

Trappist Brewing

“SSST.... HIER RIJPT DE TRAPPIST”

“SHHH ... HERE THE TRAPPIST ALE MATURES”

What is Trappist Beer?

Trappist Abbey Beer is a **protected legal appellation**, and can only be used by genuine Trappist monasteries that brew their own beer at the Trappist Abbey.

What is Belgian Abbey Beer?

A beer brewed not by monks, but in the Trappist **Abbey style at a former abbey**. These private businesses pay an annual duty or license to the Church, and include brewers such as Abdij Sint Sixtus (Westvleteren), Abbaye de Saint-Martin (Brunehaut.) or St. Feuillien Abbaye.

Homebrewers & others must use the word: “Abbey-style.”



La Trappe Brewery (Brouwerij De Koningshoeven)



History

Ora et Labora – “Prayer & Work”

Trappists Monks lead a simple life in their abbeys, a life in which [prayer and work](#) are central as their motto “[ora et labora](#)”. At La Trappe, Daily Life exists in 8-hour increments of Prayer, Work and Rest.

All monestaries must support themselves as well as their projects in developing lands and works of charity.

And yes, there's time for beer.

Timeline Key Dates

530 - The rule of Saint Benedict is written, and to this day remains the reason why monks brew and sell beer.

750 - Charlemagne and his followers promote the Benedictine way of life and monastery brewing.

820 - The Saint Gall Monastery brewery plan is drawn, providing a blueprint for other monasteries.

1656 - Seeking a purer living of the rule of Saint Benedict, a stricter order of Cistercians begins in La Trappe, becoming known as Trappists.

1830 - 1890 - Monks begin brewing at Westmalle, Westvleteren, Achel, Chimay, and Rochefort

1925 - Chimay trademarks ADS (Abbaye de Scourmont), the first Trappist trademark.

1992 - Westvleteren ends a 46-year contract brewing deal with Saint Bernardus and reassumes control over all the beer it sells. Saint Bernardus begins selling beers under its own name.

Abbey was Founded in 1881 in Berkel-Enschot, North Brabant, the Netherlands



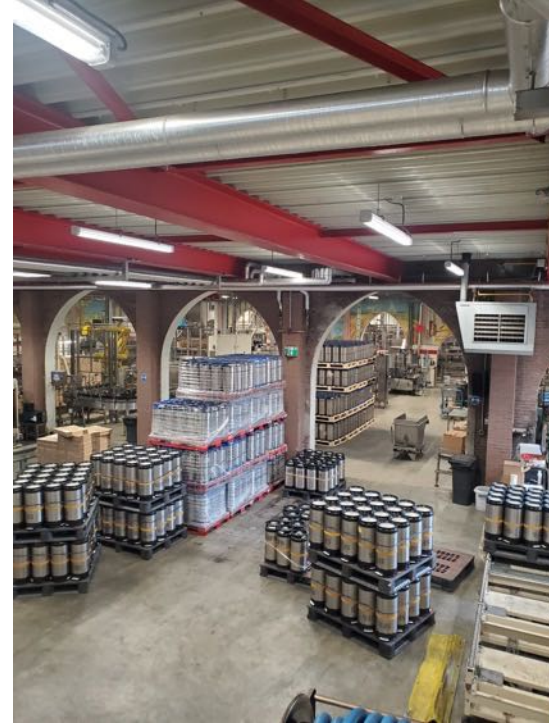
The La Trappe Brewmaster led importer representatives on a tour in Feb.2020



Original Brewhouse & the Modern Brewhouse



Brewery Tour Continues



Trappist Ale Styles ([BJCP 2015](#))

- 26A Trappist Single
- 26B Belgian Double
- 26C Belgian Tripel
- 26D Belgian Dark Strong Ale / Quadrupel

Q: Why are Tripels Pale and Quadrupels Dark?

- A: The Evolution of Malt Drying Techniques Led to Pale Malts!
- Invented in the 1840s, Pilsner malt is the lightest-colored generally available malt, and also carries a strong, sweet malt flavor.
- Prior to Pilsner Malts, all malts were darker than pale, think Vienna Malt – to almost very dark, think Chocolate Malts.
- Darker Abbey Beers were being made as early as the year 750 A.D.
- When Monks tried using only the Pale Malts in their Dubbel Recipes they produced a Pale and slightly stronger product.
With a little recipe tweaking these became known as Abbey Tripels.

La Trappe's Beers

- La Trappe [Blond](#) (6.5% [ABV](#))
- La Trappe [Dubbel](#) (7% ABV)
- [La Trappe Isid'or](#) [[nl](#)] (7.5% ABV)
- La Trappe [Tripel](#) (8% ABV)
- La Trappe [Quadrupel](#) (10% ABV) [[3](#)]
- La Trappe [Quadrupel](#) Oak Aged (10% ABV)
- La Trappe [Witte Trappist](#) (5.5% ABV)
- La Trappe [Bockbier](#) (7% ABV) (Seasonal)
- La Trappe PUUR (4.7% ABV) ([organic](#))



26A Trappist Single (Patersbier)

Overall Impression: A pale, bitter, highly attenuated and well carbonated Trappist ale, showing a fruity-spicy Trappist yeast character, a spicy-floral hop profile, and a soft, supportive grainy-sweet malt palate.

Style Comparison: Like a top-fermented Belgian/Trappist interpretation of a German Pils – pale, hoppy, and well-attenuated, but showing prototypical Belgian yeast character. Has less sweetness, higher attenuation, less character malt, and is more hop-centered than a Belgian Pale Ale. More like a much smaller, more highly hopped tripel than a smaller Belgian Blond Ale.

Characteristic Ingredients: Pilsner malt, [Belgian Trappist yeast](#), Saazer-type hops. (Of the Trappist breweries, only Chimay uses spices, including small measures of coriander and curacao in Dorée)

Commercial Examples: [Achel 5° Blond](#), [St. Bernardus Extra 4](#), [Westmalle Extra](#), [Westvleteren Blond](#), [Chimay Dorée](#), [Lost Abbey Devotion](#)



IBU	25 - 45
SRM	3 - 5
OG	1.044 - 1.054
FG	1.004 - 1.010
ABV	4.8% - 6%

26A Trappist Single (Patersbier)



26B Trappist Double

Overall Impression: A deep reddish-copper, moderately strong, malty, complex Trappist ale with rich malty flavors, dark or dried fruit esters, and light alcohol blended together in a malty presentation that still finishes fairly dry.

Style Comparison: Should not be as malty as a bock and should not have crystal malt-type sweetness. Similar in strength and balance as a Belgian Blond, but with a richer malt and ester profile. Less strong and intense as a Belgian Dark Strong Ale.

Characteristic Ingredients: [Belgian yeast strains](#) prone to production of higher alcohols, esters, and phenolics are commonly used. Impression of complex grain bill, although traditional versions are typically Belgian Pils malt with caramelized sugar syrup or other unrefined sugars providing much of the character. Saazer-type, English-type or Styrian Goldings hops commonly used. No spices are traditionally used, although restrained use is allowable (background strength only).

Commercial Examples: [Affligem Dubbel](#), [Chimay Première \(Red\)](#), [Corsendonk Pater](#), [Grimbergen Double](#), [La Trappe Dubbel](#), [St. Bernardus Pater 6](#), [Trappistes Rochefort 6](#), [Westmalle Dubbel](#), [Russian River Benediction](#), [Lost Abbey Lost and Found Abbey Ale](#), [Allagash Dubbel](#)



IBU	15 - 25
SRM	10 - 17
OG	1.062 - 1.075
FG	1.008 - 1.018
ABV	6% - 7.6%

26B Trappist Double



26C Belgian Tripel

Overall Impression: A pale, somewhat spicy, dry, strong Trappist ale with a pleasant rounded malt flavor and firm bitterness. Quite aromatic, with spicy, fruity, and light alcohol notes combining with the supportive clean malt character to produce a surprisingly drinkable beverage considering the high alcohol level.

Style Comparison: May resemble a Belgian Golden Strong Ale but slightly darker and somewhat fuller-bodied, with more emphasis on phenolics and less on esters. Usually has a more rounded malt flavor but should never be sweet.

Characteristic Ingredients: Pilsner malt, typically with pale sugar adjuncts. Saazer-type hops or Styrian Goldings are commonly used. [Belgian yeast strains](#) are used – those that produce fruity esters, spicy phenolics and higher alcohols – often aided by slightly warmer fermentation temperatures. Spice additions are generally not traditional, and if used, should be a background character only. Fairly soft water.

Commercial Examples: Affligem Tripel, Chimay Cinq Cents (White), La Rulles Tripel, La Trappe Tripel, St. Bernardus Tripel, Unibroue La Fin Du Monde, Val-Dieu Triple, Watou Tripel, Westmalle Tripel.



IBU	20 - 40
SRM	4.5 - 7
OG	1.075 - 1.085
FG	1.008 - 1.014
ABV	7.5% - 9.5%

26C Belgian Tripel



26D Belgian Dark Strong Ale

Overall Impression: A dark, complex, very strong Belgian ale with a delicious blend of malt richness, dark fruit flavors, and spicy elements. Complex, rich, smooth and dangerous.

Style Comparison: Like a larger dubbel, with a fuller body and increased malt richness. Not as bitter or hoppy as a tripel, but of similar strength.

Characteristic Ingredients: [Belgian yeast strains](#) prone to production of higher alcohols, esters, and sometimes phenolics are commonly used. Impression of a complex grain bill, although many traditional versions are quite simple, with caramelized sugar syrup or unrefined sugars and yeast providing much of the complexity. Saazer-type, English-type or Styrian Goldings hops commonly used. Spices generally not used; if used, keep subtle and in the background.

Commercial Examples: Achel Extra Brune, Boulevard The Sixth Glass, Chimay Grande Réserve (Blue), Gouden Carolus Grand Cru of the Emperor, Rochefort 8, Rochefort 10, St. Bernardus Abt 12, Westvleteren 12, Lost Abbey Judgment Day



IBU	20 - 35
SRM	12 - 22
OG	1.075 - 1.110
FG	1.010 - 1.024
ABV	8% - 12%

26D Belgian Dark Strong Ale



Brewing in the Style of Trappist Abbeys. MALT

- These are not simply big beers. They are rich and complex, with a range of appropriate flavors and a few amusing quirks.
- In brewing a Triple, unquestionably the best malt to use is a good Belgian Pils malt; substituting domestic two-row will produce a fuller, more cloying beer.
- Pils malt should also be the basis of a Double, with such malts as Cara-Vienne, Cara-Munich, Special B, and Biscuit (DeWolf Cosyns, Brussels) providing both color and flavor. Of these, Special B is unusually significant, because it especially tends to impart the raisiny, plummy flavors so treasured in this style. It is very easy to overuse this malt, though.

As is the case with domestic grains & extracts, the danger arises from the unfermentable sugars, which can easily leave a sticky, cloying flavor inappropriate to the style.

Brewing in the Style of Trappist Abbeys. SUGAR

- Sugar is another very important ingredient in these styles. “Candy sugar,” is used in these ales. This sugar is created by superheating and then cooling a highly concentrated sucrose solution.
- Pales sugar syrups are used for Tripel & Blonde styles, and darker sugars or syrups can be used for Dubbels & Quads.
- Because the nominal composition of light candy sugars appears to be no different from that of common table sugar, substitution should present no problem, especially if inverted using the method described above.
- Under Belgian law, beer can be made with up to 40% adjuncts—usually sugar, corn or wheat starch, or malt extract—and sugar contributes up 15 to 20% of fermentables in some of the best examples of these beers.

Brewing in the Style of Trappist Abbeys. HOPS

- Hops should **supplement the malt and fermentation character** in Trappist or abbey-style beers, rather than calling attention to themselves.
- Trappist beer usually have a **BU:GU ratio of less than 1:2**, often quite a bit less, and some breweries use only a bittering addition
- The hop flavors in these beers are never harsh, and hopping should be set accordingly. **At any given level of bittering, the cleanest and softest flavor is achieved by using low-alpha “noble” hops as bittering hops**; Saaz, Hallertauer, and Tettnanger all work very well in these styles. Styrian Goldings give an outstanding flavor to Doubles, and a combination of Hallertauer and Kent Goldings is my favorite for Triples. Fuggles and Northern Brewer have their uses, though **very floral hops intrude on the malt and yeast qualities, creating a much less interesting beer**. NO “Superhops” like Chinook!

Brewing in the Style of Trappist Abbeys. WATER

“No standard water profile exists for brewing Trappist ales”

“Many Belgian brewers use food-grade acid to lower pH”

“For the most part, American commercial breweries don’t treat water used in Belgian styles differently than they do in brewing other styles. That means removing chlorine and often making additions to adjust pH, particularly on the lighter beers. John Kimmich at the Alchemist Pub & Brewery in Vermont is an exception. **He’ll soften his water with magnesium sulfate for spicier, softer Belgian ales**, and harden it with calcium sulfate for hoppier beers.”

Two Dutch homebrewers put together Belgian water profiles in the late 1990s. Jacques Bertens and Ronald Baert contacted Belgian water companies and compiled information from more than one hundred pumping stations. These profiles are based on averages within the region near the breweries. Most monastery breweries have their own water source, but it won’t be much different than the water of the region.

	Calcium	Bicarbonate	Magnesium	Sodium	Sulfate	Chloride
Westmalle	41	91	8	16	62	26
Orval	96	287	4	5	25	13
Rochefort	82	240	10	6	32	17
Chimay	70	216	7	7	21	21
Achel	64	157	7	12	28	24
Westvleteren	114	370	10	125	145	139

Data courtesy of Jacques Bertens and Ronald Baert, listed in ppm (mg/L).

Brewing in the Style of Trappist Abbeys. MASH

“With Pilsner malt at the heart of their beers, all the **Trappist breweries conduct a step mash**, as do many other producers of abbey ales. The number of rests, resting temperatures, and time at each stop may vary by a small measure”

Single infusion works, most malts are well modified, but the **upward infusion mash results in more malt complexity typically found in Trappist style beers.**

Temperature	Minutes
113°F	15
144°F	35
158°F	25
172°F	5
Brewery Ommegang Mash Schedule	

Brewing in the Style of Trappist Abbeys. **BOIL**

Recommended time for the boil is 60 - 90 minutes...

Brewing in the Style of Trappist Abbeys. YEAST

- It is important to **use a yeast known to produce the sort of flavor you are looking for and to use a strain tolerant of high-gravity beers**. Many yeast strains behave differently at high gravities than in more normal ranges, in some cases becoming quite temperature sensitive.
- Generous pitching rates should be the rule. A few years ago, the most common practice was to **culture the dregs from a bottle-conditioned Trappist beer**, but surprises were not uncommon — and were rarely pleasant — from that practice. Plus most brewers use different yeast for bottle-conditioning than for primary fermentation.
- An excellent assortment of Belgian yeast cultures is now available.

More on Belgian Yeast Strains

“Belgian yeast strains are different. We think in terms of results; they tolerate higher alcohols, attenuate well, and generate a range of phenolics and esters.”

“under a microscope and sees cells that have a smaller surface area than other ale yeast”

“Belgian yeasts have a lot in common with wine yeasts. They have phenolic compounds that are **similar to wine yeasts.**”

“Belgian yeasts also share characteristics with several wheat yeasts, although the desirable phenolics we expect in Belgian beers are decidedly different than clovelike phenolics common in Bavarian wheat beers.”

“Higher original gravity produces more esters, as does higher attenuation. More aeration lowers ester production. Belgian yeasts naturally produce more esters, including some related to wheat yeasts.”

Fermentation Notes

- Control the temperature early on so you can avoid having to cool it down later. When cooled popular strains are prone to crashing and raising the temperature or rousing is ineffective and new yeast will need to be pitched.
- More phenolics are produced at lower temperatures and absence of esters makes phenolics stand out more.
- “One of the things that starting cooler does, is it leaves some of the fatty acids for ester production otherwise utilized early by yeast growth”
- Pitch rates are lower than expected by many homebrewers
 - Results in desirable flavor during the yeast growth
 - Pitch too little though and you get solvent off-flavors from increased ethyl acetate levels.
 - Very high or very low pitching rates increase ester levels
 - Using healthy yeast is critical
- Reducing aeration increases esters

Commercially Available Yeasts

- [Chimay](#) - [Wyeast 1214](#) / [WLP500](#) / [B63 Monastic](#) / [GY014](#)
- [Rocheport](#) - [Wyeast 1762](#) / [WLP540](#)
- [Achoffe](#) - [Wyeast 3522](#) / [WLP550](#) / [OYL-024](#) / [B45 Gnome](#)
- [Westmalle](#) - [Wyeast 3787](#) / [WLP530](#) / [B48 Triple Double](#)
- [Unibroue](#) - [Wyeast 3864](#)
- [Duvel](#) - [Wyeast 1388](#) / [WLP570](#) / [GY048](#)
- ~~[Coursendonk](#) - Wyeast 3538 (Seasonal Private Collection)~~
- [Orval](#) - [WLP510](#)

All strains above able to handle ~12% ABV and attenuation in mid to high 70s. Flocculation varies widely.

- [WLP575](#) - Blend of two monastery-type yeast strains and one Belgian ale-type yeast

Same Yeast, Different Fermentation Profiles

All three breweries use the same yeast which is cropped from Westmalle fermentations.

“Increased temperature increases ethyl acetate levels, floral and fruity esters, and may be necessary for some of these yeasts to finish attenuating. Lower temperature restrains ester production, promotes perception of phenols.”

Achel	<i>Achel Bruin 8 (1.079–19 °P, 22 IBU)</i>
Yeast is pitched at 63 to 64° F (17 to 18° C) Top temperature 72 to 73° F (22 to 23° C) Fermentation in cylindro-conical tanks	Sweet and malty, a little like a chocolate milkshake, albeit one dosed with dark rum. Subdued aromas, plenty of malt flavor, well rounded.
Westmalle	<i>Westmalle Dubbel (1.063–15.6 °P, 24 IBU)</i>
Yeast is pitched at 64° F (18° C) Top temperature 68° F (20° C) Fermentation in closed squares	Cocoa nose, dry and complex. A bit sweet up front, rum giving way to dark fruit. Smooth to the end, although it finishes dry. An example of yeast deferring to malt and dark caramel syrup.
Westvleteren	<i>Westvleteren 8 (1.072–17.6 °P, 35 IBU)</i>
Yeast is pitched at 68° F (20° C) Top temperature 82 to 84° F (28 to 29° C) Open fermentation	A restaurant near us serves plantains in mole sauce. Scorch that a bit, and you have this beer (at about four months since bottling), with a first impression of burned chocolate and banana. Darker fruits, rum begin to appear at mid-palate. Finishes dry even when young; a complex beer that will improve with age.

Aging La Trappe Quad in Oak Barrels



Trappist Breweries

- [Brouwerij der Trappisten van Westmalle](#) - 1836 -  Belgium
- [Brouwerij De Sint-Sixtusabdij van Westvleteren](#) - 1838 -  Belgium
- [Bières de Chimay](#) - 1863 -  Belgium
- [Bierbrouwerij de Koningshoeven \(La Trappe\)](#) - 1884 -  Netherlands
- [Brasserie de Rochefort \(Abbaye Notre-Dame de Saint-Rémy\)](#) - 1899 -  Belgium
- [Brasserie d'Orval](#) - 1931 -  Belgium
- [Stift Engelszell](#) - 2012 -  Austria
- [St. Joseph's Abbey \(Spencer\)](#) - 2013 -  United States
- [Brouwerij Abdij Maria Toevlucht \(Zundert\)](#) - 2013 -  Netherlands
- [Tre Fontane Abbey](#) - 2015 -  Italy
- [Mount St Bernard Abbey \(Tynt Meadow\)](#) - 2018 -       England
- [Abbaye du Mont des Cats \(Mont des Cats\)](#) - 1826 - Not ATP, brewed at Chimay -  France
- [Cerveza Cardeña Trappist](#) - 2016 -  Spain - Not ATP yet, in process of setting up on-site brewery
- [Achel](#) - 1850 -  Belgium - Lost ATP label in 2021 due to no monks onsite to supervise

*ATP (Authentic Trappist Product) refers to logo on the beer label, but any brewer / brewery can brew “trappist style” beers

Sources

- Brew Like a Monk by Stan Hieronymus
- BJCP Website
 - [2015 Style Guidelines for Trappist Ales](#)
 - [2014 \(Draft\) Style Guildelines](#)
- [White Labs Website](#)
- [Wyeast Website](#)
- Wikipedia
 - [Trappist beer](#)
 - [Trappists](#)
- Untappd pages for the beers / breweries
- Beer photos from [Paul](#)
- https://www.morebeer.com/articles/Belgian_Trappists_Abbey
- Ed Chainey, La Trappe Importer to Northern California