THE BREWING PROCESS

ONLY FRESH INGREDIENTS

Ales

All beers are either Ales or Lagers. The main difference between these two styles is their fermentation temperatures. Ales are fermented at higher temperatures, usually 60-70 F. This elevated temperature causes the yeast to grow more quickly resulting in both shorter fermentation times (one to three weeks) and an increase in yeast produced flavors. These flavors are often fruity and/or spicy in nature, leading to a fruitier, spicier beer.

Water

The most abundant ingredient in beer. Clean, fresh water is used for the entire brewing process.

Barley Grain

Roasted and cracked, many types of barley grain are used for color, flavor and fermentable sugars.

Hops

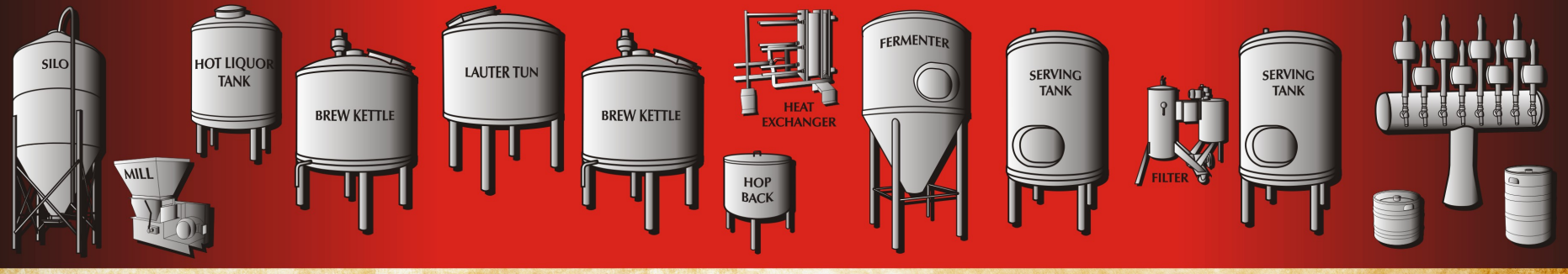
Added at various time during the boil, different kinds of hops are used for bittering and aroma.

Yeast

Several cultured strains of yeast are used during fermentation to consume sugar and produce carbon dioxide and alcohol.

Lagers

With all beers being either Ales or Lagers, the second main difference is their fermentation time. Lagers are fermented at cooler temperatures than ales, often between 34 and 50 F. As a result, the yeast grows more slowly, taking longer to complete fermentation (one to three months) and producing fewer flavor compounds This slow, cool fermentation gives lagers both their name (German: "To Store") and a smoother, mellower taste.



1 In the first step of brewing, some of the Barley Malt in our silo is coarsely ground in our grist mill. It's then mixed with warm water from the Hot Liquor Tank in the Brew Kettle and allowed to sit for about an hour. During this "mashing" process, enzymes in the malt break down barley starches to simpler sugars, resulting in a very sweet liquid called "wort", (pronounced wert).

2 The wort is next separated from the barley husks and other particles in the Lauter Tun. This vessel has a perforated screen inside that retains solids, allowing the wort to flow through.

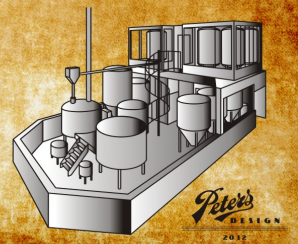
3 Clarified, sweet wort is then transferred back to the Brew Kettle along with warm water that has been used to rinse retained sugar out of the grains retained in the Lauter Tun.

4 Wort in the Brew Kettle is heated to a vigorous boil, which is continued for an average of 1 hour. During this time, hops are added (sometimes from the Hop Back) to provide some bitterness and flavor and to counteract the sweetness of the malt sugars. The boiling process helps dissolve bitter hop resins sterilizes the wort, and precipitates unstable haze forming compounds.

5 The hot, hopped wort must now be cooled and aerated before yeast can be introduced for fermentation. Passage through a Heat Exchanger cools the wort to 50-70 F (the exact temperature depends on whether an ale or a lager is to be made). Oxygen is then dissolved into the cooled wort, which is transferred to a Fermenter. Here, pure brewing yeast is waiting to consume sugars and produce alcohol, carbon dioxide, and other compounds.

6 After the yeast has finished absorbing all of the available food, it goes dormant and drops out of the beer to the bottom of the fermenter. At this point the beer is ready to be transferred to cold Serving Tanks where it is carbonated to the proper level. Some beers are further clarified by filtration prior to this transfer step.

7 Beer lines lead from the cold Serving Tanks to tap Towers throughout the brewpub. A portion of the beer is also kegged into ¼ and ½ barrels for in-house and outside accounts use.



AWARD WINNING RESTAURANT AND BREWERY
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