















When flavor and efficiency go hand in hand.

John I. Haas is dedicated to helping brewers create great flavors in beer. Sometimes that's easy: just add world-class hops to your kettle and let your creativity run wild. Other times, it can be more challenging. Like when big flavor meets shrinking margins. Or when every ounce of wort you lose has a direct and tangible impact on your bottom line.

At HAAS®, we work closely with brewers around the world to develop and commercialize innovative hop products and brewing solutions that help you achieve the great flavor you want, while meeting the process efficiencies—and supply chain assurances—today's brewing economics demand.

From the mash tun to the bright tank, and every step in between, we're ready to help you brew your next great beer, more efficiently than ever before.

Thanks for brewing with us. Cheers!

COVER from left to right:
Micah Cawley, Midwest Key Account Manager, John I. Haas
Christine Turner, Brewer, Wiseacre Brewing Co.
Michael Laurenzi, Brewer/Lead Trainer, Wiseacre Brewing Co.
Adam "Rudy" Ruderman, Brewer, Wiseacre Brewing Co.

Four hops at the forefront of flavor.

Get to know these amazing hop varieties—developed and grown by our partners in Washington, Oregon, and Australia, perfect for today's most popular beer styles, and available now from HAAS® and our distribution partners.

BRU-1™

Developed through open pollination at Brulotte Farms in Toppenish, WA, BRU-1TM is notable for a distinct sweet fruit aroma often described as pineapple. When used as a whirlpool or dry hop addition, BRU-1 delivers the aroma of freshly cut pineapple and green fruits, and it has been shown to improve haze stability in certain beer styles.







REGION: USA



ECLIPSE®

04-337-016 C.V.

A new, big-hitting flavor hop bursting with sweet mandarin, zesty citrus peel, peach, and fresh pine needles. Eclipse® was created by the Hop Products Australia (HPA) breeding program in 2004 and commercialized in 2020. Its ancestry is a cross pollination of high alpha Australian and North American hops.





REGION: AUSTRALIA



MCKENZIETM

C-148 C.V.

McKenzie™ is the first hop variety released by West Coast Hop Breeding (WCHB).
Specifically bred for the climate and agronomy of Oregon, and intended to maximize the local terroir, McKenzie is a bright and fruity mixture of classic varieties like Fuggles and Centennial, and provides a unique stone fruit and citrus aroma.







REGION: USA





Seven hop growing regions 76 Incredible hop varieties.

ADEENA® ADHA 1940 c.v.

United States Herbal, Spicy, Floral

AMARILLO® VGXP01 c.v.

United States

Citrus, Sweet Fruit, Floral

ARAMIS

France Spicy, Citrus, Herbal

ARIANA

Germany Sweet Fruit, Berry & Currant, Floral, Citrus

AZACCA®

ADHA 483 c.v.

United States Sweet Fruit, Citrus, Woody Aromatic, Green-Grassy

BARBE ROUGE

France

Berry & Currant, Citrus

BRU-1™

United States Sweet Fruit, Green Fruit, Green-Grassy **CALLISTA**

Germany Berry & Currant, Citrus, Sweet Fruit

CASCADE

United States Floral, Citrus, Woody Aromatic

CASHMERE

United States Citrus, Sweet Fruit, Herbal

CENTENNIAL

United States Citrus, Sweet Fruit, Woody Aromatic, Floral

CHINOOK

United States Citrus, Sweet Fruit, Woody Aromatic, Spicy

CITRA®

HBC 394 c.v. United States Sweet Fruit, Citrus, Floral

CLUSTER

United States Floral, Sweet Fruit, Citrus COLUMBUS (CTZ)

United States Citrus, Spicy, Vegetal, Sweet Fruit

COMET

United States Citrus, Berry & Currant, Sweet Fruit

CRYSTAL

United States Woody Aromatic, Floral, Spicy

ECLIPSE®

04-337-016 c.v. Australia Citrus, Sweet Fruit

EKUANOT®

HBC 366 c.v. United States Green-Grassy, Sweet Fruit, Citrus, Floral

EL DORADO®

United States Green Fruit, Sweet Fruit. Citrus

ELIXIR

France Spicy, Citrus, Berry & Currant, Floral, Woody Aromatic ELLA™

01-220-060 c.v. Australia Sweet Fruit, Spicy

ENIGMA®

02-016-008 c.v. Australia

Green Fruit, Sweet Fruit, Berry & Currant

FUGGLE

France

Woody Aromatic, Floral, Menthol

GALAXY®

94-203-008 c.v. Australia

Sweet Fruit, Citrus

GALENA

United States Citrus, Sweet Fruit, Green-Grassy

GOLDING

United States Cream Caramel, Spicy, Floral

HALLERTAU BLANC

Germany Green Fruit, Berry & Currant, Citrus HALLERTAUER MITTELFRÜH

Germany Herbal, Floral, Woody Aromatic

HBC 431 c.v. United States

Sweet Fruit, Berry & Currant, Spicy

HBC 472 c.v.

United States Woody Aromatic, Cream Caramel, Citrus

HBC 522 c.v.

United States Citrus, Floral, Woody Aromatic

HBC 586 c.v.

United States Sweet Fruit, Berry & Currant, Spicy, Citrus

HBC 630 c.v.

United States Sweet Fruit, Berry & Currant, Cream Caramel

HBC 638 c.v.

United States Sweet Fruit, Citrus, Berry & Currant

SENSORY LANGUAGE

Finding common terms for sensory experiences has always been a challenge. That's why HAAS® developed this uniform system to define specific aroma categories and identify distinct attributes for each.



FLORAL Elderflower, chamomile blossom, lily of the valley, jasmine, apple blossom, rose, geranium, carnation, lilac, lavender



BERRY & CURRANT Blueberries, raspberries, blackberries, strawberries, cassis (black currant), red currant, wild strawberries, cranberries



HERBAL Lovage, thuja, basil, parsley, tarragon, dill, fennel, thyme, rosemary, marjoram, green tea, black tea, mate tea, sage



CITRUS Grapefruit, orange, lemon, lime, bergamot, lemongrass, ginger, tangerine



CREAM CARAMEL Butter, chocolate, yogurt, honey, cream, caramel, toffee, coffee, tonka, vanilla



SPICY Pepper, chili, curry, juniper, aniseed, nutmeg, liquorice, clove, gingerbread, fennel seeds

HBC 682 c.v. United States

Sweet Fruit, Herbal & Floral

HBC 1019 c.v. **United States** Sweet Fruit, Citrus, Cream Caramel

HBC 1134 c.v. United States Floral, Woody, Citrus

HERKULES Germany

Citrus, Sweet Fruit, Menthol

HERSBRUCKER Germany

Menthol, Citrus, Herbal

HÜLL MELON

Germany Sweet Fruit, Berry & Currant, Floral, Spicy

IDAHO 7™ **United States** Sweet Fruit, Woody

Aromatic, Citrus

IDAHO GEM™ United States Sweet Fruit, Citrus, Herbal

LORAL® HBC 291 c.v. United States Floral, Herbal, Citrus

MAGNUM Germany Green-Grassy, Woody Aromatic, Herbal **MANDARINA BAVARIA** Germany

Citrus, Sweet Fruit, Berry & Currant

MCKENZIE™ C-148 c.v. United States Citrus, Sweet Fruit, Woody Aromatic, Herbal

MISTRAL France Citrus, Sweet Fruit, Green Fruit

MOSAIC® HBC 369 c.v. United States Citrus, Sweet Fruit, Berry & Currant

MOTEUKA™ New Zealand Citrus. Sweet Fruit. Herbal

MOUNT HOOD United States Spicy, Herbal, Citrus

NELSON SAUVIN™ New Zealand Green Fruit, Citrus, Sweet Fruit

NORTHERN BREWER Germany Woody Aromatic, Menthol

NUGGET United States Citrus, Herbal, Sweet Fruit

PACIFICA™ New Zealand Citrus. Sweet Fruit. Floral, Spicy

PEKKO® ADHA 871 C.V. United States Citrus, Menthol, Sweet Fruit, Floral

PERLE Germany Herbal, Menthol, Citrus, Green Fruit

RAKAU™ New Zealand Sweet Fruit. Citrus. Green Fruit

RIWAKA™ New Zealand Sweet Fruit, Citrus

SAAZ Czech Republic Citrus, Cream Caramel, Woody Aromatic, Herbal, Spicy

SABRO® HBC 438 c.v. United States Citrus, Sweet Fruit, Cream Caramel

SAPHIR Germany Spicy, Citrus, Berry & Currant, Herbal

SPALTER SELECT

Germany Citrus, Woody Aromatic, Herbal, Floral

STERLING United States Herbal, Citrus, Spicy

STRATA™ United States Sweet Fruit, Berry & Currant, Menthol

STRISSELSPALT France Herbal, Floral, Spicy, Citrus

SUMMIT® United States Vegetal, Citrus, Herbal

TALUS® HBC 692 c.v. **United States** Citrus, Floral, Woody Aromatic

TETTNANGER Germany Floral, Woody Aromatic, Cream Caramel, Citrus

TOPAZ™ TC-85-70 c.v. Australia Berry & Currant, Green Fruit, Sweet Fruit, Woody Aromatic

TRADITION

Germany Sweet Fruit, Berry & Currant, Citrus

TRISKEL France Floral, Sweet Fruit, Cream Caramel

VIC SECRET™ 00-207-013 c.v. Australia Sweet Fruit, Woody Aromatic, Citrus

VISTA USDA-ARS 2006009-074 C.V. United States Citrus, Sweet Fruit, Herbal

WARRIOR® United States Citrus, Floral, Herbal

WILLAMETTE United States Woody Aromatic, Spicy, Herbal

ZEUS (CTZ) **United States** Citrus, Spicy, Vegetal, Sweet Fruit



SWEET FRUIT Banana, watermelon, honeydew melon, peach, apricot, passion fruit, lychee, dried fruit, plum, pineapple, cherry, kiwi, mango, guava



WOODY AROMATIC Tobacco, cognac, barrique, leather, woodruff, incense, myrrh, resin, cedar, pine, earthy



GREEN FRUIT Pear, quince, apple, gooseberry, white wine grapes



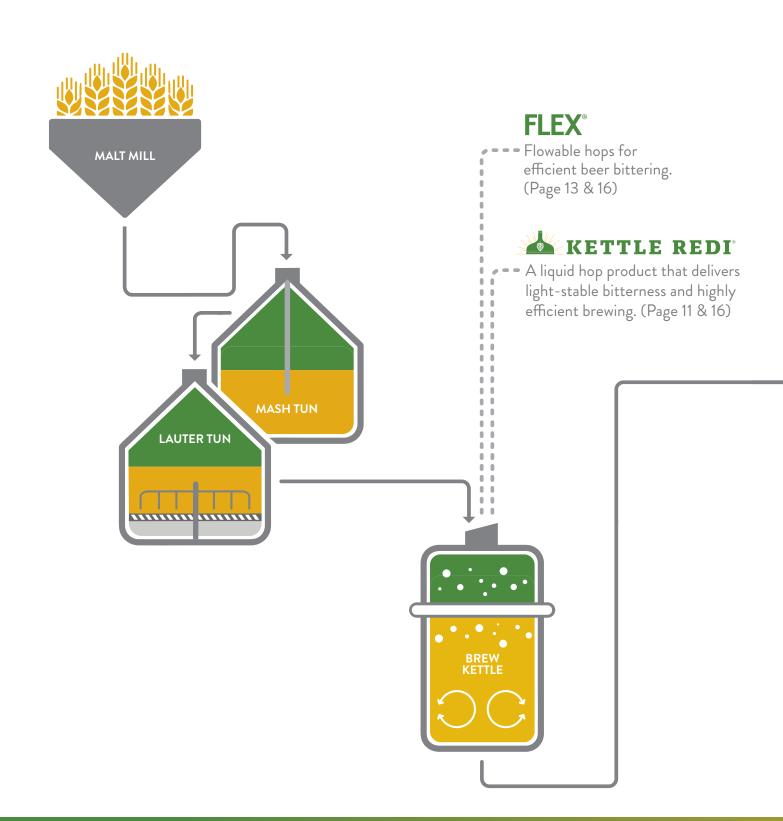
MENTHOL Mint, lemon balm, camphor, menthol, wine yeast

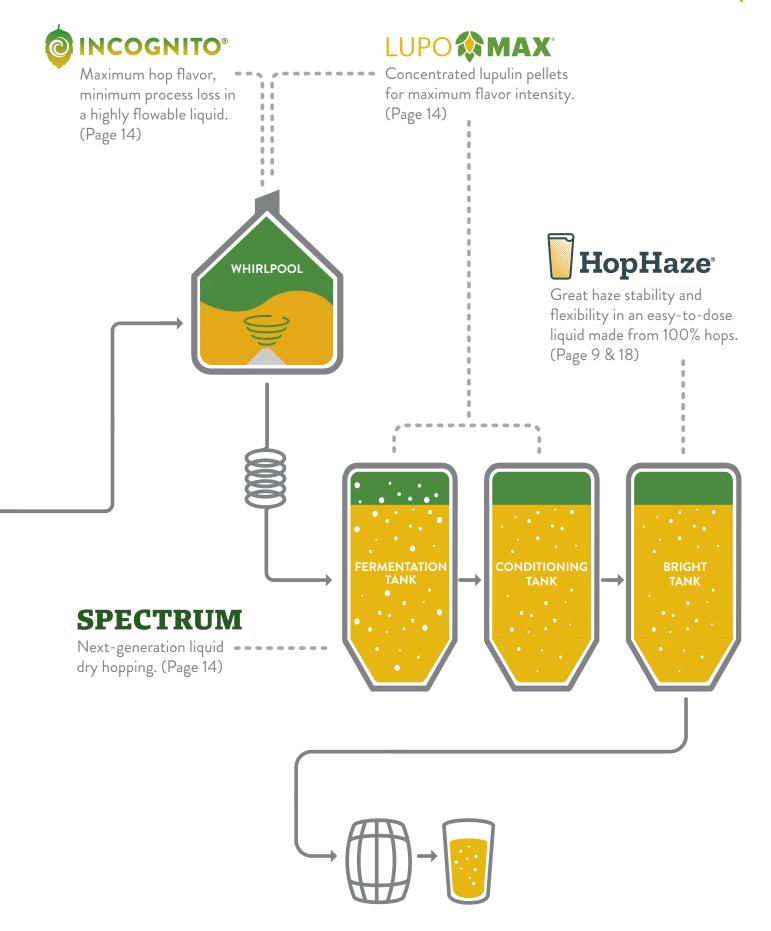




VEGETAL Celery stock, celery root, leek, onion, artichoke, garlic, wild garlic

Innovative hop products to help you find efficiencies through the brewing process.









Haze stability that's clearly better.

HopHaze® provides stability and flexibility from 100% hops.

In recent years, hazy style beers—New England IPAs, Hazy IPAs, Juicy IPAs—have redefined craft brewing. While there are many ways to achieve haze in beers, maintaining the stability of that haze during packaging, distribution, and storage can be challenging, to say the least.

"We're known for IPAs and Hazys—it's about 90% of what we brew," said Justin Kingsford, Brewmaster at Hop Valley Brewing Company. "As distribution has expanded nationally, we have longer shipping times and shelf life to manage. HopHaze® is great. It's 100% hop-derived, so there are no labeling concerns because we're not adding anything that's not already in the beer. And we can maintain a stable haze with no added bitterness or aroma impact. Ultimately, it's about meeting customers' expectations, whether they're enjoying our beer here in Eugene or somewhere else."

HOP VALLEY® BREWING CO.



Brewed in Oregon with Pacific Northwest hops and loads of real pineapple puree per barrel! The addition of **HopHaze®** to this tropical delight ensures that every can of Pineapple Stash House is filled with stable pineapple haze.



Now, you can let the sunshine in!

Kettle Redi[®] for light-stable bitterness and efficient brewing.

Light style lagers and pilsners are a mainstay of beer drinkers around the world. But when beer is packaged in clear or green glass bottles, maintaining optimal flavor and quality becomes a big issue. Kettle Redi® is an efficient, all-natural hop product that delivers light-stable bitterness to beer that is pleasant and well rounded.

"Many of our beers come in brown or green bottles, so we've always needed our beer to be light resistant," said João Guimarães, Brewmaster with Debron Bier in Brazil. "Kettle Redi is extremely easy to use, it's easy to dose, and it provides excellent results in our beer. Even when you package beer in dark bottles, over time there is often light exposure. With Kettle Redi you have the security of knowing that the flavor will not be affected."

DEBRON BIER



Debron Bier is one of Brazil's leading craft breweries. Brewing with **Kettle Redi®** helps them create incredible pilsners, lagers, and ales that South American consumers love, while preventing light-struck flavors throughout the supply chain and at point of sale.



Bittering

FLEX® is easy to ship, easy to store, and helps beer flavors shine.

FLEX® is an innovative hop product designed for efficient bittering performance. It's highly flowable at room temperature so it's easy to use. FLEX® is made from pure hops, but without any hop solids or vegetive matter, which reduces wort loss and improves clean up. But what brewers are discovering is that adding FLEX® to your boil creates a clean, bright canvas that makes just about any style of beer shine.

"We're known for pilsner—I think it's the epitome of balance when it comes to beer," says Davin Bartosh, co-owner of Wiseacre Brewing Company in Memphis, Tennessee. "You want something that's sweet but clears your palate really fast, and is nice and bracingly bitter as well. FLEX gives us a very specific bitterness that's cleaner, less earthy, less vegetal. We use FLEX in all our beers, it just makes them taste better."

WISEACRE **BREWING COMPANY**



TINY BOMB is Wiseacre's flagship, made with German pilsner malt, spiked with local Tennessee wildflower honey, and bittered with **FLEX®**. With delicate herbal aromas, this crisp, smooth pale lager is a refreshing explosion of taste. BOOM!

Flavor & Aroma Products

PHA® FLAVOR AND AROMA PRODUCTS

Completely soluble and free of hop alpha-acids, PHA® products offer a versatile flavor and aroma palette and a great complement to traditional kettle additions. Extracted and distilled from cone hops.

Available in PHA® Classics, PHA® Varietals and PHA® Topnotes.

AROMAHOP®

AromaHop® provides an economical means to deliver light-stable, variety nonspecific, hop aroma to beer. Made by removing alpha-acids and most of the beta-acids from hop extract, AromaHop® can be used for many purposes: it's a cost-effective way to add back hop aroma to light-stable beers or traditionally hopped beers when added late in the boil, or it can help knock down foam and improve efficiency when added early in the brew kettle.

INCOGNITO®

A 100% all-natural hop product crafted to deliver highly concentrated hop flavor and aroma while maximizing brewing efficiency and minimizing process loss. INCOGNITO® is simply the best part of the hop, without any vegetative material. It's flowable at ambient temperature, 75% cheaper to ship and store than pellets, and easy to clean up.

Available in: Centennial, Chinook, Citra®, Ekuanot®, El Dorado®, HBC 472 c.v., Mosaic®, and Sabro®.

LUPOMAX®

Consistent lupulin concentration for optimized hop flavor. LUPOMAX® pellets are designed with consistent alpha for reliable brewing performance and are HAAS Sensory Plus™ selected for true-to-type hop flavor, year to year. With concentrated flavor and less green matter, you can increase beer yields and decrease costs.

Available in: Amarillo®, Azacca®, BRU-1TM, Cascade,
Cashmere, Centennial, Chinook, Citra®, Columbus, Ekuanot®,
El Dorado®, Idaho 7TM, Mosaic®, Saaz, Sabro®, and Talus®
—with more choices to come!

SPECTRUM

A revolutionary way to dry hop, SPECTRUM is a flowable, 100% hop-derived product that is fully dispersible in coldside applications for great flavor, efficiency, and less beer loss. Because SPECTRUM disperses immediately, there's no need to wait—you get instant aroma and can turn tanks over more quickly than ever.

Available in Citra®, Eclipse®, Galaxy®, and Mosaic®, with more choices on the way.

















Bittering Products

HOP EXTRACT

Prepared from hops or hop pellets using pressurized carbon dioxide, Hop Extract contains the alpha-acids and essential oils of hops and provides added efficiency and flexibility in the brew house. It's exceptionally stable when properly stored, and retains the aroma and the bittering potential of the hops from which it is made.

ISOHOP® HOP EXTRACT

Intended to improve brewer's control over bitterness, Isohop® Hop Extract naturally acts as an antimicrobial agent when added to beer. Standardized to 30% iso-alpha-acids, it's produced from hop extraction and designed to replace kettle bittering hop and improve hop utilization.

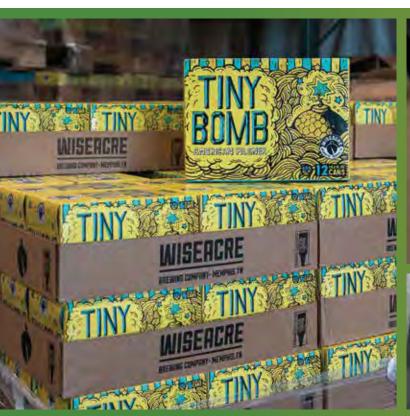
FLEX®

A flowable bittering hop product derived from pure hops, FLEX® is easy to use, easy to pour, and eliminates a significant amount of the vegetative material in hops—reducing wort loss and improving clean up. FLEX® disperses more readily than whole hops or pellets and provides a 10–20% (relative) increase in alpha-acids utilization as compared to standard T90 hop pellets.

KETTLE REDI®

Kettle Redi® is an efficient, easy-to-use, all-natural hop product that delivers light-stable bitterness and great kettle hop flavor, all while improving hop utilization.

Kettle Redi® is the perfect hot-side addition for commercial beers packaged in clear and green bottles.







REDIHOP® HOP EXTRACT

Provides protection from light-struck flavor. It has a pleasant smooth bitterness and, when added to wort or beer, Redihop® will act as an antimicrobial agent. Produced from hop extract, Redihop is an aqueous alkaline solution of the potassium salts of rho-iso-alpha-acids.

TETRAHOP GOLD® HOP EXTRACT

Enhances beer foam when used post-fermentation as a replacement for a portion of the normal bittering. In the absence of normal alpha-acids and iso-alpha-acids, it also provides complete protection from light-struck flavor.

HEXAHOP GOLD® 10% HOP EXTRACT

Improves foam stand and cling. It's ideal for light-stable hopping in beers packaged in green or clear glass and it imparts a clean, smooth bitterness that is especially effective in low BU beers. Water soluble solution standardized to 10% blend of hexa-hydro-iso-alpha & tetra-hydro-iso-alpha acids.

HEXAHOP® 95 HOP EXTRACT

Water soluble solution standardized to 20% blend of hexa-hydro-iso-alpha & tetra-hydro-iso-alpha acids. Improves foam stand and cling and is ideal for light-stable hopping in beers packaged in green or clear glass. It imparts a clean, smooth bitterness and has desirable antimicrobial properties.

IKE - ISOMERIZED KETTLE EXTRACT

A pre-isomerized hop extract containing free iso-alpha-acids along with soft resins and hop oils, IKE can be used as a complete or partial replacement of normal kettle hop extract. It's non-variety specific, but is generally 40-60% iso-alpha-acid with an isomerization rate of approximately 92%.





Brewing Solutions

Products

HOPHAZE™

HopHazeTM is designed to create remarkably stable haze in beer. It's an all-natural, 100% hop-derived product that's added after filtration before the bright tank/pre-packaging. It's flavor-neutral and odorless, so you can add a little or a lot to get the exact level of haze you want without impacting the flavor or aroma of finished beer. Year-long trials have shown that HopHazeTM will last the entire shelf-life of the beer, without settling out of solution.

HOPAID® ANTIFOAM

Are you looking for a way of preventing too much foam being created during fermentation? HopAid® Antifoam is a natural, hop-based antifoam agent. The suspension is suitable for use with top or bottom-fermented beers in all types of fermentation tanks. HopAid® Antifoam is proven to significantly reduce overfoaming during fermentation. As a result, less fermenter headspace volume is needed, increasing your fermentation capacity. It has no impact on the final beer's foam retention properties.

Tools

HOP AROMA STANDARDS KIT

The result of collaboration between HAAS® and BarthHaas® flavorists and perfumists, this kit was developed to train everyone from homebrewers to seasoned professionals on how to distinguish the twelve major aroma attributes found in hops. The aromas are formulated to be highly reflective of the exact compounds found in hops. It is a good training tool and conversation piece, used for smelling education and enjoyment only (not for consumption).

Training

HOPS ACADEMY

This two-day training course offered by HAAS® instructs brewers and beer professionals on relevant industry topics ranging from botany, agronomy, logistics, economics, brewing science and sensory evaluation. The course includes lectures from HAAS® experts, as well as thought leaders from the broader industry. Previous guest lecturers include Dr. Tom Shellhammer from the Department of Food Science and Technology at Oregon State University and Dr. Daniel Sharp, Director of Brewing Process Development at Ninkasi Brewing.

HOPS COMPANION - 4TH EDITION

A brewer's easy-to-use reference guide for hop varieties from around the world. The design allows the reader to obtain desired information at a glance, including hop background and pedigree info, as well as our Hopsessed® aroma icon lexicon for key hop flavor attributes. In addition, each hop variety page contains a table containing specific bitterness and aroma chemical data.

HOP FLAVORIST

This two-day training course condenses the standard training that the HAAS® Sensory Team undergoes each year. The course is designed to train both new and experienced members of the brewing community on basic aroma discrimination and hop flavor and aroma profiling.













How to buy

Whether you brew one barrel a month, or thousands of barrels a year, you can count on HAAS® to deliver the finest quality hops and hops products to ensure your brewery's success. From exclusive hop varieties to technical brewing solutions, explore all the ways that we can help you brew your best. Contact your local HAAS® representative, or reach out to one of our hand-picked distribution partners in your region. We can't wait to taste what you brew next.

United States

WILLAMETTE VALLEY HOPS +1.503.633.4677 hops@wvhops.com willamettevalleyhops.com

HOP HEAD FARMS +1.269.671.4439 sales@hopheadfarms.com hopheadfarms.com

+1.509.248.6436 sales@hollingberyandson.com shop.hollingberyandson.com

YAKIMA VALLEY HOPS (CRAFT + HOMEBREW) +1.509.245.6363 sales@yakimavalleyhops.com yakimavalleyhops.com

ROY FARMS +1.509.452.3494 sales@royfarms.com royfarms.com

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Mexico

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hopmalt.vn



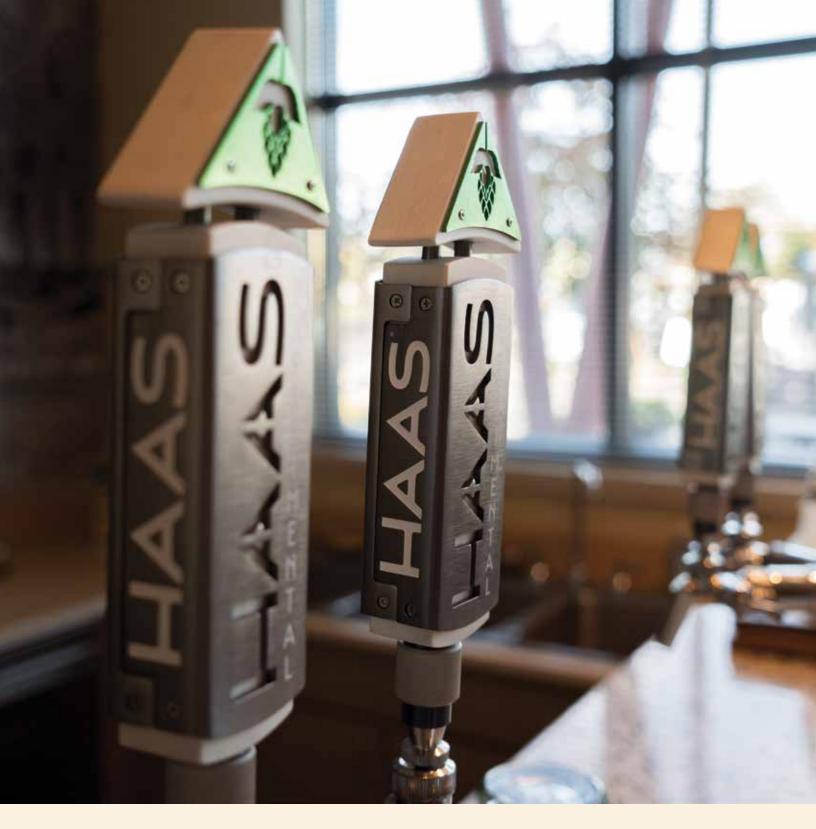














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