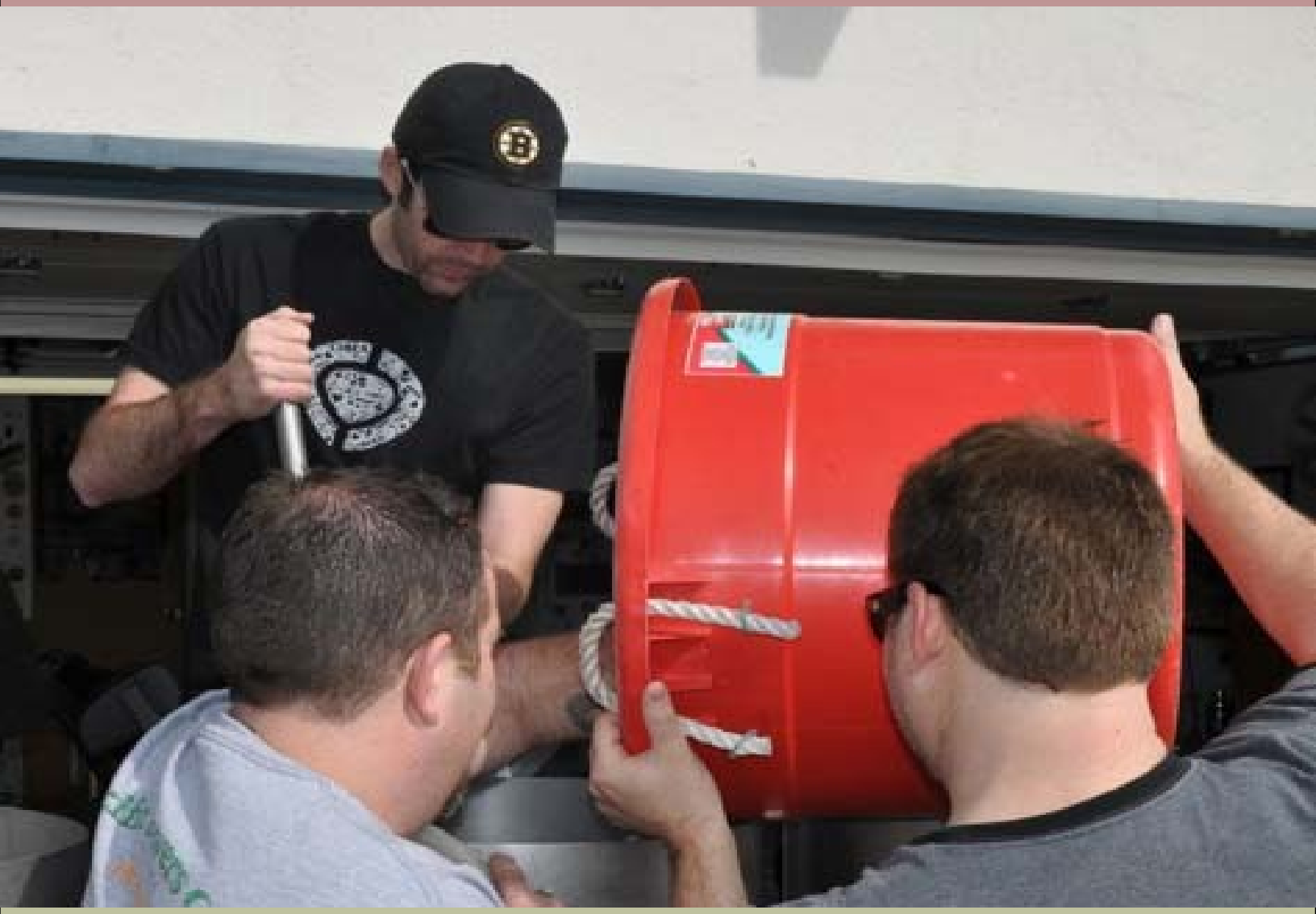
ISSN 1945-1342

DREGS FROM THE KEG

February 2010



Laxo, non excrucio, Poto cervisia domistica.

In This Issue

Foam at the Top

Chris Voisey, SBC President

What a start to a great new Brew Year! We have had both a successful first meeting of the club and a great club brew!

First, I wanted to thank the guys over at the Strand Brewing Company again for hosting our first meeting. It was a fantastic way to kick off 2010! For those that missed it, we had a great turnout and plenty of home brew to share over some pizza. In fact, I think we had more home brew at the meeting than most of our previous ones. We set that challenge out there and it was obviously heard by our members. Let's see if we can do it again at the next meeting. In fact, I want to go back to my first challenge for everyone in the club that they bring beer to at least two meetings during the year.

Second, I wanted to extend another big thank you to Dave and Kelly Peterson for hosting the first club brew of 2010! This seems to be a tradition with the club and it was definitely well attended. There were over twenty people there including several first time brewers! If you did miss it, you missed what I would rate as one of the top 3 club brews I've attended. We had three different systems brewing and plenty of conversations and samples of great beer. We also had Bryan on the grill with some fantastic sausages to top it all off. Thanks to the Peterson's and everyone that attended!!

For those of you that missed the last club brew, we are already planning the next! It will be Sunday, February 21st at my place. We will send out more details soon. It would be great to see as many of you as we can! We'll start out at 9am and be brewing into the afternoon. Even if you can't make it for the start or the whole thing, try to drop by. Club brews really start people talking and getting into the home brew spirit. It is honestly something to experience if you haven't already.

Have you booked your space at the Southern California Home Brewers festival? What are you waiting for?? One of the goals with our initial club brews of the year is to get enough home brew to serve up at this great event. Wouldn't you love to try it there? The festival is a weekend of camping up in Lake Casitas, just outside of Ojai. It is the last weekend of April, so get planning now! I hope to see a great turn out from the Strand Brewers Club.

Over the next few weeks and months we do have a lot of things planned for the club. One of my goals is to work with Bryan to get some more activities planned and started with the club. We all enjoy both brewing and drinking beer. So why not do it together?? We do have some rather aggressive plans to change up the website, update the mailing list as well as reintroduce things like Final Friday's and host a Club Brew every month. Sure, we can't all make it to every one of these, but I think it is important to have them there for those that can. We will provide details at the meeting on February 10th, but count on this all kicking off in February!

In anticipation of the next club meeting on the 10th I would like to encourage everyone to think about bringing something they brewed. It doesn't matter how good or bad you think it is, it is worth sharing! I personally have brought some beers that I was not very proud of, but also couldn't figure out what could have gone wrong. The feedback I received from other members helped me pinpoint the possible issues with my process. It was invaluable feedback that I would have never figured out myself. So don't be ashamed or shy about that beer, just bring it! We all start somewhere.

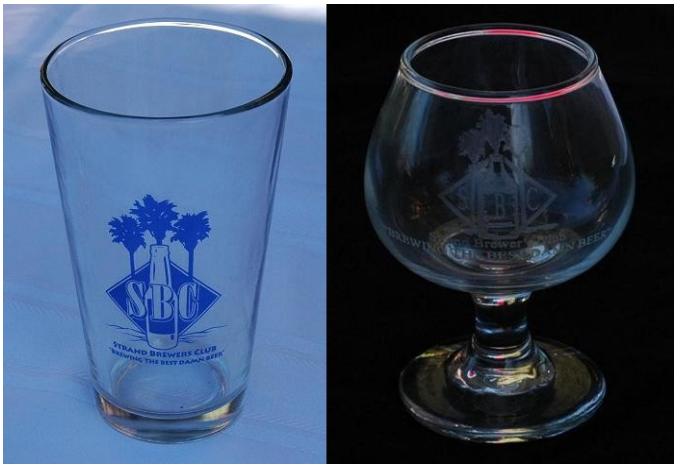
I look forward to seeing you all at one of our events in February!

Meeting Place for January

This month's meeting will be at

Naja's Place
154 International Boardwalk
Redondo Beach, CA 90277

SBC Glassware for Sale!



Pint glasses: 4 for $10.00 5.5 oz Goblet: $7.00 each

Contact Glenn Deckman:
310-823-9990
gldmcd@yahoo.com

PBC Placque is missing!

Steve Fafard – 2009 PBC Prize Coordinator

This an APB for the club's Pacific Brewer's Cup High Point Club plaque. It used to be at Naja's for the longest time, but during a remodel/reorg, it went missing. If you have it, please bring it to the club meeting so that I can get the engraving for HPC completed. I've engraved Long Beach's and Pacific Gravity's already. Thank you!

What's on Tap

Bryan K(egger) Willis, SBC Activities Director

Hello, all! Bryan K. Willis, your event coordinator here. I'd like to let you know about what went down in January.

First of all, a big thank you goes out to Richard Marcello, Jeff Parker & Joel Elliott for letting us go to their brewery and mess up the joint. Our meeting at Strand Brewing Company went incredibly well! Over HALF of all of our members showed up that night, and many of you came packing your homebrew (and a few special commercial beers from several years back, which nobody seemed to mind)! We got to see how the place is coming along, and got a 3 gallon keg of 24th Street all to ourselves.

Also, I must hoist my thumbs as upwards as they can go in respect for Dave Peterson letting us use his place for our club brew at the end of January. A couple of dozen showed up for the brewing shenanigans to marvel at Dave's system and bar. If my tallys are correct, we got 25 gallons of maibock that afternoon out of dave's 3-tiered system, and several other club members got to do a bit of brewin' themselves. If I remember correctly, Devin Knowles brought his system and made a milk stout & Chris Voisey brewed a barleywine.

I unfortunately didn't brew anything as I spent the morning getting fresh sausage made for the club from a butcher and had to mind the grill to cook 'em up. It was worth it when I grilled those beauties up and everybody raved about 'em.

Anyway, let's get to February's events!

On Wednesday, February 10, 2010, we are back at Naja's! Dallas from New Belgium Brewing will be there to showcase the brewery's newest beer: Ranger IPA. I've personally had a few pints of the brew and can attest to it's quality. The best way I have described it was that it's a "Colorado IPA." Have a few sips and I think you'll see what I mean.

In addition, Sunday, February 21, 2010, we are having another club brew, and this one will be at our president's house. Chris Voisey will be letting us use his system, but we still welcome anybody else to come with their system so we can brew as much beer as we possibly can. No style has been announced yet, but we are taking suggestions! Hit me or any of the other officers up to let us know what you'd like to help make, and we'll hold a vote on it at the February meeting at Naja's.

Also, I have decided to completely and arbitrarily decide that everybody should be aware of Lucky Baldwin's 11th Belgian Beer Festival being held between February 13-28, 2010. I think we should have everybody get on the train to head down there for the last weekend and see if we can empty out some kegs! I'll bring up a vote at the February meeting to see who wishes to go on the 27th or 28th and we'll make the winner a club thing (that doesn't mean you can't go on the other day, too! Feel free to invite me if you do, as I have been known to be quite nice company)!

By the way, don't forget about the California Homebrewers Association's "Southern California Homebrewers Fest" on April 30 and May 1! Ticket prices increase every month and ticket sales end some time before the event, with NO tickets being sold at the event! Some of our club members may still have space at their campsites, so I'll ask around to see if anybody's willing to share some space.

There's a few more things down the pipeline as well:

There's going to be yet another club brew on Saturday, March 20, 2010 to celebrate the Vernal Equinox! We'll be brewing something that we will call "Vernal Equinox" to celebrate (though I prefer a cooler name like "Big Vern," myself. Hmm, maybe I should write a recipe).

Also, we will be having another summer party (which will hopefully be a club brew) of course since the last one was a hoot.

There will also be a BBBBBBBBBBBB (I always forget how many "B's" there's supposed to be so I just randomly pick a number between five and twenty whenever I say it) this summer as well, so start oiling those bike chains now!

We're still trying to figure out the logistics of some of this stuff, so if you want to help by offering space,/equipment/whatever please let us know!

That's pretty much what's happening at this moment. I'll try to keep all of you posted as to what's going on where and when.

Happy brewing!

Spent Grains

Rob Proffitt, SBC Treasurer

MEMBERSHIP RENEWAL TIME

Membership dues for 2010 are due now. We currently have 19 renewals, but we're way behind compared to previous years. Even though the club is in good shape financially, we still depend on membership dues as our only predictable income. Those dues go to fund club brews food and supplies for events, and other miscellaneous club expenses, so please remember to renew soon.

Dues are $25, plus another $10 for each additional family member. Also, if you would like a paper copy of the Dregs mailed to you each month, add an additional $5 for postage. If you'd like to renew by mail, please mail a check made out to "Strand Brewers Club" to me at 1008 Teri Ave, Torrance, CA 90503.

Beginner's Corner

Jay Ankeney, SBC Civilian

At the January 30th Club Brew at the Peterson house, a really great turnout of Strand Brewers witnessed the highest tech in homebrewing with Dave's remarkable HERMS system. (Actually, Dave has come up with a better acronym for his system, but you gotta ask him about it.)

For those of you who are looking for an easier process to begin brewing with, I'm going to host another "stovetop brewing session" at my place in the north end of Manhattan Beach on one of the Saturdays in February.

If you would like to participate, come on by and I will demonstrate the absolute simplest way to homebrew using an extract and mini-mash approach. And, of course, it would be great to have advanced brewers show up to answer the questions I don't have a clue about. Plenty of homebrew will be on hand.

My basic brewing process doesn't have as much of a "wow" effect as a Club Brew, but I'm glad to say that at least one of our members who participated in one of these stovetop sessions last Summer won a ribbon at the Pacific Brewers Cup 2009.

So send me an E-mail to the address below with your preference of date and I'll see who wants to do what and when they want to do it.

Choose from Feb. 13th, Feb. 20th or Feb. 27th. Please list an "A" and "B" choice.

We usually start around 2 PM and will be done by 5 PM or so—depending on how many people bring their own homebrews to share. Afterwards, if you want, we can chow down at Sharkeez pub which is right around the corner.

Jayankeney@mac.com

Wort Cooling 201

Jim Wilson, BJCP Grand Master Judge

My ale brewing evolved from three gallon extract batches in the kitchen to 11 gallon all grain batches in the garage. The process has been kept simple so I can enjoy it. Wort and beer movements are minimized and are mostly powered by gravity or CO2. Cold side temperature control does have room for improvement as some styles can only be brewed well in cool weather.

Last year, I did the taste workshop for some Fear No Beer members who were preparing for the BJCP exam.

We met in Mark Cherney's Mission Viejo garage which houses more beer stuff than mine does. I spotted a small blue cube connected by two hoses to a water filled tub. Mark explained that the blue cube was an aquarium chiller used for fermentation temperature control (FTC). Wow! That's pretty clever and the light over my head switched on.

We have dogs and I'd never heard of aquarium chillers. They are small refrigerators that cool water to keep fish or yeast happy. Some can multitask by also controlling a heater if the water gets too cold. Mark's is a 1500 BTU/hour unit he found on EBay for $200, which was about half retail.

I spooled up on FTC by studying the usual suspects; water baths with and without aquarium chillers, foam boxes like Ken Swartz's Son of Fermentation Chiller, refrigerators, Peltier devices and the latest homebrew toy, a glycol cooler powered by the guts of a window air conditioner.

My effort screeched to a halt when I recalled that most of the tasty fermentation products (esters, phenols and higher alcohols) are created the first day or two after pitching. To manage these compounds, I needed to be able to pitch at lower temperatures. Then, FTC could be meaningful.

There are some primitive wort cooling methods; do nothing, water or ice baths, snow banks (probably not at the beach), dilution water and sanitized ice but none can quickly cool a large volume of boiling wort. If you brew extract or small all grain batches, one of these methods might work for you.

Dave Cordrey wrote an excellent article that reviewed wort cooling basics. It's in the Technical Information section of the club website. He discussed immersion coolers (IC) with water flowing inside copper tubing and counter flow coolers (CFC) where wort and water exchange heat inside the device. My story builds on Dave's.

Before this project, my wort was cooled with tap water once through a small IC. After it reached 80-90°F, chilled water from a cold plate finished the job. This setup, a holdover from my five gallon batch days, couldn't achieve low enough temperatures for 11 gal batches year round and cooled too slowly.

I learned more about cooling systems and found that each one has its own downside. Here are the big ones in my eyes:

- Undersized ICs cool slowly allowing the production of DMS above 140°F and wild yeast and bacteria a chance to thrive between 140 and 80°F.

- Recirculated wort is vulnerable to staling reactions due to Hot Side Aeration (HSA). There is an ongoing debate about HSA and research continues to better understand its mechanisms.

- CFCs can be difficult to sanitize, allowing the most unwelcome flavors to get started.

- CFCs allow volatile hop flavor and aroma to evaporate by keeping the bulk of the wort hot longer than ICs.

- CFCs complicate hitting a specific pitching temperature.

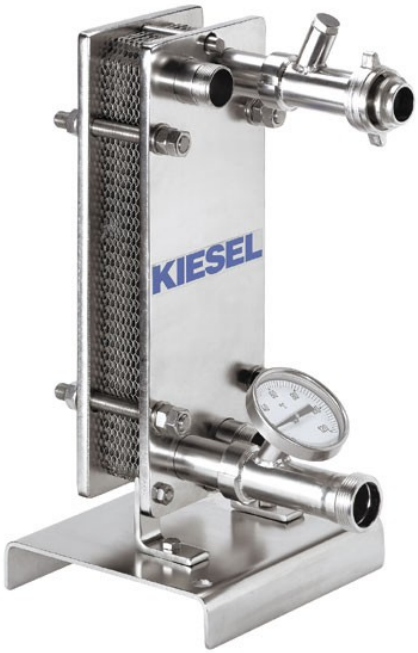
Commercial brewers do find that CFCs meet their production needs. One benefit is that they can be used in a contained system which lowers infection risk as long as good sanitation is practiced. Even then, there's a downside. If you ever wondered why the Randall and Torpedo had to be invented, loss of hop flavor and aroma is your answer.

For almost 90 years, commercial brewers have specified plate CFCs more often than not. These are amazingly efficient but there's no free lunch, as discussed on a Wiki. "In HVAC and brewing applications, heat exchangers of this type are called plate and frame; when used in open loops, or with fluids that transport solids, these heat exchangers are normally gasketed to allow periodic disassembly, cleaning and inspection. There are many types of permanently bonded plate heat exchangers, such as dip-brazed and vacuum-brazed varieties, that are often specified for closed loop applications."

Hose and tubing CFCs have been available to home brewers for at least 30 years. Therminator and Shirron plate coolers have been marketed for the last five along with others that can be found online. None of these coolers can be disassembled for cleaning and sanitizing. CFCs have some attractive features, but I've heard and read about too many infected batches when sealed ones are used. I think no CFC can be reliably sanitized unless it can be completely taken apart and visually inspected.

Here's a photo of a freshly opened plate cooler. The light brown stuff isn't exactly good for your beer.

CFCs aren't for me until I can find an affordable version of something like this.



Even though cleaning and sanitizing an IC is easy, some home brewers still worry about their limitations. Recently, Jamil Zainasheff published his version of a wort recirculation/IC scheme that rivals CFCs for speed and low temperatures. This is intriguing, but the possibility of HSA from energetic mixing bothers me. Perhaps a look at the science of heat transfer can lead us to quick cooling with a minimum of complications.

Boiling wort's excess heat can be calculated with $H=M \cdot Cp \cdot \Delta T$. H equals the product of M, the wort's mass, Cp, its specific heat and ΔT, its temperature change. My worst case is 11 gallons of 1.080 wort that weighs 100#, has a Cp of 1.05 and a ΔT of 150°F. Allowing for the heat retained by the kettle and IC, the total is 17,000 BTU in round numbers. Removing this heat in less than an hour will allow the yeasty beasties to start dining and repel unwanted guests.

The rate of heat transfer can be calculated with $Q=U \cdot A \cdot \Delta T$. Q equals the product of U, the overall heat transfer coefficient, A, the area of the coil and ΔT, in this case, the average difference between the wort and coolant temperatures during the entire process. Engineers deal with this ΔT using the Log Mean Temperature Difference concept but we don't have to go there. For our purpose, clues to quick cooling can be teased out of the terms on the right hand side of the equation.

- U - High coolant flow, a clean coil inside and out and moving wort all increase the rate of heat transfer.
- A - Greater immersed area also increases the rate.
- T hot - Start and end wort temperatures are 212 and 62°F.
- T cold - Chilled water speeds things up by increasing ΔT. My local tap water varies between 57 and 72°F from winter to summer. Because a ΔT is required to push heat from the wort to the coolant, some chilled water is necessary to even reach 62°F wort year round.

Changes that can speed wort cooling the most without bad compromises are:

- Increase U by keeping the coolant flow rate high and constantly but gently stirring the wort.
- Increase A by replacing the old 30' long 3/8" tubing IC with a 50' long ½" one. This is a 200% area gain.
- Increase ΔT by replacing the cold plate with a chilled water recirculation pump. This also increases the flow rate which increases U.

Reality check. A U of 30 BTU/hr-ft2-°F is required to remove 17,000 BTU/hr with the large coil. IC U's can range up to about 250, so my plan is realistic.

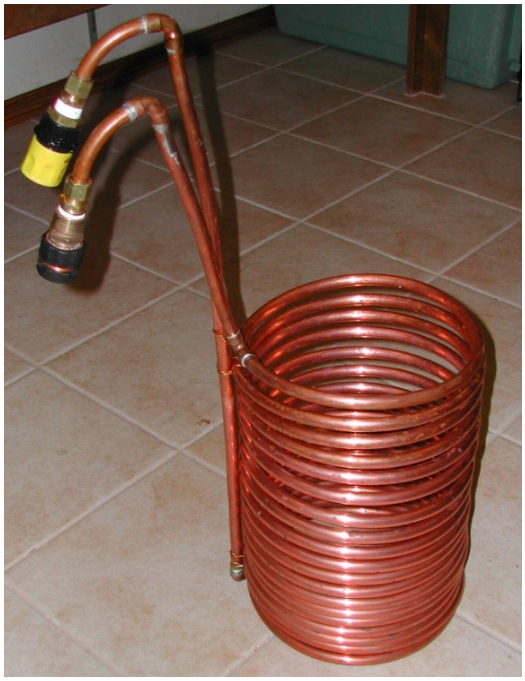
Hardware notes:

- ICs can be purchased. They can also be built for slightly less money out of pocket. Prices vary a lot, so shop around. If you build, Lowe's has copper tubing almost as cheap as sources like coppertubing.com but their sweat soldered

fittings are expensive. Even Ace Hardware's fittings are 50% cheaper than Lowes.

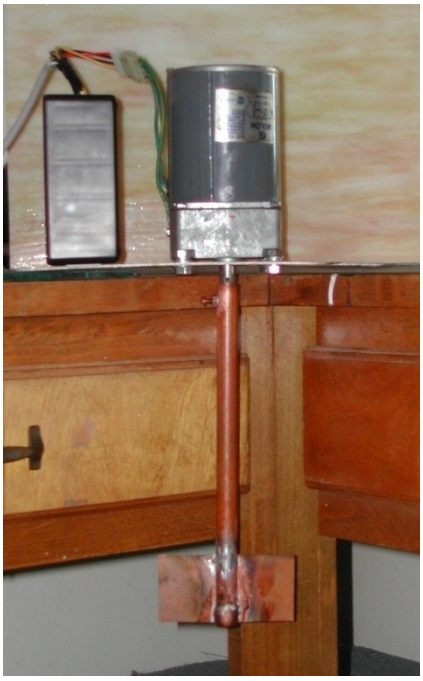
- Soft ½" refrigeration tubing can easily be formed by one person into a 9" OD coil but fittings are easier to install than trying to make sharp bends.
- Refrigeration tubing is specified by OD and fittings by ID. ½" tubing and ⅜" fittings mate perfectly. Go figure.
- Only use lead free solder.
- Roll your own video.

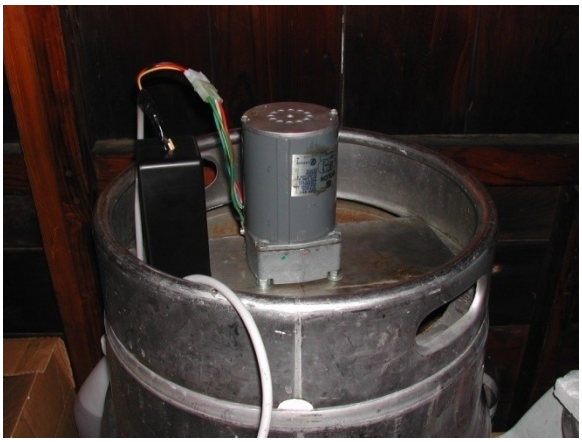
Here's a photo of my new coil. Some are prettier and some are uglier but coils with the same immersed area all work about the same.



Motorized Stirrer:
I have better things to do than stir wort. Machines to do this can be found on forums like Home Brew Talk. I found a low speed gear motor, a Molon EM5R-63-1, for $25 online and assembled a stirrer from workshop scraps. The grey can in the middle of the photos is the motor and below it is the gearbox. The black box on the left holds the motor's start/run capacitor.

One quart yeast starters and complete wort aeration allow my fermentations to show activity in 2-3 hours. I've rarely (knock on wood) suffered unwanted infections. Because of those experiences I mounted the stirrer on a piece of stainless that leaves the kettle top open. This allows DMS a chance to evaporate and the wort to cool a bit faster.





Other stirrer drivers that might work are:

- top mounted ice cream machine motor (I tried a bottom mounted one but the dang thing was just too complicated to convert)
- cordless drill (OK but awkward to mount)
- hand mixer (find one that can be slowed to 60-120rpm)
- rotisserie motor (might be too slow)

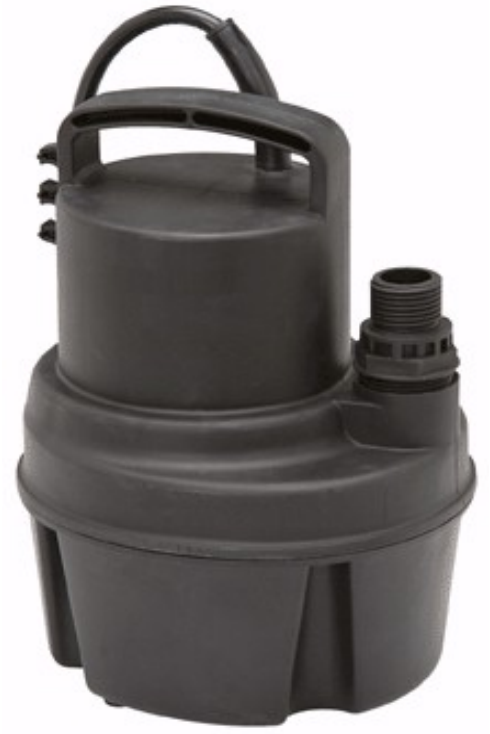
Impeller:

- Radial and axial flow impellers each work well and can be fabricated from sheet metal.
- To start, I chose a simple radial flow paddle.
- Brass, copper or stainless steel are the preferred materials for any parts that touch wort.
- Carbon steel is a poor choice as it can add iron's off flavors to the beer.

Stirrer Operation:

- A 4”x2” paddle spinning about 60 rpm rotates the entire wort mass at 5 rpm in my kettle. Recirculation rotates wort at about 10 rpm, so I’m where I wanted to be.
- The stirrer is also run after cooling to create a trub cone at the bottom center of the kettle.

Chilled water recirculation pump:
Jim Hilbing uses a Little Giant 5-MSPR-WG submersible pump to recirculate chilled water through the second of two CFCs in his brewery. This reliable pump has a maximum discharge of 20 gpm, a shut off head of 26 feet and retails for about $100. I shopped around to look at the competition. All the big box and hardware stores carry submersible (they are also called utility, pond or sump) pumps with similar specs. Harbor Freight was the cheapest at $40 for their Pacific Hydrostar model 98342. Most of Harbor Freight’s stuff is crap in my eyes but I’ll roll the dice on a pump that may only run 12 hours a year. Here’s a photo of the 98342.



Results of a series of step by step tests:
Baseline

- 72°F tap water through the small coil
- Followed by water chilled with the cold plate in an ice bath
- Intermittent stirring with a spoon
- One hour to cool 11 gallons to 72°F in July

Test #1

- 62°F tap water through the large coil
- Followed by water chilled with the cold plate in an ice bath
- Intermittent motorized stirring with a radial impeller
- 55 minutes to cool 7.5 gallons to 62°F in Dec
- 140°F was reached in 3 minutes and 80° in 15

Test #2

- 59°F tap water through the large coil
- Followed by water chilled with the cold plate in an ice bath
- Continuous motorized stirring
- 45 minutes to cool 11 gallons to 62°F in Jan
- 140°F was reached in 5 minutes and 80° in 20
- These milestones are similar to published wort recirculation results.

Test #3

- 57°F tap water through the large coil
- Followed by 45°F chilled water circulated with the Harbor Freight pump
- Continuous motorized stirring
- 28 minutes to cool 11 gallons to 62°F in Jan
- 140°F was reached in 4 minutes and 80° in 18

I think I’m on the right track. The real test will come next summer when tap water temperatures peak again. I’ll buy plenty of ice and update test results then.

Conclusions:
An IC can cool 11 gallon ale batches to optimum pitching temperatures in much less than an hour. Key points are:

- Size the IC appropriate to your brew length.
- Start with tap water as the coolant. The large ΔT between it and hot wort allows quick cooling down to 80 or 90°F.
- Keep coolant flow rates high.
- Continuously stir the wort. This keeps warm wort and the IC in contact.
- Circulate chilled water as the last step. This is a powerful aid to fast cooling and low finishing temperatures.

During this project, I came to the understanding that 80°F is the key wort temperature in the cooling process. Below 80°, the risk of infection is small and cooling to your desired pitching temperature can proceed with little fear of problems. Getting the bulk of the wort to 80° quickly is worth the effort to preserve hop character and limit DMS, wild yeast and bacteria's effect on the beer.

Brewery upgrades are never finished. Even faster cooling is possible by:

- Tweaking the impeller size or shape to increase mixing while still avoiding the dreaded HSA.
- Running the coolant pump continuously to keep flow rate high.
- Using a cold liquor tank like some commercial breweries. Ice does have a big advantage over liquid water for heat absorption due to the latent heat of fusion as Mike Hall explained in HBD. Ice should be included in the final stage of the process for fast cooling to low temperatures.
- Using dry ice for water cooling. This might be more entertaining than practical. But hey, this is a hobby!
- Totally off topic, but this video of liquid oxygen being used to start a barbeque fire is a real hoot. Now that's entertainment!

Improved FTC is my next project.

Thanks to Ron Cooper and Jim Hilbing for sharing their expertise and historical tap water temperature data.

Homebrewing Forums

Jim Wilson, BJCP Grand Master Judge

I've just finished an article about wort cooling that turned into an extended game of whack a mole. I've published 30+ times in The Dregs and this one needed more editing than any of the others. Every time it got close to being finished, another detail would pop up that had to be polished. I'd be hungry if I had to do this for a living!

Mousing around homebrewing forums helped me whack some of those moles. In the day, Home Brew Digest was the forum. I referred to it a lot when I started brewing and have supported Pat Babcock and his predecessors in their efforts. For this project, HBD was a good start and it led me to other forums. These are web enabled, have easy to use interfaces and improved multi-media support. Most seem to have some commercial connection. It's not obtrusive, so that's OK by me.

Might there be a forum in Strand's future? They are an easy way to share information and would be a useful service to club members. We need someone who is willing to champion the idea and move it forward. Having knowledge of software implementation might help. Here's a good resource if anyone's interested, http://www.forummatrix.org/. If you'd like to carry the ball, discussing the concept with the E-Board would be a good first step.

(The E-Board has been discussing this very thing as part of a web site revamp. Anyone with knowledge, experience, and/or interest in this topic is encouraged to contact someone on the board. - ed.)

Below are sites that were useful on this project. Perhaps some of these can help your brewing practice too.

http://www.hbd.org/ (and the associated catch all site http://www.brewery.org/)

http://hbd.org/cgi-bin/discus/discus.cgi (aka the Brews & Views BBoard)

http://www.homebrewtalk.com/ (my new favorite)

http://www.wortomatic.com/ (Carl Krivutza's article was especially helpful)

http://www.brewboard.com/ (aka the Green Board)

http://www.dmoz.org/Recreation/Food/Drink/Beer/Homebrewing/

http://www.beersmith.com/forum/

http://forums.morebeer.com/

http://forum.northernbrewer.com/

http://www.homebrewersassociation.org/pages/community/aha-forum

http://www.thebrewingnetwork.com/forum/

Calendar of Homebrewing Events

Jake Filopovich, SBC Vice-President

Club-Only Competitions
Strand Brewers' Club Meeting
Location: Naja's Place
154 International Boardwalk
Redondo Beach, CA 90277
Time: 2nd Wednesday of every month 7:00pm

02/20/2010
AHA Club-Only Competition, The Session Challenge-English Brown Ales Kent, WA
Contact: Tim Hayner Phone: (206) 730-4532 Entry Fee: One entry per club, $7 (make check payable to AHA)
Entry Deadline: 02/16/2010

For more information on club-only competitions, go to http://www.beertown.org/homebrewing/calendar/events.aspx

Other Competitions:
(In order of entry deadline)

02/19/2010
America's Finest City Homebrew Competition 2010
San Diego, CA
Contact: Cole Davisson
cdavisson@componentcontrol.com
Phone: (619) 838-4007
Entry Deadline: 02/10/2010

02/27/2010
Boston Homebrew Competition Boston, MA
Contact: David Lytton dlsman@hotmail.com
Phone: (617) 606-2393
Entry Fee: $7
Entry Deadline: 02/13/2010

02/19/2010
Mid-winter Homebrew Competition Milwaukee, WI
Contact: David Kelley david@northernbrewer.com
Phone: (224) 578-1075
Entry Fee: $5.00
Entry Deadline: 02/14/2010

2/27/2010
British Beer Festival Columbus, OH
Contact: Victor Gonzales vicgonzales@sbcglobal.net
Phone: (614) 746-6731
Entry Fee: $7 for first, $5 per additional. (Checks payable to SODZ.)
Entry Deadline: 02/19/2010

3/19/2010
BlueBonnet Brew-Off 2010 -World's #1- 24th Annual Celebration Irving, TX
Contact: Gene Wheelbarger
director@bluebonnetbrewoff.com
Phone: (817) 657-4802
Entry Fee: $7
Entry Deadline: 02/25/2010

03/06/2010
21st Annual Reggale and Dredhop Competition Denver, CO
Contact: Deborah Lee reasurer@hopbarley.org
Phone: (303) 888-0253
Entry Fee: $7.00
Entry Deadline: 02/27/2010

03/06/2010
Cascade Brewers Cup Seattle, WA
Contact: Mike Brown brewmanator@gmail.com
Phone: (425) 743-2399
Entry Fee: $6
Entry Deadline: 03/03/2010

03/10/2010
Kona Brewers Festival Home Brew Competition Kailua Kona, HI
Contact: Fred Housel Fred@kieleokona.com
Phone: (808) 331-8602
Entry Fee: $7.00 per entry
Entry Deadline: 03/03/2010

03/13/2010
The Drunk Monk Challenge Aurora, IL
Contact: Calvin Rowland
drunkmonkchallenge@gmail.com
Phone: (630) 525-0283
Entry Fee: $6 each entry
Entry Deadline: 03/06/2010

For a list of BJCP competitions around the country, go to http://www.bjcp.org/ and select the Scheduled Competitions link

The objectives of the Strand Brewers' Club are to Brew Beer; to disseminate among the members information pertaining to the brewing, consuming, presentation, judging and history of beer; to promote and encourage homebrewing competition; and to foster general goodwill throughout this great nation of ours through the making and consuming of this noble and most excellent beverage.

It is the policy of the Strand Brewers' Club (SBC) to brew and consume beer strictly for fun. Under no circumstances does the SBC support or condone in any manner the sale or barter of homebrewed beer, the operation of a motor vehicle under the influence of alcohol by a member or participant in any club event, or the provision of alcohol to minors.

Strand Brewers' Mentor Pool

In time of need...who ya gonna call? These Brew Buddies have volunteered to answer any brewing questions you might have, and to be available to teach beginning homebrewers our hombrew craft.

Name	Phone	Email	Location
Dave Peterson	(310) 530-3168	diablo390 (at) aol.com	Torrance
Dan Hakes	(323) 730-1003	danhakes (at) mac.com	Downtown Los Angeles
Bill Krouss	(310) 831-6352	bkrouss (at) cox.net	Rancho Palos Verdes
Jim Hilbing	(310) 798-0911	james (at) hilbing.us	Redondo Beach
Jim Wilson	(310) 316-2374	jim7258 (at) gmail.com	Redondo Beach
Steve Fafard	(310) 373-1724	sfafard (at) cox.net	Rolling Hills Estates
Jay Ankeney	(310) 545-3983	jayankeney (at) mac.com	Manhattan Beach
Brian McGovney	(310) 376-8246	brian.mcgovney (at) gmail.com	Redondo Beach

...and your 2010 Club Officers:

2010 Club Officers

President:	**Chris Voisey**	**(310) 941-4810**	**chris (at) voisey.net**
Vice-President:	**Jake Filipovich**	**(818) 825-1088**	**pittboss13 (at) verizon.net**
Secretary:	**Devin Knowles**	**(323) 841-2037**	**devin.e.knowles (at) gmail.com**
Treasurer:	**Rob Proffitt**	**(310) 787-9511**	**rproff (at) earthlink.net**
Activities Director:	**Bryan K. Willis**	**(310) 462-5528**	**bryankwillis (at) yahoo.com**