with other beers like Abbey ales & Trappists, which choose to classified

as such first, then strong beers second. These beers often have names associated with the devil. They commonly range between 8%-10% in strength, but can be well over that. How ironic...they either come from a monastery, or they come from Satan. Is there no middle ground left in Belgium? Balance people, balance.

Hefe-weizen: Germany: "Hefe" means "unfiltered" or "with yeast". Clove and banana-like esters produced by particular strains of brewing yeast are signatures of this style. German style wheat beers are highly carbonated, have low hop character and are brewed using at least 50% malted wheat. Sometimes they are called "Weiss-biers", or white beer. This is a reference to the light color of the beer and head.

"Imperial" (applies to various styles): Like IPAs, any beer style that includes the word "Imperial" is usually quite high in hops and most certainly higher in alcohol. Another invention of necessity, "Imperials" were usually beers that were made in one country and shipped to another, often bound for the lips of royalty (hence the name Imperial). It's another case of long journeys calling on the properties of higher alcohol and hops to act as preservatives. If you think IPAs are strong and hoppy, you should try an Imperial IPA!

India Pale Ale (IPA): England: The stars of the hop world. As with a number of brewing styles, IPA was born out of necessity. When the British were colonizing India, the beers they sent down to their troops kept spoiling during the long sea voyage. With an extra healthy dose of hops and alcohol (40-65 IBU and 5%-7.5% ABV respectively), both having great preservative value, their problems were solved, and the world had another distinctive beer style. Today, American craft brewers do more than emulate the style. They continue to push the envelope with strength and bitterness. Curiously, it's much harder to find a true IPA from England these days, with a few notable exceptions, which we will feature.

Kolsch: Germany: A golden top-fermenting beer that originated in Cologne. Medium bodied and usually around 5% abv.

Lambics: Belgium: Lambics represent the oldest style of beer (and beer making) found in the modern world. Specific to the Brussels area, this style resembles wine and champagne more than any other beer in the world. The name is most likely derived from the small town of Lembeek ("Lime Creek"), southwest of Brussels in the Zenne River valley. This is the heart of the Lambic region. A handful of breweries around Lembeek practice brewing methods which pre-date the culturing of yeasts. They gain their tartness from a content of at least 30% raw wheat in addition to malted barley, but their defining characteristic is the use of wild yeast, or "spontaneous" fermentation. Wild airborne yeasts, indigenous to the region, ascend upon open brewing vessels in attics of farmhouse breweries, where nature takes its course. It is not uncommon for Lambics to have a fermentation period of two or three years, and much of that time in wooden casks. Most of these beers have conventional alcohol content, in the range of 3%-6% ABV.

Fruit Lambic: They are beers, and not wines, because the original fermentation is grain based (the definition for beer). The fruit comes later, and is an excellent compliment to acidity of the lambic beer style. In the traditional method, the fruit is added during the maturation of the beer, causing a further fermentation. The best of Belgian fruit beers have the dryness of pink Champagne, rather than the sweetness of a soda-pop.

Gueuze: A champagne style lambic. The carbonation is achieved by blending young Lambic (typically six months old) with more mature vintages (two to three years). The residual sugars in the young Lambic and the yeasts that have developed in the old cause a new fermentation. The most traditional examples will usually have the endorsement label of the organization De Objectieve Bierproevers. References to “old” (oud, vieux, vieille) on the label indicate a minimum of six months and a genuine Lambic process. Without these legends, a Lambic may have been “diluted” with a more conventional beer.

Straight Lambic: Straight Lambic is very rare (and hard to find). Typically, it is tapped directly from the cask in which it was fermented. With almost no carbonation, unsweetened and unblended, straight lambic can seem less like a beer and more like fino sherry.

Pale Ales: England: Traditionally golden to copper in color, pale ales have low to medium maltiness, with English hop varieties providing flavor and bitterness. Pale ales are not really “pale”. The term was originally used to distinguish these ales from porters and stouts. They tend to have a bit more assertive flavors than most beers in the “Bitters” category.

Porters: England: Porters were the first beer style in the world to achieve national distribution, due to the industrial revolution. The style can be dated to the early 1700’s. It has been argued that porter takes its name from the train porters who used to sell their beer throughout the early British rail system. Another notion is that porter was first produced on a commercial scale in London on the River Thames, where it was sent out on ships bound for other port towns. The darkness of the beer covered up cloudiness and the roasty full flavor helped mask flavor defects. These were helpful beer style characteristics during a period when problems with consistency in brewing were commonplace. Today, porters range from 4%-6.5% ABV, and 20-40 IBU.

Red Beers: Belgium: Mainly from West Flanders, they are the more sharply acidic, reddish, half-brothers to the Brown Beers of East Flanders, with the additional difference that they are often filtered and pasteurized. The sharp acidity and some of the color is derived from aging in large wooden tuns.

Saison: Belgium: Saison has no clear definition with respect to raw materials and processes. It is an instance where a number of beers from a certain region are broadly similar in character and use the same designation on their labels. Today they are loosely identified by a few parameters: 5% - 7% ABV, and regarded as “light” summer specialties. They are usually amber to orange in color, and often quite dry, with a citric,

peppery, quenching quality. This can be attributed to hard water, heavy hopping, spicing, or deliberate souring. High mashing temperatures are sometimes employed to produce a substantial degree of un-fermentable sugars, giving a firm edge to the beer. This style was once a poor-man’s blend of several beers, designed to be a thirst-quencher for local farm workers. Saisons are largely local to the French-speaking part of the country, especially the western part of the province of Hainaut. Many small breweries in the French-speaking part of Belgium make similar beers, not necessarily identified as Saisons. The style does not exist in the Flemish-speaking part of the country. Saisons were regarded as a distinct family of beers by brewing scientists in the late 1800s and early 1900s. These beers were originally produced to a variety of strengths, including “children’s”, “family”, “double”, and “royal”.

Scotch Ale: Scotland: Fairly high in alcohol (6%-8% ABV) and flavor intensity. Scotch ales are overwhelmingly malty and full-bodied, with a clean and balanced alcohol flavor, and very low hop profile (25-35 IBU). They are often peaty or smoky in character and may have a fruity aroma or flavor.

Scottish Ales: Scotland: Similar in appearance, but much lighter in body and strength than their big brothers, the Scotch ales, Scottish ales are golden amber to brown in color and are characterized by malty caramel flavors.

Scottish light ales: Light in body, low in alcohol, very low bitterness (9-20 IBU’s)

Scottish heavy ales: Stronger malt character and slightly higher in alcohol than Scottish light ales (3.5%-4% ABV), heavy ales are balanced with perceptible bitterness.

Scottish export ales: More robust than Scottish heavy ales. (4.5% ABV, 15-25 IBU’s)

Stout: Stouts come in five major categories, Irish Dry, Sweet (Cream), Oatmeal, Foreign and Imperial. Stouts are black in color with the exception of oatmeal and imperial stouts, which can vary from dark copper to black.

Dry stouts: Ireland: Lower in alcohol (3.8%-5% ABV), exhibiting a dry roasted bitterness in the finish from roasted barley. They are famous for their head retention. Dry stouts sometimes contain roasted unmalted barley. This is the style most commonly associated with the nitrogen-cascading head effect.

Foreign-style stouts: Countries vary: Like Irish dry stout, there is very little hop perception, even though the IBU’s might be substantial (30-60). There is a little dry-roasted bitterness from the malt. The alcohol is considerably higher, at 6%-7.5% ABV.

Imperial stouts: Countries vary: Typical alcohol contents exceed 8% ABV, with an extremely rich malty flavor balanced by assertive hopping, and a fruity-ester character. Originally brewed as a winter warmer, for sale in the Tsarist Russian Empire. It is medium dry and distinguished by its great strength.

Oatmeal stouts: England: Medium roasted malt and caramel/ chocolate character, moderate bitterness, and generally a mild oatmeal flavor. The addition of oatmeal to a stout sometimes produces a silky texture. 4%-6% ABV on average.

LAGER BREWING STYLES

Sweet stouts (or cream stouts): England: A style which has only about 3.75% ABV in its domestic market but more than 5% in the Americas. Sweet stout usually contains milk sugars (lactose), and is a soothing restorative. Very low hops (15-25 IBU).

Strong Ales: England: Often referred to as old ales due to a long aging process that smooths the alcohol flavors and maltiness. Strong ales range from amber to brown in color, and can reach potencies of 11% ABV.

Trappist Beers: Belgium/Dutch: This term is properly applied only to a brewery in a monastery of the Trappists, one of the most severe orders of monks. This order was established at La Trappe, in Normandy. There are seven Trappist breweries, six in Belgium and one just across the Dutch border. Trappists who left France after the turbulence of the Napoleonic period established all of them. The Trappists have the only monastic breweries in Belgium, all making strong ales with a re-fermentation in the bottle. Some gain a distinct rummy character from the use of candy-sugar in the brew-kettle. They do not represent a style, but they are very much a family of beers.

The Breweries: Westvleteren, Rochefort, Orval, Westmalle, Achel, Chimay, Konigshoven

Weizen Bock: Germany: All bocks were ales in the beginning. Weizenbock is the only member of the family that is still an ale, although it is usually lagered...yet not a lager. Those are two different things. Lagering a beer has to do with cold-temperature aging (the German word "lager" means "to store"). Just about any beer can be lagered. But it's the yeast type that still dictates whether a beer is classified as ale or lager. Whew! Anyway, weizenbocks are amazingly complex beers, with cloves, bananas, raisins, and caramel in the flavor, and often over 6% ABV. As wheat beers go, they are stronger than most in alcohol. They range from buckwheat to toffee in color.

White (Wit) Bier: Belgium (Bière Blanche): Wit bier was originally popularized in Hoegaarden, a small town in a wheat-growing region east of Brussels and Leuven. This style is usually made from equal portions of raw wheat and malted barley, spiced with ground coriander seeds and dried orange peels. The fruitiness imparted by the wheat blends well with the orange and coriander. The style is further characterized by the use of noble-type hops. Wheat beers are identified as being "white" in several brewing nations. Wheat beers can be filtered, but less easily than those made from barley malt. They usually tip the scale around 5% ABV.

Winter Warmers: Countries vary: Generally amber to brown in color and are brewed with ale or lager yeast. They are brewed seasonally as a way for the brewers to express their appreciation and love of beer. Winter warmers often exhibit strong and complex maltiness along with low to assertive hop characters. Spices and other special ingredients are often added to increase complexity. They are typically rather potent.

Bock: Germany: Bock biers are strong beers that can be traced to the town of Einbeck Germany, circa 1250. They were originally spontaneously top fermented dark beers primarily made of wheat. Einbeck is also one of the areas responsible for the propagation of lager yeasts that have become commonplace in the modern world. They usually have more than 6.25% ABV, and may be golden, tawny or dark brown. Outside Germany, strengths vary, and a bock is usually dark.

Helles bock/ Maibock: Lighter in color ("helles" means light in German), with an average strength of 6%-7.5%. Hop bitterness is low, yet noble hop aroma may be at medium levels. (20-35 IBU)

Doppelbocks: Germany...or Paula, Italy (you decide): Contrary to popular belief, it has been argued that doppelbocks are not really related to bocks, other than by name. They come from a different place and time in history. During the Protestant Reformation (Circa 1517), the Franciscan monks from Paula Italy settled in Munich. These monks would ritually brew strong beer to carry them through the two holy fasts of Lent and Advent. While the beer style can be dated to the 1500's (which makes them a few hundred years younger than bocks), it didn't even get its name "doppelbock" until the early 1900's, when it became a popular style in Munich. The people, comparing it to the immensely popular bock biers of the day, noticed the difference in color and strength, subsequently giving it the moniker "doppelbock" (double bock). Originally top-fermented wheat beers, today they are primarily barley-based lagers. Doppelbocks were brewed with more grain than used for bocks, but not fermented as thoroughly. This left a sweet finish. The "noble" hops used in doppelbocks are for balance and slight aroma, nothing more. Despite their strength, they are a study in subtlety. (17-30 IBU, 6.5%-8% ABV)

Traditional bock: Similar to helles bock, yet a couple shades darker in color, and with an even lower level of bitterness (no higher than 30 IBU). Their alcohol content is the same.

Dortmunder/Export: German: Tend to be slightly higher in alcohol and deeper in golden color than the German Helles. The hop levels, while not high, are also more pronounced (23-30 IBU)

German Helles: In many ways, the German Helles lagers embody the flavor profile that the large American mega-breweries are trying to capture. An excellent example of subtlety in beer making. 4.5%-5.5% ABV and very low hops (18-25 IBU)

Munich Dunkel: (German dark lagers): Pronounced malty aroma and flavor that dominates over clean crisp moderate hop bitterness. They can be chocolaty, chewy, and often exhibit a bread-like aroma, from the use of Munich malt. Colors range from light brown to dark brown.

Pilsners:

Czech Pilsner: Originated in the town of Pilsen, of the Czech Republic. The most classic of pilseners. Their signature is the use of Saaz hops and a golden color. They are around 5% ABV.

German Pilsner: Higher hop bitterness, moderate hop flavor and aroma, and lighter in color (straw/golden) than the Czech. Hallertau Hops are the German bittering signature, somewhere between 30-40 IBU.

Bohemian Pilsner: More full-bodied, slightly sweeter and maltier than German pilseners and may be light amber in color. Bohemian pilseners are also typified by the use of Czech Saaz hops, and may have IBU's as high as 45, despite sweetness in finish.

Ur-Marzen or Oktoberfest: Germany: A style derived from "Sommerbiere" (summer beer). Ur-Marzen, meaning "original of March", are beers that were brewed in March, and made stronger to remain preserved over the summer months, prior to the help of modern refrigeration. A son of the owner of the Spaten Brewery learned of this brewing style while serving as an apprentice in Vienna around 1870. The next year, it was served for the first time at the Oktoberfest in Munich and, due to its popularity, became the official beer style from that point on. Ur-Marzens are full-bodied lagers that are amber in color and usually weigh in at around 6% ABV, with bitterness at about 18-25 IBU.

Rauchbier (smoked): German (Bamberg): The malt for these beers is kilned over a fire and absorbs the dark, husky aromas associated with beech wood, peat, alder, or oak. These beers are full-bodied with plenty of smoky aroma and are amber to dark copper in color. Still, they are balanced, with an average alcohol and bitterness of 4.5% ABV and 20-30 IBU respectively.

A FEW OTHER TERMS

Abbey: A monastery, which for our purposes has something to do with beer making.

ABV: Alcohol by volume.

ABW: Alcohol by weight

Bitterness: Sharp taste produced by hops, used to balance the sweetness of the malt.

Cask or Bottle-conditioning: Beer is put into kegs (casks) or bottles with still-active yeasts before fermentation has finished, sometimes with the addition of new fermentables (sugars) so it may naturally carbonate and cask-condition under pressure prior to being dispensed for consumption.

Diacetyl: Refers to an acid made up of two vinegar molecules, which, when present in beer, can create a "buttery" or "butterscotch" quality. This is not always a desired thing.

Dry Hopping: The addition of hops to beer after it has fermented. This is to give the beer a floral or aromatic quality.

Esters: The fruity flavors and aroma in beer usually associated with ales and produced by higher fermentation temperatures.

FG: Finishing gravity. A measurement of the density (weight) of fermented beer. Indicates both the residual sweetness and, with the Original Gravity (OG) the alcohol content of the beer. "High gravity" beer means strong.

Hefe: (German) Means "with yeast". Applies to unfiltered, or bottle conditioned beers.

Hops: A climbing vine (*Humulus lupulus*) that produces flowers or "cones" which contribute bitterness and aroma in beer. Hops also act as a natural preservative and help clarify the beer during the brewing process. Active ingredient: alpha acid.

IBU: International bitterness units. A measurement of the bitterness of beer, contributed by hops. One IBU = 1 mg. Isomerized hop oils per liter of beer.

Lagering: (German) means "to store". Applies to the aging or cold cellaring of certain beers. Both ales and lagers can be lagered. But just because a beer is lagered does not make it a "lager". Only the yeast which makes the beer can decide that.

Malt: Malting is a process in which grain (barley/wheat/etc.) is lightly sprayed with water to begin germination, and then is dried. This activates enzymes necessary to release the sugars trapped in the kernel. Malt is the main ingredient in beer. It is the coffee bean in coffee.

OG: Original Gravity. A way of measuring the dissolved solids in a liquid. In beer, it is a measure of sugars, using water as a starting point (1.000). The original gravity of an average beer is 1044, and it finishes at about 1010, giving it a 4.2% alcohol by volume.

Yeast: A little creature you and I can't see with the naked eye, but they're doing good things, I assure you. They eat the sugars released by the malted grains, converting them to alcohol and CO2. They are the magic in beer making. So from now on, be kind to yeasts.

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