Briess commissions its 3rd, and largest brewhouse

By Gordon Lane
Briess President/COO

CHILTON, WI — January 5 marked a historic day for Briess. That’s when we officially commissioned our third and largest malthouse, ceremoniously flipping the “on” switch and sending 432,000 pounds of cleaned and graded barley to steeping for its first batch. Not only does this 65,000-metric-tonne malthouse more than double Briess malting capacity, it gives Briess complete control over our entire malting barley supply chain and all malted barley products we sell — “From Seed to Suds” we like to say. We have been moving in this direction for almost 10 years, reaffirming this company’s ongoing dedication to helping American craft beer continue to grow.

2013 WY acquisition secured raw material supply, storage capacity.

About 10 years ago it became apparent that the broker system of selling raw barley was drying up, a victim of the rapidly changing North American barley market. In response we partnered with Riverland Ag, an experienced grain storage and handling company that began contracting our barley needs for us. That led to our March 2013 acquisition of the Briess Wyoming Barley Operation. Located in the unique, rich agricultural Bighorn Basin, the operation is supported by a large network of experienced WY and MT barley growers and anchored by modern barley processing and storage facilities at Ralston and Powell, WY. Located on the Burlington Northern Railroad, the operation is capable of processing WY and MT barley in a single operation.

Dave Luckow is the Plant Manager of the Manitowoc brewhouse.

White Labs opens facility in Copenhagen, Denmark

By White Labs staff report
SAN DIEGO, CA — After months of preparation, White Labs is opening its research and production laboratory in Copenhagen.

In February, the San Diego-based company announced it is placing an outpost in Copenhagen, and in the ensuing two months the facility has rapidly taken shape.

White Labs occupies space at the WarPigs brewpub (a joint venture of Danish Mikkeller and America’s 3 Floyds Brewing Co.). The relationship will bring three widely recognized companies in the brewing world into close proximity and will create a strong beer focus to the historic meat packing district in Copenhagen, where the building is located. Known for its creative gastronomy, growing craft beer and music scene, and robust art district, this Copenhagen district is exploding into a haven for brewing and culinary arts.

“I am greatly looking forward to collaborating with White Labs,” said Kyle Wolak, head brewer at WarPigs, which was expected to open on April 10. “It is an extraordinary opportunity to expand my knowledge of yeast and its vital role in the brewing process.”

White Labs is pleased to bring its yeast production and fermentation knowledge closer to its European customers. White Labs has provided yeast and related products to Europe since its founding in 1995, and having local personnel and small-scale production capacity will enhance this important relationship. The office will allow increased distribution to Europe and will enhance relationships with existing distributors, allowing for expanded offerings of fresh yeast for customers throughout Europe.

“Craft beer and brewing innovation is thriving in Europe, and the future is even brighter,” said White Labs CEO Chris White. “We are pleased to bring our knowledge and experience developed over many years of serving breweries, wineries and distilleries around the world into closer proximity.”

See “To Copenhagen,” page 4

Style Matters: Tips for American Amber Ales

In each issue, CBQ spotlights a particular beer style and provides tips from an ingredient and fermentation perspective. In this issue we examine American Amber Ale, a style endemic to Portland, home of this year’s Craft Brewers Conference.

Malt Notes:
We love the American Amber Ale beer style for three reasons — it’s a perfect showcase for Roasted Caramel Malt, it allows brewers to give it a signature flavor with light use of other specialty malts, and it played an important role in the history of craft beer on the West Coast before spreading nationwide. Since craft beer is converging upon Portland in April for the annual Craft Brewers Conference, it’s a fitting style for this edition of Craft Beer Quarterly.

Most brewers start this style with either 2-Row or Pale Ale Malt. Keep in mind that Briess Pale Ale Malt has a rich malty flavor profile with hints of biscuit and nuts. It’s unique. We produce it using a proprietary malting process which involves careful monitoring of the kiln drying process and specialized temperature rests.

The expected moderate to high hop flavor from American hop varieties is balanced by moderate to strong malt flavor, starting with malty sweetness followed by a moderate caramel flavor. Roasted Caramel Malts have
Briess malthouse

There’s a quick breakdown of current Briess malting capabilities:
- Chilton Malthouse—60,000-lb batches, for small-batch production of kilned and roasted malts.
- Waterloo Malthouse—216,000-lb batches, for medium-batch production of kilned and roasted malts.
- Manitowoc Malthouse—432,000-lb batches, for large scale production of base malt.

What this means to American craft beer

Our approach to supply chain control has been as unique as our business plan, designed to bring added benefits to craft brewers and help American craft beer grow. Here are a few benefits from Briess that come to mind.
- Briess has a large supply of high-quality 2-row malting barley in 2015. Since a great deal of our barley is grown in regions of Wy and MT that were spared severe weather conditions this past growing season, Briess malt will be high quality and in good supply.
- Briess has alternate uses for 2-row barley rejected for brewing. North American maltsters dedicated to the production of malting barley rejected for brewing. As a result, malting barley that was pre-sprouted this year will not be sold as malt for brewing.
- We have more malting capacity available in Wisconsin. Two more of the six Manitowoc malthouses can be brought online when demand calls for it.
- There’s room for malting capacity in Wyoming. We recently more than quadrupled acreage at the Briess Wyoming Barley Operation, making it possible for Briess to expand in the west.
- Continued focus on developing new craft-cen
tric malting barley varieties. Briess has expanded its barley variety development program in Wyoming, partnering with the nearby University of Wyoming Research and Extension Center which has 220 acres of test plots for testing and scaling up new varieties. Briess remains an active AMBA member, supporting efforts to develop new barley varieties for American craft beer.

Since the pioneer days of American craft beer, Briess has embraced the small-scale production of artisan beers and developed unique malts and services to help it grow. Taking control of our supply chain is another step in that direction.

Briess company transitions to 100% 2-row malts

The Briess malt product list may not look much different from previous years, but this year it includes only 2-row malts after the decision to eliminate 6-row products was made.

Several factors lead to the decision, said Vice President of Sales and Marketing Bob O’Connell. “We have been closely monitoring the ongoing decrease in 6-row plantings and yields for several years. We knew the time was coming when the 6-row supply would be low, pricing would be at par with 2-row, and we couldn’t ef
differently produce 6-row malts. Last year a number of factors came together as a perfect storm which hastened our decision,” he continued. “Severe weather once again reduced the overall supply of 6-row to the market and, in many cases growers stopped planting 6-row all together. The shrinking 6-row supply coupled with craft and home brewers preference for 2-row over 6-row, escalating prices and future risks lead us to eliminate 6-row malting barley as a source of raw material.”

O’Connell further explained that Briess has a plentiful supply of 2-row malt to facilitate the transition, despite the gen
erally poor 2014 North American malting barley crop. “In addition, it’s exceptionally high quality 2-row malting barley,” O’Connell reported that many Briess 6-row malts have also been offered as 2-row for years, and that many brewers were already using 6-row and 2-row versions of the same malt interchangeably.

Customers with questions are encour
d to contact Briess at www.BrewingWithBriess.com or 920.849.7711.

To download a new two-page Briess Typi
cal Analysis product list, visit www.brewingswithbriess.com/Products/

Typical Analysis product list, visit www.brewingswithbriess.com/Products/

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High quality Briess barley crop defied mother nature

CHILTON, WI—The overall poor quality of the North American 2014 barley crop is causing supply and quality issues for many maltsters and craft brewers alike. Rainstorms at harvest time, from Idaho to North Dakota as well as in Western Canada, affected yields and quality of the harvest. We say “overall” because Briess is fortunate — Briess has a sufficient supply of very high quality malting barley to supply its customers until the next barley crop is harvested.

How do we happen to be in this position?

In the past two years Briess expanded into a fully integrated grain processing company in complete control of its supply chain from grower to producer or, as we like to say, from seed to suds.

We now contract directly with more than 280 experienced barley growers for all of our barley needs, and a great deal of our barley is grown in regions of WY and MT that were spared the wet harvest conditions this past growing season. In addition, the small amount of presprouted barley we received was malted for uses other than craft beer.

Our customers can be assured that the malt they receive from Briess will be high quality and we have sufficient quantities to fill our contracts.

In the meantime, we are committed to helping American craft beer continue to grow and believe we’re all in this together. Call upon our technical expertise if you are experiencing brewhouse performance issues related to poor quality malt. Contact your Division Manager, or email us at info@BrewingWithBriess.com for assistance.

And best of luck to all craft brewers this year. We join you in hoping for a banner 2015 barley crop.

Briess introduces new Mesquite Smoked Malt

CHILTON, WI — Officials at Briess Malt & Ingredients Co. have announced the addition of a second smoked malt to its portfolio — Mesquite Smoked Malt.

Like Briess Cherry Wood Smoked Malt, Briess Mesquite Smoke Malt (pictured at right) delivers pronounced smoke flavor and recommended maximum usage is 60%.

Mesquite Smoked Malt is characterized by upfront earthy mesquite flavor and some sweetness.

Mesquite Smoked Malt is surprisingly smooth, delivering a mellow mesquite smoke flavor without the harshness that mesquite can deliver. This smoothed out flavor is achieved through a blend of mesquite and other hardwoods.

Mesquite Smoked Malt is less sweet than Cherry Wood Smoked Malt, which is smooth and clean with subtle fruity flavor and malty sweetness. Both malts are 5º Lovibond and 140DP.

Mesquite Smoked Malt offers craft brewers and craft distillers expanded formulating options and flexibility.

Usage rates starting at 5% will add noticeable smoke character in Scottish Ales and Oktoberfests, pronounced smoke character in these styles at 10-20%, and pronounced smoke character in darker styles like Stout and Porter at 30-60%.

Briess malts are available through a network of authorized distributors and directly from Briess.

For more information and recipes visit www.BrewingWithBriess.com, call 800.657.0806 or email info@BrewingWithBriess.com.

“Mesquite Smoked Malt offers craft brewers and craft distillers expanded formulating options and flexibility”
White Labs announces plans to open in Asheville

In January, White Labs unveiled plans to expand its operations to the East Coast with a new factory in Asheville, North Carolina, crowned BeerCity USA in 2010. Known for its scenic beauty, music culture and robust art scene, Asheville’s reputation as a haven for brewing and culinary arts is growing and White Labs is growing along with it.

White Lab’s expansion into the North Carolina craft-brewing center is driven by consumer demand. CEO and Founder Chris White said the expansion will result in “even quicker shipping turn around times, lower costs and less overhead. Asheville is the first step of our global expansion plan that is strategically being rolled out in waves over the next few years.”

“This is a natural fit with our White Labs corporate carbon footprint.” Construction will begin soon, although it will take some time to get the facility ready to make and ship yeast. Phase one will be completed by early 2016 with full buildout by April 2016.

The following is the schedule for White Labs classes for the rest of 2015. Consult whitelabs.com for full class details and ordering information, or call 1-888-5-YEAST-5.

White Labs is offering many workshops for the remainder of the year, beginning with the Yeast Handling Workshop in April in Portland just prior to the Craft Brewers Conference. This workshop is sold out.

On June 10 in San Diego, White Labs will host its Homebrew Yeast Workshop. This is expected to be popular because it is being held at the same time as the National Homebrewers Conference.

The remainder of the year is filled with yeast-related workshops, which are the most popular classes offered by White Labs.

**JUNE**
- Yeastbank on June 25-26 in San Diego, White Labs will host Yeast Essentials 2.0, a 2-day intensive yeast course that is ideal to take after enrolling in the 1-day workshop.
- Most likely, Will there be a tasting-room and restaurant at the brewery?
- Yes, this facility will directly mirror that of our San Diego headquarters and have both a tasting room and bites.
- How will White Labs’ presence benefit the local beer scene?
- Availability. Community. Innovation. What’s the White Labs’ commitment to the community?
- From day one we’ve had a commitment to community providing everything from yeast to feedback, testing and technical advice. We are proud to create enduring experiences and cultivate community where ever we are and have been long time supporters of JDRF (Juvenile Diabetes Research Foundation and Breast Cancer Research through Beer For Boobs) Why did you choose North Carolina? And Asheville?
- Asheville, North Carolina is centrally located on the [Y]east coast and within driving distance to many of our customers. Asheville has an amazing beer culture and quality of life. They’re our kind of people and it’s a natural fit with our White Labs corporate culture of cultivating community and work life balance.
- Will you sell growlers and beer on site?
- Yes.
- Where will orders be fulfilled?
- We will have the ability to fulfill orders from both the East and West coasts. Will you producing all strains in both locations?
- Not at this time. Yeast for pros and homebrewers will be made in Asheville. Are you brewing the same beers at each location?
- Having two locations allows for even more creativity in our brewing and we plan on brewing different beers in each tasting room that meet the needs of the local taste buds and character. Any additional locations on the horizon?
- We are always looking toward corporate growth and look forward to sharing our global expansion plan over the next few years.

White Labs announces plans to open in Asheville

On to Copenhagen

The following is the schedule for White Labs classes for the rest of 2015. Consult whitelabs.com for full class details and ordering information, or call 1-888-5-YEAST-5.

**JULY**
- On July 17, White Labs will have the 1-day Yeast Essentials class, this time in Davis, CA.

**SEPTEMBER**
- From Sept. 7-15, Siebel Institute of Technology will teach the Siebel Essential QC Course. The class will be held at White Labs in San Diego and White Labs scientists will help teach the class. Enrollment must be made through Siebel.

**NOVEMBER**
- The remainder of the year looks like this—
- Oct. 1-2, Yeast Essentials 2.0, Asheville
- Nov. 6, Yeast Essentials, San Diego
We moved into Building 3 on Candida Street site

Does this headline look familiar? If so, that is because two issues ago, I wrote a column about how we opened our second building on Candida Street in San Diego. Months later, we now have our third building, and it is right next door to the original facility (Building 2 is across a small street and a few buildings down).

Like a lot of our clients, business is growing rapidly at White Labs. It seems like only yesterday (actually it was four years ago) when we moved into what we now call Building 1, which included all aspects of the company until we moved shipping/receiving, office and customer service folks over to Building 2 last year. In Building 3, we have installed the largest cold room we have ever used (the other buildings each have cold rooms as well). Building 3 is our packaging and finishing hall, but there was some room for customer service people and others.

Customer service will also be helped by having access to the more robust computer and phone network that has been linked to it from Building 1. The move to Building 3 allowed space for the brewery to be installed in Building 1. (See full story below).

Meanwhile, we have announced in recent times that we are building a plant in Asheville, North Carolina and are opening an office and small production facility in Copenhagen, Denmark (stories about these places can be found elsewhere in this newsletter).

Additionally, we began manufacturing yeast in our existing R&D facility in Davis, CA, to supply Northern California including the Bay Area and greater Sacramento. We are working to optimize yeast production at this facility (located within Sudwerk Brewing Co.) and expect to soon produce fresh yeast with a staff of two or more.

We are in the process of hiring regional sales people to work more closely with brewers around the country, including Katie Skow in the Bay Area/Davis and Sara Hagerty in Chicago (who like Katie will travel extensively to nearby cities and states).

Big QC Day

The main sales office remains in Boulder, CO, which was White Labs’ first remote location. Back then, this office began with the desire by two of my employees to move to a place where they would enjoy living, but it was also with the justification that it would place us closer to an important region in beer. Indeed, today Boulder has one of the highest per capita ratios of breweries in the country.

The kind of motivation that encouraged us to open in Boulder is still what drives us today.

Davis is close to one of the most important brewing centers in California. Asheville brings yeast production to the East Coast, where a great percentage of our brewery customers are located. Copenhagen will help support and promote the rapid development of craft brewing in Scandinavia and Europe in general.

But most of our production is centered in San Diego, and we will do whatever we can to make this facility big enough to meet the world-wide demands. If that means opening a Building 4, we shall do so.

Chris White is President of White Labs Inc. He has a Ph.D. in biochemistry from the University of California, San Diego. Feel free to write to him at ctwhite@whitelabs.com about this column.

Letter from the President

Chris White

Inside WL Lab Services

New test kit

Starting April 15, White Labs will begin offering a new test kit for brewers:

TK3010 Bacterial Contaminants Kit: This kit contains all of the items needed to identify beer contaminants in your brewhouse. The kit is good for up to 5 samples. Kit includes: sterile tubes with rack, isopropanol, HLP media, SDA media, LCSM media, sterile spreaders, sterile water, glasses, transfer pipettes, and instruction sheet.

New sizes for Pre-Poured Plates

White Labs has begun offering its Pre-Poured Plates in new sizes, 10 packs and 20 packs. The pricing has been adjusted to reflect the package sizes. This will make the sizes more consistent.

Big QC Day

Big QC Day Spring 2015 was another milestone for White Labs and the brewing community. In one of the largest tests to date, hundreds of breweries sent in two or more samples each for testing, and results were released in mid-March. Participants received their results via email and in their online Yeastman accounts.

Big QC Day involves testing two beers for more than a dozen factors including alcohol, IBUs and calories, all at one affordable price. This year for the first time, breweries could upgrade to gluten testing. The next tests are scheduled to take place in fall 2015.

All tests now online

In an effort to make the White Labs Analytical Services department as easy to navigate as possible, all tests are now available for viewing at whitelabs.com/test.

The listings include complete details when possible including the amount required to send into White Labs for sampling and the expected time it will take to get results.

The tests have always been available for ordering at the White Labs sister site Yeastman.com, but now one will not have to turn to a catalog to get additional information and background about the tests.

All about cider

Cider is growing rapidly as a product category, and more and more people are coming to White Labs for testing options. The comprehensive test for wine has been renamed to include the word cider, and the other applicable tests have also been adjusted to reflect cider. The renaming should make the options more transparent for those looking for help for their cider.

Brewery install happening at WL

As this publication was going to press, White Labs was installing a multimillion dollar brewhouse at its San Diego headquarters.

This project is the largest and most automated brewhouse White Labs has ever installed, and it is being undertaken for reasons beyond the obvious.

The brewhouse will supply beer to the onsite Tasting Room, but more importantly for White Labs purposes, it will supply wort for yeast manufacturing.

“For years, we have watched our customers either build their first brewhouse or more commonly over the years, expand into larger spaces with larger brewhouses,” said Chris White, White Labs CEO. “Adding our own brewhouse brings all of the challenges we have seen with others, some funny and some not so funny, but the bottom line is we will now have much greater control over our malt supply, including costs, and that is great news for everyone”
Briess drum roasters have been custom designed for the application of significantly higher temperatures to green malt, which is a must for the caramelization of sugars, uniform temperature application to all kernels, and precise control of airflow and moisture. Full, caramel flavors and aromas are not achievable with kilning. Drum roasters also produce more uniform and consistent results within each batch and from lot to lot—a mark of quality that Briess customers have come to expect. For more information about the difference between caramel and crystal malts, visit www.brewingwithbriess.com/Homebrewing/FAQs.htm.

We recommend using more deeply roasted Caramel Malts in the 60-120L range. At 90L and 120L these malts are quite complex with pronounced caramel, burnt sugar and prune flavors.

One unique specialty malt to consider for adding background notes are Special Roast, with complex toasty, biscuity, bran flake, sourdough, tangy flavors. Extra Special Malt will deliver toasty marshmallow, toast, mild coffee, prunes, dry, woody flavors. Victory® Malt, or a small amount of Dark Chocolate Malt are also interesting choices. Experiment with the specialty malts of your choice to make your American Amber Ale stand out.

**Style Matters**

rich caramel flavor that can only be fully developed in a roaster.

Briess drum roasters have been custom designed for the application of significantly higher temperatures to green malt, which is a must for the caramelization of sugars, uniform temperature application to all kernels, and precise control of airflow and moisture. Full, caramel flavors and aromas are not achievable with kilning. Drum roasters also produce more uniform and consistent results within each batch and from lot to lot—a mark of quality that Briess customers have come to expect. For more information about the difference between caramel and crystal malts, visit www.brewingwithbriess.com/Homebrewing/FAQs.htm.

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GABF Style Guidelines for American-Style Amber/Red Ale

American Amber/Red Ales are copper to reddish brown. Chill haze is allowable at cold temperatures. Fruity-ester aroma is low if present. Hop aroma is medium. Medium-high to high maltiness with medium or high caramel character is present. Hop flavor is medium, and characterized by American-variety hops. Hop bitterness is medium to medium-high. They may have low levels of fruity-ester flavor. Diacetyl can be absent or barely perceived at very low levels. Body is medium to medium-high.

- Original Gravity (°Plato) 1.048-1.058 (11.9-14.3 °Plato)
- Apparent Extract/Final Gravity (°Plato) 1.012-1.018 (3.1-4.6 °Plato)
- Alcohol by Weight (Volume) 3.5%-4.8% (4.4%-6.1%)
- Bitterness (IBU) 30-45
- Color SRM (EBC) 11-18 (22-36 EBC)

--- By Briess Malt & Ingredient Co.

Yeast and Fermentation Notes:

Some of the most frequent strains used in American Ambers are WLP001 California Ale Yeast, WLP007 Dry English Ale Yeast, WLP008 East Coast Ale Yeast, WLP009 Australian Ale Yeast, and WLP036 Dusseldorf Ale Yeast.

White Labs Brewer Joe Kurowski used WLP001, WLP007, WLP 002 English Ale Yeast, and WLP029 German Ale/ Kolsch Yeast to make a batch of American Amber. Like other Tasting Room batches, the wort was split into four smaller batches for fermentation. Alcohol by volume was highest for WLP001 at 5.67, and lowest for WLP007 at 5.42. WLP001 was also the lightest in color among the four beers. Full details are at tastingroom.yeastman.com.

--- White Labs