

**Brewing Glossary**

**A.A.U.** Alpha acid units. The measurement, in percentage of alpha acid, of the potential bitterness in hops.

**ABW** Alcohol by weight, given in percentages. A low alcohol beer typically has 3.5% abw or less, a medium alcohol beer 3.6% abw and a high alcohol beer 6% abw and up. To convert to alcohol by volume, multiply the abw by 1.25.

**ACETALDEHYDE** Green apple aroma, a byproduct of fermentation.

**ADDITIVE** Enzymes, preservatives and antioxidants, which are added to simplify the brewing, process or prolong shelf life.

**ADJUNCT** Fermentable material used as a substitute for traditional grains, to make beer lighter bodied or cheaper.

**AEROBIC** An organism, such as top fermenting ale yeast, that needs oxygen to metabolize.

**AFTERTASTE** A palate sensation that occurs after the beer has been swallowed.

**ALCOHOL** Ethyl alcohol or ethanol. An intoxicating byproduct of fermentation, which is caused by yeast acting on sugars in the malt. Alcohol content is expressed as a percentage of volume or weight.

**ALCOHOL BY VOLUME** Amount of alcohol in beer in terms of percentage volume of alcohol per volume of beer.

**ALCOHOL BY WEIGHT** Amount of alcohol in beer measured in terms of the percentage weight of alcohol per volume of beer, i.e., 3.2% alcohol by weight equals 3.2 grams of alcohol per 100 centiliters of beer. (It is approximately 20% less than alcohol by volume.)

**ALCOHOLIC** Warming taste of ethanol and higher alcohol's.

**ALE** Beers distinguished by use of top fermenting yeast strains, *Saccharomyces cerevisiae*. The top fermenting yeast perform at warmer temperatures than do yeast's used to brew lager beer, and their byproducts are more evident in taste and aroma.

**ALL MALT** A relatively new term in America. "All malt" refers to a beer made exclusively with barley malt and without adjuncts.

**ALTBIER** Literally, "old beer" in German, referring to way beer was made before the discovery of lager yeast, by fermenting beer with ale yeast and then conditioning it with cold temps. These ales tend to be yeasty, well hopped and clean tasting a very lager like.

**AMBER** Any top or bottom fermented beer having an amber color, that is, between pale and dark.

**AMBER ALE** A general term used to describe copper colored ales or lagers, which are more full bodied than golden lagers, often with a medium maltiness and strong hoppy bitterness. (See Vienna)

**AMERICAN LAGER** Clean, light, mild tasting lager.

**AMYLASE** Enzymes that liquefy starches and convert them to maltose (sugar) and dextrins.

**ANAEROBIC** An organism, such as a bottom fermenting lager yeast, that is able to metabolize without oxygen present

**AROMA** The particular combination of smells from malt, hops, yeast, and any unusual or distinctive disturbances in the beer

**AROMA HOPS** Varieties of hop chosen to impart bouquet. (See Hops) Astringent A drying, puckering taste; tannic; can be derived from boiling the grains, long mashes, over sparging or sparging with hard water.

**ATTENUATION** Extent to which yeast consumes fermentable sugars (converting them into alcohol and carbon dioxide).

**BACTERIAL** A general term covering off flavors such as moldy, musty, woody, lactic acid, vinegar, or microbiological spoilage.

**BALANCE** The feature of a beer concerned with the balance of various flavors and sensations.

**BALLING** Actual degrees of Balling (°B). Degrees Balling may be determined by a hydrometer or "Balling spindle," which floats in the liquid to a level corresponding to sugar content, or by a refract meter, where a beam of light is deflected in direct proportion

**BALLING DEGREES** Scale indicating density of sugars in wort. Devised by C J N Balling.

**BARLEY** A cereal grass with bearded spikes of flowers and its seed or grain. Barley is the most suitable cereal grain for making malt beverages; it provides starch, enzymes, flavor, foam, body and color.

**BARLEY WINE** Strong, malty, slightly spicy ale reminiscent of brandy or strong wine. Like wine (and unlike other beers), barley wine improves

**BARREL** A unit of measurement used by brewers in some countries. In Britain, a barrel holds 36 imperial gallons (1 imperial gallon = 4.5 liters), or 1.63 hectoliters. In the United states, a barrel holds 31.5 US gallons (1 US gallon = 3.8 liters), or 1.17 hectol

**BATCH FERMENTATION** The most common, traditional method of fermentation used to produce alcohol beverages, where each batch is fermented

**BEER** A fermented beverage made from barley. Hops, water, and yeast, and sometimes other ingredients

**BEER STYLES** The three major beer styles are lagers, ales, and specialty beers. Specialty beers are brewed with various non-standard ingredients.

**BELGIAN ALE** Strong, lighter colored but potent ale. Some people claim they detect "pear notes".

**BITTER** Bitterness of hops or malt husks; sensation on back of tongue.

**BITTERNESS** The perception of a bitter flavor, in beer from iso alpha acid in solution (derived from hops). It is measured in International Bitterness Units (IBU).

**BITTERNESS UNIT** See International Bitterness Unit

**BLACK MALT** Partially malted barley roasted at high temperatures. Black malt gives a dark color and roasted flavor to beer.

**BLACK PATENT MALT** Partially malted barley roasted at high temperatures. Black malt gives a dark color and roasted flavor to beer.

**BOCK** Complex lager (either light or dark); strong, malty and a little sweet some people taste caramel or chocolate undertones. Originated in Einbeck, Germany, where "bock" means "goat", perhaps referring to the beer's kick.

**BODY** The mouth filling property of a beer. Taken to the extreme, stout has a heavy or full body; pale low calorie beer may be thin or watery.

**BOTTLE CONDITIONING** The mouth filling property of a beer. Taken to the extreme, stout has a heavy or full body; pale low calorie beer may be thin or watery.

**BOTTLE OF BEER** A bottle of beer equals twelve ounces.

**BOTTOM FERMENTATION** One of the two basic methods of fermentation for beer, characterized by the fact that dormant yeast cells sink to the bottom during fermentation. Beers brewed in this fashion are commonly called lagers or bottom fermented beers.

**BOUQUET** That portion of the odor caused by fermentation.

**BREW KETTLE** The vessel in which wort from the mash is boiled with hops. Also called a copper.

**BREWER'S YEAST** Yeast specifically prepared for brewing beer. Two main types of yeast are used for making beer one ferments at the top of the brew (top fermenting yeast), and the other ferments at the bottom (bottom fermenting yeast).

**BREWHOUSE** The collective equipment used to make beer.

**BREWKETTLE** A large vessel, similar in shape to a mash tun, made of copper or stainless steel, in which the wort is boiled for one to two hours by steam coils or through a jacketed bottom.

**BREW PUB** Pub that makes its own beer and sells at least 50% of it on premises. Also known in Britain as a home brew house and in Germany as a house brewery.

**BRIGHT BEER TANK** See conditioning tank.

**BROWN ALE** Similar to pale ale, but (surprise) darker and sweeter, with a malty flavor and a "pleasing nuttiness"

**BUNG** The stopper in the hole in a keg or cask through which the keg or cask is filled and emptied. The hole may also be referred to as a bung or bung hole. Real beer must use a wooden bung.

**BUTTERSCOTCH** See diacetyl.

**CABBAGELIKE** Aroma and taste of cooked vegetables; often a result of wort spoilage bacteria killed by alcohol in fermentation.

**CALIFORNIA COMMON**

**BEER** (Lager) See Steam Beer

**CAMRA** The Campaign for Real Ale. An organization in England that was founded in 1971 to preserve the production of cask conditioned beers and ales.

**CARAMEL** A cooked sugar that is used to add color and alcohol content to beer. It is often used in place of more expensive malted barley.

**CARAMEL MALT** Sweet, coppery colored malt. Caramel or crystal malt imparts both color and flavor to beer. Caramel malt has a high concentration of unfermentable sugars that sweeten the beer and, contribute to head retention. Also known as crystal malt.

**CARBON DIOXIDE (CO<sub>2</sub>)** A gas consisting of one part carbon and two parts oxygen released during fermentation.

**CARBONATION** Sparkle caused by carbon dioxide, either created during fermentation or injected later.

**CASK** A closed, barrel shaped container for beer. They come in various sizes and are now usually made of metal. The bung in a cask of "Real" beer or ale must be made of wood to allow the pressure to be relieved, as the fermentation of the beer, in the cask.

**CHILL HAZE** A condition occurring in some beers at low (near freezing) temperatures caused by proteins in the beer becoming cloudy. Not an indication of bad beer.

**CHILL PROOF** Beer treated to allow it to withstand cold temperatures without clouding.

**CHLOROPHENOLIC** A plastic like aroma; caused by chemical combination of chlorine and organic compounds.

**CLOVELIKE** Spicy character reminiscent of cloves; characteristic of some wheat beers, or if excessive, may derive from wild yeast.

**CONDITIONING** Period of maturation intended to impart "condition"(natural carbonation). Warm conditioning further develops the complex of flavors. Cold conditioning imparts a clean, round taste.

**CONDITIONING TANK** A vessel, in which beer is placed after primary fermentation where the beer matures, clarifies and, is naturally carbonated through secondary fermentation. Also called bright beer tank, serving tank and, secondary tank.

**CONTRACT BEER** Beer made by one brewery and then marketed by a company calling itself a brewery. The latter uses the brewing facilities of the former.

**CONTRACT BREWING** Making beer for smaller companies that either do not have a brewery of their own or lack the capacity to meet demand.

**COPPER** See brew kettle.

**CREAM ALE** Light colored, mild ale, lagered at cold temps or combined w/lager.

**DECOCTION** Exhaustive system of mashing in which portions of the wort are removed, heated, and then returned to the original vessel.

**DEGREES LOVIBOND (°L)** Measure of the color of the malt.

**DEXTRIN** The unfermentable carbohydrate produced by the enzymes in barley. It gives the beer flavor, body. Lower temperatures produce more dextrin and less sugar. While higher temperatures produce more sugars and less dextrin.

**DIACETYL** A volatile compound in beer that contributes to a butterscotch flavor, measured in parts per million.

**DMS** Taste and aroma of sweet corn; results from malt, as a result of the short or weak boil of the wort, slow wort chilling, or bacterial infection. Dimethyl sulfide, sulfur compound.

**DORTMUNDER** Pale lager originally from Dortmund, Germany. More body and less hoppiness than a pilsner, with slightly fruity, lightly carbonated edge. Also known as Export beer.

**DOSAGE** The addition of yeast and/or sugar to the cask or bottle to aid secondary fermentation.

**DOUBLE BOCK (DOPPELBOCK)** Lager with twice the alcohol of regular bocks and an intense, malty sweetness and dry finish. Doppelbock was originally brewed by monks for Lent and, like regular bock, is still served to celebrate spring's arrival.

**DRAFT (DRAUGHT)** The process of dispensing beer from a bright tank, cask or, keg, by hand pump, pressure from an air pump or, injected carbon dioxide inserted into the beer container prior to sealing.

**DRY BEER** Invented by the Japanese, dry beer has less aftertaste due to more complete fermentation.

**DRY HOPPING** The addition of loose, dry hops to the primary fermentor (after the wort has cooled to below 75° Fahrenheit) or to the secondary fermentor to increase the aroma and hop character of the finished beer without affecting its bitterness.

**DRY STOUT** With its malty flavor and dry, bitter finish, this ale is similar to porter, but creamier, darker and bitterer.

**EBC** European Brewing Convention. An EBC scale is used to indicate colors in malts and beers.

**ENZYMES** Catalysts that are found naturally in the grain. When heated in mash, they convert the starches of the malted barley into maltose, a sugar used in solution and fermented to make beer.

**ESTER** Volatile flavor compound naturally created in fermentation. Often fruity, flowery or spicy.

**ESTERS** Esters are organic compounds that result from the interaction of acids and alcohol. The presence of esters can cause the fruity flavors and aromas, such as banana, blueberry, and pear that intentionally or unintentionally occur in some beers.

**ESTERY** Aroma or flavor reminiscent of flowers or fruits.

**EXPORT** (Lager) See Dortmunder.

**EXTRA SPECIAL**

**BITTER (ESB)** English style ale well-balanced hoppiness and sweet maltiness.

**FAHRENHEIT (DEGREES)**  $F = ((C \times 9) / 5) + 32$ .

**FERMENTATION** This is the process of producing alcohol and carbon dioxide through the actions of yeast on grain based sugars.

**FILTER** The removal of designated impurities by passing the wort through a medium sometimes made of diatomaceous earth (made up of the microscopic skeletal remains of marine animals). Yeast in suspension is often targeted for removal.

**FILTERING** The process of passing beer through a porous substance to clarify it. This process occurs after fermentation.

**FILTRATION** The passage of a liquid through a permeable or porous substance to remove solid matter in suspension.

**FINAL SPECIFIC GRAVITY** Specific gravity of a beer when fermentation is complete (that is, all fermentable sugars have been fermented).

**FINING** An aid to clarification a substance that attracts particles that would otherwise remain suspended in the brew.

**FIRST WORT** The first running of wort to be filtered in the straining vessel. It is richer in extract than subsequent running

**FRAMBOISE** Dry, almost carbonated ale with raspberry taste and aroma. (See Lambic)

**FRUITY/ESTERY** Flavor and aroma of bananas, strawberries, apples, or other fruit; from high temperature fermentation and certain yeast strains.

**GERMAN PURITY LAW** See Reinheitsgebot.

**GRAINS** (Such as rice, corn, maize, or wheat) used in addition to malted barley to make a beer. They tend to lighten the flavor of a beer and produce alcohol.

**GRAINY** Tastes like cereal or raw grain.

**GRANT** A small vessel between the straining tank (tun) and the brew kettle from which the runoff of the wort is controlled and sampled.

**GRAVITY (SPECIFIC)** The weight of a liquid relative to the weight of an equal volume of water. Specific gravity must be checked before and after fermentation. Used as an indication of the amount of alcohol present.

**GRIST** Brewers' term for milled grains, or the combination of milled grains to be used in a particular brew. Derives from the verb to grind. Also sometimes applied to hops.

**HAND PUMP** A device for dispensing draft beer using a pump operated by hand. The use of a hand pump allows the cask-conditioned beer to be served without the use of pressurized carbon dioxide.

**HANG** Lingering bitterness or harshness.

**HARD CIDER** A fermented beverage made from apples.

**HEAD** Foam that forms on top of the beer when it is poured. Head tends to indicate

the degree of carbonation, hops, and malt in the beer.

**HEAT EXCHANGER** A mechanical device used to rapidly reduce the temperature of the wort.

**HEFE** A German word meaning "with". Used mostly in conjunction with wheat (weiss) beers to denote that the beer is bottled or kegged with the yeast in suspension (hefe-weiss). These beers are cloudy, frothy and, very refreshing.

**HEFEWEIZEN** Traditional German ale; in German, "hefe" means "yeast" and "weizen" means "wheat". (See Wheat Beer)

**HELLES** (Lager) See Munchner.

**HIGH (HEAVY) GRAVITY** The common practice of brewing and fermenting a concentrated brew house wort and adjusting this beer to its final "gravity" or composition at the end of the process. High gravity brewing permits better utilization of equipment and can increase the capacity.

**HOGSHEAD** Cask holding 54 imperial gallons (243 liters).

#### **HOLIDAY ALE**

Strong, often spicy seasonal ale produced by brewers for the winter holidays.

Character and ingredients often vary from year to year and definitely from brewery to brewery.

**HOP BACK** Sieve like vessel used to strain out the petals of the hop flowers. Known as a hop jack in the United States.

**HOPPING RATE** The amount of hops added to a specified volume of wort. Often referred to in BUs (bittering units).

**HOPPY** Aroma of hops does not include hop bitterness.

**HOPS** One of the four principal ingredients of beer, hops are flower cones added to beer as a bittering agent, a preservative, and an aromatic.

**HOPS CONE** Shaped flowers that grow on climbing vines, used to flavor beer. Hops added early in the brewing process impart a dry, bitter flavor to the beer; added later, they add an herbal spiciness. There are dozens of varieties of hops.

**HYDROMETER** A thermometer like device used to measure the specific gravity to determine the proportion of potential alcohol in the beer.

**IBU** International Bitterness units. A system of indicating the hop bitterness in finished beer.

**ICE BEER** It sounds like a stereotype, but the Canadians really invented ice beer. Ice beer is frozen slightly during the brewing process and the ice crystals removed, in hopes that the flavor and alcohol content will be more concentrated.

**IMPERIAL STOUT** Heavy, complex ale; slightly sweet with hints of coffee and chocolate. Its bitterness comes from roasted barley.

**INDIA PALE ALE (IPA)** Spicy, highly hopped beer brewed for export from England to the British colonies in India in the 1700s; its high alcohol content helped it survive the long sea voyage from England to Calcutta, and no doubt helped keep British soldiers happy in the heat.

**INFUSION** The process of introducing mash into hot water for mashing. The infusion method of mashing involves mashing a single time at a constant temperature, as opposed to other, more complex mashing techniques that involve mashing more than once at different heap.

**INTERNATIONAL BITTERNESS UNIT (IBU)** A measure of a beer's bitterness. Specifically, the IBU is a unit of weight equal to one part per million (ppm) of an alpha acid called isohumulone, the bittering agent in hops, in the finished beer. Different varieties of hops contain and releases differ.

**IRISH MOSS** Seaweed that is added to boiling wort to filter proteins.

**ISINGLASS** Material made from fish bladders used to clarify beer.

**KEG** One half barrel, or 15.5 U. S. gallons. A half keg or, 7.75 U. S. gallons, is referred to as a pony keg.

**KOLSCH** French (from Cologne) ale, similar to altbier, but pale and slightly fruitier.

**KRAUSENING** A secondary fermentation whereby young fermenting wort (approx. 15-18 percent) is added to a fully fermented lager to accomplish a natural infusion of carbon dioxide.

**KRAUSEN WORT** A small quantity of sweet unfermented wort added to finished beer. This wort ferments to produce natural carbonation.

#### **KRÄUSENING**

The addition of a small proportion of partly fermented wort to a brew during lagering. Stimulates secondary fermentation and imparts a crisp, spritzy character.

**KRIEK** This ale wins points for being fun to ask for in a bar. Made with cherries (kriek) and unmalted wheat for a tart, fresh, fruity flavor.

**LAGER** Beers produced with bottom fermenting yeast strains, *Saccharomyces uvarum* (or *carlsbergensis*) at colder fermentation temperatures than ales. This cooler environment inhibits the natural production of esters and other byproducts, creating a crisper tasting.

**LAGERING** From the German word for storage. Refers to maturation for several weeks or months at cold temperatures (close to 0°C /32°F) to settle residual yeast, impart carbonation and make for clean round flavors.

**LAMBIC** Dry, tart ale made with unmalted wheat and malted barley; usually has a sweet fruit flavoring such as cranberry, cherry (kriek) or raspberry (framboise). Traditionally fermented with wild airbourne yeast in Belgium's Senne Valley.

**LAUTER** To run the wort from the mash tun. From the German word to clarify. A lauter tun is a separate vessel to do this job. It uses a system of sharp rakes to achieve a very intensive extraction of malt sugars.

**LAUTER TUN** See mash tun.

**LENGTH** The amount of wort brewed each time the brew house is in operation.

**LIGHT BEER** Beer brewed to have fewer calories and a lighter body. Alcohol, with 7.1 calories per gram, is the major calorie contributor in beer, so brewers add water to reduce alcohol content or use a special enzyme to change the unfermentable dextrins into ferment

**LIGHT STRUCK** Skunk like smell from exposure to light.

**LIQUOR** The brewer's word for water used in the brewing process, as included in the mash or, used to sparge the grains after mashing.

**MAIBOCK** Lager traditionally brewed to celebrate the month of May. (See Bock)

**MALT** Barley that has been steeped in water to produce sprouting, then kiln dried.

**MALT (ING)** The process by which barley is steeped in water, germinated, and then kilned to convert insoluble starch to soluble substances and sugar. The foundation ingredient of beer.

#### **MALT EXTRACT**

The condensed wort from a mash, consisting of maltose, dextrin's and, other dissolved solids. Either as a syrup or powdered sugar, brewers, in solutions of water and extract, to reconstitute wort for fermentation, use it.

**MALT LIQUOR** Malt liquors are technically lagers, but the beer is fermented more thoroughly to convert more of the extract to alcohol, producing a strong, smooth, pale beer.

**MALTOSE** A water soluble, fermentable sugar contained in malt.

**MARZENBIER** (Lager) See Oktoberfest.

**MASH** To release malt sugars by soaking the grains in water.

**MASH TUN** A tank where grist is soaked in water and heated in order to convert the starch to sugar and extract the sugars and other solubles from grain.

**MEAD** Meads are produced by the fermentation of honey, water, yeast and optional ingredients such as fruit, herbs, and/or spices. According to final gravity, they are categorized as dry (0.996 to 1009); medium (1010 to 1019); or sweet (1020 or higher).

**MEDICINAL** Chemical or phenolic character; can be the result of wild yeast, contact with plastic, or sanitizer residue

**METALLIC** Tastes tinny, bloodlike or coin like; may come from bottle caps.

**MICROBREWERY** By strict definition, a "micro" brewery is one that produces fewer than 15,000 barrels per year. For our purposes, the microbrewery genre includes some breweries that surpass that output, but maintain the hand crafted microbrewery ethic.

**MILLING** In brewing, the malt is ground into grist (or meal) to facilitate the extraction of sugars and other soluble substances during the mashing process. The endosperm must be crushed to medium sized grits rather than to flour consistency.

**MOUTHFEEL** A sensation derived from the consistency or viscosity of a beer, described, for example as thin or full.

**MUENCHENER** A bottom fermented style of beer produced in the mid 19th century in the Bavarian city of Munich. The original Muenchener was dark. In 1928, the Paulaner Brewery introduced a paler version, called Helles that has almost entirely overtaken the darker brew.

**MUNCHNER** Lager also known as "helles", or "pale" lager. Malty, sweet and dark, despite its name. Originated in Munich, Germany.

**MUSTY** Moldy, mildewy character; can be the result of cork or bacterial infection.

**OATMEAL STOUT** This ale is a variation of sweet stout, with oatmeal added for a smooth texture and warm flavor.

**OKTOBERFEST** Smooth, drinkable lager with slight malty sweetness. Before the days of refrigeration, oktoberfests were brewed with high alcohol content so they could be preserved in caves from March (hence its other name, Marzenbier) till fall.

**ORIGINAL GRAVITY (OG)** A measure of the density of the wort before the yeast is added; shows the fermentable sugar content available to be converted into alcohol by the yeast, which will affect the strength of the final product.

**OXIDIZED** Stale flavor of wet cardboard, paper, rotten pineapple, or sherry, as a result of oxygen as the beer ages or is exposed to high temperatures.

**PALATE** Taste. Influenced by the grains, hops, water, yeast, and adjuncts used in production.

**PALE ALE** Brisk, subtly spicy, hoppy, refreshing ale.

**PASTEURIZATION** Heating of beer to 60-79°C/140-174°F to stabilize it microbiologically. Flash pasteurization is applied very briefly, for 15-60 seconds by heating the beer as it passes through the pipe.

**PASTEURIZE** To subject packaged beer to a temperature of 142°-145° Fahrenheit for a specified time to destroy enzymes, yeast, and other bacteria.

**PHENOLIC** Flavor and aroma of medicine, plastic, Band Aids, smoke, or cloves; caused by wild yeast or bacteria, or sanitizer residue.

**PILSENER** A general name for pale, golden hued, highly hopped, bottom fermented beers. The original Pilsener was first brewed at the Bürgerliches Brauhaus in the Bohemian town of Pilsen (meaning green meadow) in 1842.

**PITCH** To add yeast to wort.

**PITCHING** Adding yeast to the wort in the fermentation tank.

**PLATO, DEGREES** Expresses the specific gravity as the weight of extract in a 100-gram solution at 64°F (17.5°C). Refinement of the Balling scale.

**PORTER** Complex, dark, strongly flavored ale, which takes its name from the dockhands it, was originally brewed for. Similar to stout but without the bitterness.

**PRIMARY FERMENTATION** Occurring after pitching the yeast and during the first three days on the average, fermentation converts sugars to alcohol and carbonation.

**PRIMING** The process of adding sugar to the brew to create carbonation, either in the bottle or keg.

**PRIMING SUGAR** Sugar added to the bottle or keg that ferments and provides CO<sub>2</sub>.

**PROTEINS** Nitrogen containing compounds, an excess of which cause a haze in beer.

**PUB** An establishment that serves beer and sometimes other alcoholic beverages for consumption on premise. The term originated in England and is the shortened form of "public house".

**PUBLICAN** The owner or manager of a pub.

**RACKING** The process of separating the fermented beer from the yeast cells at the bottom of the fermenting vessel. Also the transfer of finished beer to kegs. Broadly, moving beer from one vessel to another.

**RAUCHBIER** Lager brewed with malt, which has been smoked over a beechwood fire ("rauch" means "smoke" in German), giving it a strong smoky aroma and flavor. Similar to oktoberfest, but smoother and heavier.

**REGIONAL BREWERY** Technically, a brewer, which produces more than 25,000 barrels per year but not as much as the "macro" breweries.

**REGIONAL SPECIALTY BREWERY** A brewery that produces more than 15,000 barrels of beer annually, with its largest selling product a specialty beer.

**REINHEITSGEBOT** “Purity Law” originating in Bavaria in 1520 and now applied to all German brewers making beer for consumption in their own country. It requires that only malted grains, hops, yeast and water may be used in the brewing.

**ROASTED MALT** Malt made from barley heated sequentially, starting at 320° Fahrenheit, and 419° Fahrenheit, and finally 437° Fahrenheit. The malt acquires a brilliant external appearance while the endosperm becomes black. Roasted malt is used to flavor and color stout.

**SACCHAROMYCES CARLSBERGENSIS** See Bottom fermenting yeast.

**SACCHAROMYCES CEREVISIAE** See Top fermenting yeast

**SACCHAROMYCES UVARUM** See Bottom fermenting yeast.

**SALTY** Flavors like table salt; experienced on the side of the tongue.

**SANITIZATION** The never ending process of cleaning brewing equipment

**SCOTCH ALE** Rich, malty ale, full bodied (almost chewy) and faintly sweet.

**SEASONAL** Beer brewed and sold only at a particular time of year

## **SECONDARY**

**FERMENTATION** Stage of fermentation occurring in a closed container from several weeks to several months.

**SEDIMENT** Yeast material at the bottom of the bottle formed as a result of conditioning the beer in the bottle.

Not a sign of bad beer.

**SHELF LIFE** Describes the number of days a beer will retain it’s peak drink ability. The shelf life for commercially produced beers is usually a maximum of four months.

**SOLVENTLIKE** Reminiscent of acetone or lacquer thinner; caused by high fermentation temperatures.

**SOUR/ACIDIC** Vinegar like or lemon like; can be caused by bacterial infection.

**SPARGE** To spray grist with hot water in order to remove soluble sugars (maltose). This takes place at the end of the mash.

**SPARGING** Rinsing the mashed grains to ensure complete extraction of the sugars from the mash.

**SPECIALTY ALE** Ale brewed by fermenting beer with unusual ingredients such as pumpkin, chiles, various herbs and spices, etc.

**SPECIFIC GRAVITY** A measure of the density of a liquid or solid compared to that of water ((1.000 at 39°F (4°C)).

**SQUARES** Brewers’ term for a square-fermenting vessel.

## **STANDARD**

**REFERENCE METHOD (SRM)** Measure of the color of beer

**STEAM BEER** Highly hopped, foamy lager popularized during the California Gold Rush. The name comes, depending on whom you ask, either from the hissing pressure wooden casks of the stuff made when tapped or from the steam power used in the early breweries.

**STOUT** This ale is just what its name sounds like dark, sturdy, and strong. See also dry stout, oatmeal stout and sweet stout.

**SULFURLIKE** Reminiscent of rotten eggs or burnt matches; a by-product of some yeast’s.

**SWEET** Taste like sugar; experienced on the front of the tongue.

**SWEET STOUT** Dark, thick, soft, sweet ale with hints of chocolate and coffee.

**TART** Taste sensation cause by acidic flavors.

## **TEMPORARY**

**HARDNESS** Hardness in water that can be removed by boiling.

**TERMINAL GRAVITY** Synonym for final specific gravity.

**THE DOUBLE** Jacketed, stainless steel vessel in which mashing occurs.

**TOP FERMENTATION** The ancient method of brewing, where yeast ferments at room temperature and floats to the top of the beer. Top fermenting produces ales, which tend to be malty, complex, and sometimes a little fruity. (See also Bottom Fermentation)

**TOP FERMENTING YEAST** One of the two types of yeast used in brewing. Top fermenting yeast works better at warmer temperatures and are able to tolerate higher alcohol concentrations than bottom fermenting yeast.

- TOP FERMENTING YEAST (ALE YEAST)** A style of yeast that works at cellar or warm temperatures and floats to the top of the beer. Ale yeasts are responsible for the creation of most beers other than lagers. However, this style of brewing is practiced mostly in England.
- TRAPPIST ALE** Strong, fruity, yeasty ale brewed by Trappist monks since the Middle Ages. Only beer brewed at a Trappist monastery can bill itself as "Trappist Ale".
- TRIPLE** The strongest of Trappist Ales. (See above)
- TRUB** Proteins in barley filtered during the wort boil.
- TUN** Any large vessels used in brewing. In America, "tub" is often preferred.
- TWO ROW BARLEY** A variety of barley on which only the central spikelet is fertile, forming two rows of grains each. It is the variety most appreciated for brewing because its kernels are better developed, and the husk is thinner; however, it is generally lower in enzyme.
- VIENNA** Reddish, somewhat fruity lager introduced in the 1800s as Vienna's answer to pilsner. Grandfather of amber ale.
- VINOUS** Reminiscent of wine.
- WEISSE** A beer made with approximately one-quarter wheat malts and usually served cold with either woodruff or raspberry.
- WEIZENBIER** A beer made with approximately one-third wheat malts and usually served cold with lemon.
- WHEAT BEER** Light, bubbly, spicy ale brewed with malted wheat rather than barley for a fruity flavor. Also known as weisse (white) or weizen
- WHITE BEER (WITBIER)** Smooth, cloudy Belgian ale brewed with unmalted wheat. Some people taste spicy/fruity overtones like orange and coriander.
- WINY** Sherrylike flavor; can be caused by warm fermentation or oxidation in very old beer.
- WORT** The solution of grain sugars strained from the mash tun. At this stage, regarded as "sweet wort", later as brewed wort, fermenting wort and finally beer.
- WORT CHILLER** See heat exchanger.
- WORT RECEIVER** A cooling vessel into which the wort is poured after straining the hops.
- YARD GLASS** A tall glass (traditionally 3 feet) that was originally produced in England back in the days when travel by horse drawn coach was common.
- YEAST** Microscopic, unicellular, vegetal organisms of the fungus family (Eumycophyta), distinct from bacteria since they possess a true nucleus.
- YEASTY** Yeast like flavor; a result of yeast in suspension or beer sitting too long on sediment.
- ZYMURGY** The science / art of yeast fermentation. Also, the last word in Webster's Unabridged Dictionary.