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CRAFT Beer & Brewing

Your Guide to New England-Style IPAs

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What is a New England-Style IPA

New England–style IPA is a perfect example of how the whole can be greater than the sum of its parts. According to Neil Fisher (Brewmaster/Cofounder, WeldWerks Brewing Co.), there are six characteristics that help distinguish New England IPAs from other IPAs:

- Higher protein malts, such as wheat and oats, in the grist
- Use of contemporary, fruit-forward hops varieties
- Restrained bitterness from fewer kettle-hops additions and higher whirlpool-hops rates
- Adjusted [water chemistry](#) to favor higher chloride levels than typical for IPAs
- Fermenting with a low-attenuating, low-flocculating, ester-forward yeast strain
- Unique dry-hopping techniques and schedules, including dry hopping during fermentation

As a nod to the style, the Brewers Association added [Juicy or Hazy Ale Styles](#) with this description: "The addition of this trio of styles include representation of what may be referred to as New England IPAs or West Coast Hazy IPAs. The styles will be identified in the guidelines and

Brewers Association competitions as "Juicy of Hazy Pale Ale," "Juicy or Hazy IPA" and "Juicy or Hazy Double IPA."

By The Numbers

We took a look at the most acclaimed New England-style IPA recipes on our website, and these are the trends we found:

- **24.2%:** Average percentage of the grist that is oats/wheat
- **0.24 oz:** Average first wort hop addition in a 5-gallon batch
- **0.74 oz:** Average boil hop addition in a 5-gallon batch
- **2.88 oz:** Average whirlpool hop addition in a 5-gallon batch
- **7.07 oz:** Average dry hop addition in a 5-gallon batch
- **Conan/Vermont Ale:** The most popular yeast selection. ~30% used London Ale III.
- **1:** The amount of prominent brewers we talked to that use Kölsch yeast

Hops

The hops in New England-Style IPAs are predominantly contemporary, fruit-forward varieties, especially ones known for their tropical-fruit and citrus character instead of more piney, resinous, dank varieties. Popular choices include Citra, Amarillo, Simcoe, Mosaic, Galaxy, and El Dorado. But one of the best aspects of the style is its experimental nature, so you can take some chances with new, experimental varieties that may not be widely available yet. Even classics such as Centennial, Cascade, Chinook, and Columbus can be great additions to your New England IPA.

In terms of bitterness, New England IPAs are typically below 65–70 IBUs, despite total hops rates in the 3–5 lb/bbl (1.4–2.3 kg/bbl) range or higher, with 30–50 percent of those hops still being added on the hot side. This is accomplished with huge whirlpool hops additions and very little, if any, early kettle additions. At WeldWerks, they have had a lot of success with almost no hops additions until the whirlpool. Their whirlpool additions range from 1.5–1.75 lb/bbl (680–794 kg/bbl) total (0.77–0.9 oz/gal or 22–25 g/3.78 l), typically in 2–3 additions over 45–60 minutes. The tricky part is estimating hops utilization from your whirlpool additions—every case will be different, based on factors such as your brewing system and geographic location, but utilizations can range from

5–50 percent for hops added during the whirlpool, varying based on time and temperature.

The biggest concern with long whirlpool times is the conversion of S-methylmethionine (SMM) to dimethyl sulfides (DMS) after boiling is complete and before crashing to fermentation temperature. This is a subject WeldWerks hopes to research further to better understand the risks of DMS (re)formation during whirlpool, hop stands, etc., but to date their sensory testing has not detected DMS in any of their IPAs, despite whirlpool times of an hour or more. However, it is certainly a risk you should be aware of when using longer whirlpool times.



Rethinking Bitterness In Dry-Hopped Beers

Dry hopping does weirder things to beer than we thought. While conventional logic—and all existing software models for calculating theoretical IBUs in beer—say that IBUs can only be generated on the hot side of brewing (since alpha acids can only be isomerized by heat), brewers have long suspected that dry hopping can, indeed, make an impact on the perception of bitterness.

In 2017, Jason Perkins of Allagash Brewing presented at the Craft Brewers Conference on a study they conducted with Oregon State University to test the impact of dry hopping on beer attenuation and found that by adding dry hops to a fully attenuated beer (their sample was Coors Banquet), they could cause significant additional attenuation in the beer. Over 40 days, those dry hops were able to drop the finished Coors Banquet from about 1.014 SG to 1.007, taking the beer from 4.9 percent ABV to 6.2 percent by creating enzymatic activity that broke down nonfermentable dextrins in the beer.

Applying that same question to dry hopping in hazy New England–style IPAs, New Belgium’s Ross Koenigs recently presented (at the Big Beers, Belgians, and Barleywines festival in Breckenridge) the findings of a study he did with a test batch that used no kettle hops and four different levels of dry hopping. While he’s continuing to refine his results with further testing, the preliminary findings could be very useful for brewers whose perceptions of the beer they brew don’t always match the calculations produced by their brewing software.

One » Dry hopping definitely adds more actual IBUs than previously calculated. “We took an un-kettle-hopped base beer and split it out into four fermentations,” says Koenigs. “We did an entirely non-hopped control and did three different dry-hops iterations. We did 500 g/hl, 1 kg/hl, and 1.5 kg/hl.”

The IBUs, measured with New Belgium’s in-house spectrophotometer, were fascinating. The control batch tested for the expected marginal IBU level (2.3 IBU), but despite the complete lack of kettle hops, IBUs then increased dramatically and scaled consistently, with the 500 g/hl dry-hop batch testing at 44.9 IBU, the 1 kg/hl batch testing at 58.5 IBU, and so on.

Two » Higher dry hopping raises the pH of beer. The control batch in Koenigs’s test registered 4.46 pH, while the 1.5 kg/hl batch registered a 5.05. The pH moved on a relatively linear scale, increasing with the amount of dry hops.

“There’s definitely a pH rise as you increase hops material,” says Koenigs. “The cool part about that, too, is that as you alter your pH, it also alters your perception of bitterness. As you decrease pH, to a point, you’ll get a decreased perception of bitterness, and it’ll just feel more juicy until you get really low.”

While unrelated to New England–style IPAs, this is one reason more acidic dry-hopped beers, such as dry-hopped mixed-culture farmhouse ales or wild ales, present hops in such a fruit-forward juicy manner at those lower pH levels.

Three » Greater dry-hopping levels do increase attenuation of the beer. “ABV from the control batch to the highest is almost a full percentage point ABV off,” says Koenigs. “Hops material does have glycosidic enzymes—a combination of amyloglucosidase, beta-amylase, a little alpha-amylase—very, very small. If you look at it in terms of diastatic power, a base malt will be 150 DP, and this is a 0.2 DP, but it’s enough. Especially as you start going up in concentration of hops material, it will actually start to attenuate.”

For brewers, this is one of the larger takeaways. If your goal is bigger mouthfeel from a higher finishing gravity, heavy dry hopping will knock that down, so consider that when making decisions about elements such as mash temperature or dry-hops timing.

“The New England style is generally highly underattenuated,” says Koenigs. “When we ran lab tests of [fellow Colorado brewers and seminar participants] Outer Range Brewing and Cerebral Brewing, they had finishing gravities around 5.5 Plato (1.021 SG). The lowest we tested was Weldwerks Juicy Bits, around 3.8 Plato (1.015 SG). So brewers are gearing it toward full mouthfeel perception.”

Four » IBU is, still, an insufficient way to describe perceived bitterness in dry-hopped beers. Echoing the findings of others, Koenigs found that the trained sensory panel at New Belgium Brewing pegged the blind samples at much lower levels of bitterness than their measured IBUs would suggest. As they drank a sample of the 1.5 kg/hl beer together in the taproom one afternoon, Koenigs said, “The beer you’re tasting right there, analytically, that’s a 62 IBU beer. But it doesn’t taste like it. Not even close. With our sensory panel, we do hedonic scaling—one to ten in bitterness perception. This beer ranked about a three. So what we’re seeing analytically about what we should have isn’t backed up by sensory.”

Part of this, Koenigs suggests, is an indictment of how the measurement is done. A spectrophotometer aggregates the bittering compounds and applies a number to them, but it cannot account for other sensory inputs that brewers use to manipulate the perception of those compounds. A big step will be developing useful correction factors that software calculators can use to account for the impacts of dry hopping, but that’s still a ways off.

As with most research in brewing science, more work remains to be done to tease out the full impact of modern techniques and new hops varieties on dry-hopped beer, but if you found your beer dropped in gravity after dry hopping or that the bitterness didn’t correlate at all with the calculation of your software, there’s a good reason for that.

Water Chemistry

Unlike West Coast IPAs, which typically feature higher sulfate levels, many New England IPAs favor higher chloride levels where water chemistry is concerned. More specifically, most New England IPAs target ratios of 1:1 – 3:1 of chloride to sulfate, which is typically the inverse of West Coast IPAs. Total chloride and sulfate amounts vary widely from brewery to brewery, but at WeldWerks they target about 150–175 ppm chloride and 75–100 ppm sulfate. The higher chloride level brings out more of the malt character, which helps enhance the mouthfeel and contributes to the overall balance of the beer. And the sulfate level is just high enough to accentuate the hops character without accentuating hops bitterness.

Malt

The base malts for a New England-Style IPA are very similar to those for other American IPAs and typically consist of pale, 2-row, or Pilsen malts and sometimes British pale malts such as Maris Otter, Pearl, or Golden Promise. But the specialty malts are a bit different. Many New England-Style IPAs have abandoned crystal malts and instead rely on high-protein malts, such as wheat and oats, both for balance and for mouthfeel contributions. These malts also provide greater haze stability since the malt polyphenols from these high-protein malts serve as a binding point for hops polyphenols. The malt polyphenols keep hops polyphenols from dropping out of suspension and, as a result, produce a beer that remains hazy longer. This shouldn't be the goal when brewing this style, but this interaction may provide a bit more insight into the appearance of these IPAs.

Yeast & Fermentation

Yeast seems to be one of the better-kept secrets of the style with numerous rumors floating around about each brewery's strain of choice. The truth is, each brewery has likely developed its own house strain by selecting unique mutations from multiple generations of use. But to achieve similar results, we recommend using a medium-to-low attenuating, medium-to-low flocculating, expressive, high ester-producing strain, such as London Ale III (Wyeast 1318), Dry English Ale (White Labs WLP007), or Vermont/Conan.

At WeldWerks, they have fermented all of their New England-Style IPAs with London Ale III (Wyeast 1318) with great results. Fermenting with these strains flies in the face of conventional wisdom for West Coast IPAs, which are typically fermented dry, clean, and clear, but New England IPAs are a different animal entirely. The lower attenuation helps balance the overwhelming hops character of the beer and also enhances the mouthfeel, keeping it full-bodied without being heavy or cloying. Using a more expressive yeast helps drive ester production, and these strains in particular are known for producing notes of peach, apricot, and even tropical fruit when fermented under the right conditions. This bold, fruity ester character pairs wonderfully with the fruit-forward, more contemporary hops commonly found in New England IPAs. The lower flocculation of these strains helps the bound malt and hops polyphenols remain in suspension longer, which improves haze stability. Again, haze is not a goal of the style, but it can affect the perception of hops flavor and hops aroma in certain instances.



Dry Hopping

Dry-hop rates for New England IPAs can range from 1–2.5 lb/bbl (454 g–1.13 kg/bbl) or 0.5–1.3 oz/gal (14–37 g/3.8 l), and at WeldWerks, they target close to 1.75 lb/bbl (794 g/bbl) total. One of the most common practices among New England IPAs is dry hopping before the end of fermentation. They have had great results beginning our dry-hop additions at about 2–3° Plato from terminal gravity. This technique provides several benefits that can help enhance the hops character of your finished beer.

To begin with, the mechanical action of fermentation helps keep the hops in suspension and in motion, which can extract more flavor and aroma from the hops in a shorter period of time. And because the hops are added during active fermentation, there is lower risk of oxygen ingress in the finished beer, which keeps the hops character fresher longer. Alternatively, if fermentation is too vigorous, that same action and CO₂ off-gassing can work to scrub hops aroma from the finished beer, so avoid dry hopping too early.

Furthermore, there has been a lot more speculation and research into the biotransformation of hops compounds that occurs when they interact with yeast during fermentation. More specifically,

there have been claims that suggest certain yeast strains have the capability of transforming non-aromatic hops glycosides into aromatic terpenoids. While there is still a lot of research to be done to further substantiate these claims with more empirical data, their very modest sensory experiments at WeldWerks have suggested that the hops character expressed from dry-hop additions during fermentation is drastically different from the hops character expressed from the same hops used at the same rates added after fermentation. That is not to say that one method is necessarily better than the other, but that they are different. Again, this area in particular is one they are researching more at WeldWerks, so we suggest trying different dry-hopping techniques for yourself to decide which one you prefer.

- By: Neil Fisher

Watch the Full Video (67 Minutes) on How to Brew Weldwerks Juicy Bits



Châteaux de Chico

There are plenty of American-ale yeasts out there. But just as we use Q-Tip and Kleenex to identify cotton swabs and facial tissues of any brand, talking about “American-ale yeast” means only one thing: Chico.

Chico is probably the most widely used craft yeast strain on the West Coast, if not in the entire country. You know it as White Labs California Ale (WLP001), Wyeast American Ale (1056), or Safale US-05. “Chico” refers to the hometown of Sierra Nevada Brewing Company, from which the strain is said to have been sourced. Legend has it that Sierra Nevada, in turn, obtained it from

Ballantine decades ago. Whence it arrived at Ballantine may forever remain locked in the vaults of brewing lore.

Whatever its roots (and inevitable mutations along the way), Chico is famously clean, meaning that fermentation by-products are relatively few. Thus, the West Coast IPA drinker experiences a more or less unadulterated expression of malt and hops. But despite Chico's clean reputation, it can, in fact, throw impressive esters when it ferments above or below its preferred temperature range.

"These [West Coast] yeasts have a potential ester profile. If you play with fermentation temperature, you can really influence the character of the beer," says Richard Norgrove of Bear Republic Brewing Company (Healdsburg, California). He's partial to White Labs WLP051 California Ale V, which is somewhat more expressive than classic Chico yeast.

"If you ferment California Ale V at 66–68°F [19–20°C], say, it's not going to throw tremendous esters. But raise it to 72–74°F [22–24°C], and that same yeast can throw bubblegum and Juicy Fruit character into the beer, giving a round sweetness that complements the hops profile."

Norgrove knows a thing or two about integrating interesting flavors. While Racer 5 remains a classic interpretation of the West Coast IPA style, Bear Republic's Apex imperial IPA is a chance to play. "We reserve the right to change Apex each year according to the hops that are available." Right now, his favorite hops is a new cultivar known only as Experimental Hop 06277. He has nicknamed it Stitch for its ability to seamlessly weave in and out of Apex's hops profile and keep beer drinkers guessing. And it seems to work well with the brewery's house yeast strain.

Because Bear Republic's beers are bottle conditioned, the interaction between yeast character and hops profile changes with time. "Everyone at Bear Republic has a favorite way to drink Racer 5," he says. For Norgrove, that's three to four months after production. "The hops no longer dominate, and you start to get some esterification. It becomes almost more English in style."

English Accents

Erik Jensen of Green Flash Brewing Company in San Diego thinks a key differentiator for East and West Coast brewers of IPA may be the lineage of their preferred yeast strains. Green Flash's proximity to White Labs affords him the opportunity to taste a number of the yeast bank's experiments, which often include splitting a single batch of wort and fermenting it with multiple yeast strains. Each resulting beer gets tested for a number of key metrics, including International Bittering Units (IBUs).

"A beer that hits 50 IBUs with a California-ale strain might only come up as 35 IBUs when fermented using a British-ale strain, even though the original wort is the same," says Jensen. It seems that the house strains that have developed at East Coast breweries may enjoy a more

direct lineage to classic British strains than those on the West Coast. The Alchemist's well-known Conan strain, for example, was begat from one of brewing legend Greg Noonan's preferred yeasts at the Vermont Pub and Brewery. In all likelihood, Noonan's strain had its origins in the United Kingdom, but as with Chico, Conan's actual family tree may very well be lost to the ages.

Whatever the case may be, it's undeniable that many of the best IPAs from the East Coast exhibit a qualitatively different bitterness and hops presence than their West Coast counterparts. Neither is innately better or worse than the other. Rather, they represent two different approaches to the same overarching style.

Sixty miles south of The Alchemist, Dan Foley of Foley Brothers Brewing (Brandon, Vermont) admits to using not just one yeast strain but a blend. "The yeast strain absolutely has a big impact," he says. "We pitch a ton of yeast with lots of oxygen so that our IPAs ferment out in just three or four days."

Foley believes in getting his IPAs from grain to glass as quickly as possible. That means fast fermentation and quick conditioning. The Foley brothers like to ferment their IPAs in the high sixties Fahrenheit (about 20°C) and then raise the temperature to the low seventies (about 22°C) near the end of fermentation to assure full attenuation. "Our dry-hop regimen is also fast," Foley observes. "We'll do a single dry hop for standard IPA and a double addition for double IPA."

Foley also advises brewers to keg their beer if at all possible. "We started out by bottle conditioning, and the warm carbonation period seemed to age the beer and degrade the hops profile." Kegging lets him keep the beer cold, which is crucial for preserving delicate hops flavors and aromas.

- By: Dave Carpenter

Developing Your New England-Style IPA

For this, we talked to Ryan Brooks, the former brewmaster for San Diego's award-winning Coronado Brewing Company and now cofounder and brewmaster at SouthNorte. Initially skeptical, he became a convert through the process of research, culminating in two pivotal moments—the point at which he tasted the beer and the point at which the customers in the Coronado taproom did the same.

"One of our Coronado brewers was nerding out on this whole juicy, hazy IPA thing—beers with tons of low bitterness hops, 20–30 IBUs (which is like half of what we'd normally use in an IPA),

and all of that focused on whirlpool, late hopping, and dry hopping,” Brooks says.

With research, the Coronado brewers settled on Wyeast 1318 London Ale III (thought to be the Boddington’s strain), a yeast that Brooks found to be much more flocculent than expected. “It cleans up pretty well, but as long as you don’t fine it or treat it, it’ll stay in suspension and remain hazy,” he says.

With yeast decided, the Coronado brewers considered brewing a smaller beer such as a bitter or ESB to feed the yeast and step up to the larger amount they’d need to brew their goal 7.9 percent double IPA. But there was only one problem. “I loved the idea of brewing an ESB, and it’s one of my favorite styles, but no one in this market is buying beer under 4 percent.” Facing the reality of today’s craft-beer market, they plowed headfirst into what Brooks lovingly calls a “stupid unfiltered juicy IPA.”

Hops, Hops, and More Hops

For hops, he decided to use what they had on hand—some Columbus, some Centennial, Simcoe, Citra, and Mosaic. The key differentiator for the hazy New England–style North Island IPA, as compared to Coronado’s clear West Coast style (and World Beer Cup gold medal winning) Islander IPA, was hops timing and double dry hopping.

Brooks targeted a small 5 IBUs from his initial bittering charge and laid off the hops until 5 minutes left in the boil, when he added a bit more. He reserved “heavy” levels of hopping for the whirlpool and even more for the dry hopping. But Brooks was exceptionally finicky about dry-hops timing.

“After fermentation hits terminal gravity, we add dry hops, wait a day, drop those hops off, dry hop again with either the same varieties, or if we feel it’s not hitting what we want, we switch up the second dry hop to get the profile we’re looking for,” Brooks says. “It’s funny, but even when we use the exact dry hops mix, sometimes they come out more citrusy and danky and less fruity, so we need to reinforce more of the fruitier hops with our second dry hop. We pull samples from the tank, taste them, and make the call about what to use in the second dry hop.”

The process is more akin to a chef in a kitchen than the typical commercial brewing process. Brooks’s suggestion for homebrewers doing it at home is to “just hop the shit out of it—both late on the hot side and in the dry hopping.” But don’t let those dry hops sit too long on the beer. While some brewers might let dry hops go for a week or more, Brooks prefers greater hops volume for less time. “If we leave dry hops for longer than one or two days, we tend to get grassy flavors that we don’t find as desirable.”

Like many brewers, Brooks uses only freshly opened hops packages for dry hopping. If they reseal and refrigerate a package of hops, it might get used later on the hot side, but never on the cold side. Once hops come into contact with oxygen, the delicate fruity aromas and flavors

diminish quickly. For homebrewers, he suggests using only nitrogen-flushed 2 oz or 4 oz packs of hops from BSG or similar because they haven't been exposed to oxygen while being repacked.

“If you're buying hops that have been split out of a larger bale by the shop or a smaller distributor, then you don't always know how they were handled, how much oxygen is in the package, etc. Quality and handling make a big difference, especially in the dry hop.”



Making Do with Harder Water

“We have pretty hard water here in San Diego, and Coronado doesn't have a reverse osmosis system to strip the water down and start with the really soft water that many other brewers are using,” says Brooks. “But Coronado does have a de-ionizing water unit and all the mash is 100 percent de-ionized water. For the sparge water Coronado uses a little bit of the DI water and some charcoal-filtered San Diego water, so they do try to cut it down and get that softer water profile, but it's not perfect. Still, it seems to work.”

“Coronado doesn't target a specific sulfate to chloride ratio; they just use the same water regimen they use for their lagers—cut it down with the de-ionizer—but don't shoot for specific numbers.”

Yeast Life

Like other brewers, Brooks has found Wyeast 1318 to have a shorter effective lifespan than other common brewing yeast.

“I’ve seen the London Ale III strain crap out consistently around the fourth generation. It’s great on generations 2 and 3, but by 4 it is a little stressed. So when Coronado rolls this beer out for packaging, they’re bringing the beer down to 7–7.5 percent ABV from the 7.9 percent ABV they started out with, just to try to get another generation off of it.”

That makes it a costly beer from a commercial perspective. Homebrewers used to buying pitchables won’t notice, but when buying yeast by the industrial-sized drum, it’s a challenge to get so few generations from it—something reflected in the pricing for many breweries’ New England–style IPAs. On top of that, their inability to sell a smaller beer brewed with the same yeast means they can’t step up the yeast through different beers.

“It would be great if Coronado could brew a bitter or ESB to start the yeast, then move it over, but that style of English beer doesn’t sell for them, so they just buy a crapload of yeast and start that way,” says Brooks.

The Process of Unlearning

One of the more difficult parts of brewing a New England–style IPA is unlearning the best practices that are beaten into brewers through years of school and professional work.

“Everything I learned just got thrown out the window. You don’t take time to let the beer mature. You don’t let the clarity get to where you think it should be. You just rush it, basically,” says Brooks. However, with this style, flavor matters more than tradition. “The first time Coronado brewed it, the beer turned out super bold and big and people loved it. They made a 7 percent beer, hopped it like crazy toward the end of the whirlpool and then again just after fermentation in dry hop, then dry hopped it again two days later. Crashed it cold, carbonated it, let it settle out for a day, kegged it, and it was the fastest selling IPA they’ve ever done at any of their locations.”

Patrons didn’t seem to mind the slightly chalky finish that is common to the style, due to the yeast and hop polyphenols in suspension, and they cared even less about the objections of brewing traditionalists.

Packaging the Haze

One of the best things about the New England–style IPA for commercial breweries is the rapid rate of consumption. While most commercial breweries have to target a 90–120 day window for their beer and build hops profiles to peak later in the beer’s lifespan (in the 30 day+ timeframe when it’s most commonly consumed), many New England–style IPAs don’t make it a week past packaging. Consumers have been trained to drink it quickly, keep it cold, and not let it age at all. Bottle and

Consumers have been trained to drink it quickly, keep it cold, and not let it age at all. Bottle and can limits reinforce this “drink it quick” mentality. After two weeks, some drop off in hops intensity is noticeable. At one month, yeast flocculation in the package increases. Coronado is just now tackling packaging tests.

“They’ve just started hand bottling samples to do some longevity testing on them—up until now, the beer hasn’t lasted long enough to get some to test,” says Brooks. “I’m curious to see how it reacts at ambient temperatures—if it flocculates out, how much it flocs out, and what it tastes like. They’ve just launched a guava IPA that looks the same way—super hazy milky juicy looking—and they haven’t seen any flocculation issues with that. It’s still nice and hazy.”

It’s not clear whether distributors, shops, and consumers will treat the beer the way it should be treated, but that’s a problem with retail beer sales anywhere.

“You cut those IBUs down in half and add them [hops] all through your whirlpool so they’re super low and use a low attenuating yeast so it’s semisweet, then push the tropical fruit notes with your dry hops—the result is a very approachable beer for normal people.”

- By: Jamie Bogner

New England IPA Recipes We Love

We first wrote about New England IPAs back in 2016. Since then, we've received recipes some of the highest regarded and critically acclaimed IPAs available.

[Alvarado Street Brewery 'Contains No Juice' Expressive IPA Recipe](#)

This Double IPA with 'expressive yeast' is one of Alvarado Street Brewery's most popular beers.

[Great Notion Fermentation in Motion IPA Recipe](#)

This recipe is a nod to a hazy, juicy IPA that Great Notion Brewing's Andy Miller brewed at the 2017 Craft Beer & Brewing Magazine® Brewers Retreat in Astoria, Oregon.

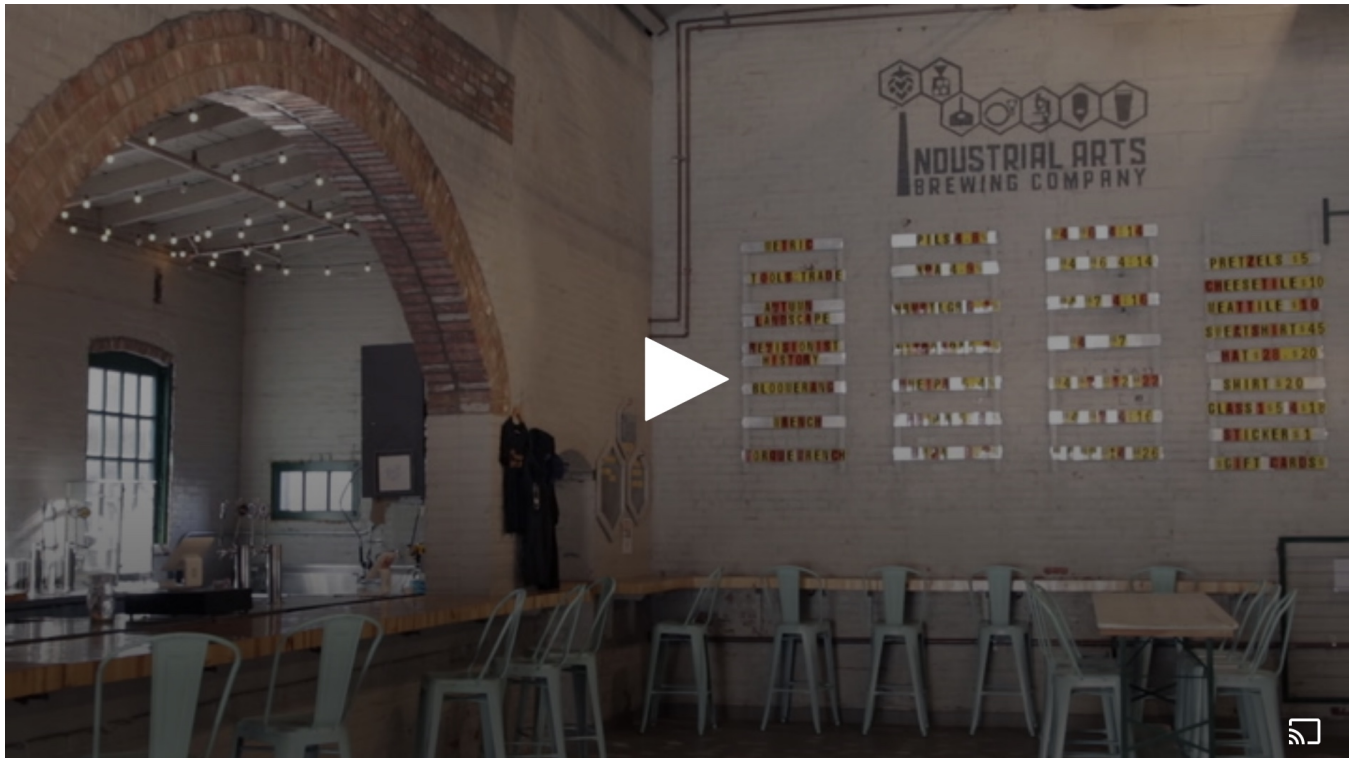
[WeldWerks Brewing Co. Juicy Bits New England–Style IPA Recipe](#)

Juicy Bits from WeldWerks Brewing Co. in Greeley, Colorado, is a New England–style IPA that has quickly garnered both regional and national attention for the brewery. Brewer Neil Fisher scaled this recipe to homebrew size.

[Industrial Arts Wrench IPA Recipe](#)

Industrial Arts Brewing Founder Jeff O'Neil shared the recipe for Wrench IPA as a part of the 'Brewing Industrial Arts Wrench IPA' video.

Watch the Full Video (67 Minutes) on How to Brew Industrial Arts Wrench



[Troon Brewing Placebo Effect IPA Recipe](#)

If you brew with oats because you've accepted this as common knowledge but have never actually experimented with it yourself, then this recipe will be especially edifying.

[NoDa Brewing New England-Style IPA Recipe](#)

Here's a super-hoppy, super-fun, clean New England-style IPA with no haze from NoDa Brewing Company's Brewmaster, Chad Henderson.

[Maplewood Brewery and Distillery Son of Juice IPA Recipe](#)

This New England-style IPA from Maplewood Brewery and Distillery in Chicago, Illinois, is a local favorite.

[Door County Brewing New England-Style IPA Recipe](#)

This recipe from Danny McMahon, the head brewer of Door County Brewing Company (Bailey's Harbor, Wisconsin) is one of their ever-evolving New England-style IPA recipes.

[Civil Society Fresh IPA Recipe](#)

This New England-style IPA from Civil Society Brewing Co. got its start as a homebrew recipe by

This New England-style IPA from Civil Society Brewing Co. got its start as a homebrew recipe by Cofounder Karl Volstad and has become the flagship IPA for the South Florida brewery.

Top-Rated Commercial Examples

Our blind panel of BJCP certified judges has tasted through [more than 500 IPAs](#). Below are a couple of the top-rated New England-Style IPAs.

[WeldWerks Double Dry-hopped Juicy Bits](#)

Beer will never get better than this, and it's one of the best beers I've ever had. This would be a good gateway IPA if you don't like a lot of bitterness and want to start drinking IPAs. This beer is so juicy, that if I were a sailor, I would take this beer on my voyages to stave off scurvy. It is as close to perfect as we've tasted.

[Tree House Brewing Company Green](#)

This beer is great—so full of juicy fruit flavors. Fluffy and light without sacrificing body. Great showcase of the hops. The low bitterness is just enough to make it an IPA. A juicy, fruity, hazy, chewy IPA that's an excellent example of what new-school IPA can be.

[Burial Beer Hawkbill](#)

Everything a good NEIPA should be. The soft and creamy mouthfeel, bright tropical fruit flavors from the hops, and balanced bitterness come together in an exceptional way.

[Great Notion Brewing Mandela IPA](#)

An ideal of the style: the body is silky smooth without being heavy; the hops bitterness is present but lets the true flavors shine through in every sip. Crushable to the max. Everything I want a juicy IPA to be.

[TrimTab The Original 006](#)

A great beer is all about mouthfeel, and they nailed it. An excellent NEIPA from nose through finish.

Don't Fear the Haze

Whether a deliberate choice, an accidental result, or a surprising outcome, haze is neither a sign

Whether a deliberate choice, an accidental result, or a surprising outcome, haze is neither a sign of great things to come nor a signal to begin dumping your beer into the gutter. As with most parts of brewing, we should judge it on its own merits (or challenges). Consider the flavor and visual impacts, compare them to your goals and desires for that beer, and respond accordingly. Whether it's the best of beers or the worst of beers is, ultimately, up to you.

This guide was put together with writing contributions from [Neil Fisher](#), [Jamie Bogner](#), [Dave Carpenter](#), [John Holl](#), and the breweries who contributed recipes.

Sincerely,

The Craft Beer & Brewing Team

P.S. Please let us know if you have any feedback or topics you'd like to see covered.



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