



Siebel Institute  
OF TECHNOLOGY



# J. E. Siebel 1-Fifty

## Classic American Pilsner

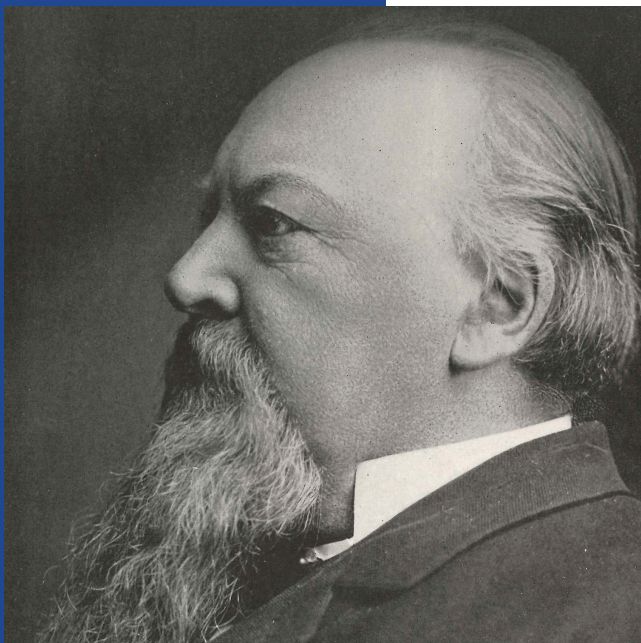
### *A Siebel Institute Open Source Recipe*

To honor the memory of the late Dr. J. E. Siebel and the 150 years of contributions to brewing and technology by his namesake company, the staff of the Siebel Institute of Technology has created a recipe that draws from our legacy of brewing research in North America.

While Siebel Institute has been known for both industry-leading education and innovation, the works of Dr. Siebel were most closely associated with the development of adjunct lager beer, which remains the most popular style of beer in history. With that in mind, Siebel staff formulated the “J. E. Siebel 1-Fifty Classic American Pilsner”.

With a blend of American and German ingredients including corn adjunct, American 6 and 2-row malted barley, and traditional hops both domestic and imported, this recipe harkens back to the early 1900’s when Dr. Siebel was instrumental in developing the benchmarks of this internationally recognized classic beer style.

The recipe for this beer is hereby released to brewers everywhere as an “open source recipe” for anyone to brew. Whether you are a homebrewer or a commercial brewer, please feel free to create your version of “Siebel 1-Fifty” and raise a glass in celebration of our 150th year of excellence in brewing education and science.



## J. E. Siebel

*author, brewer, scientist, educator*

Brewed to celebrate the life and legacy of Dr. J. E. Siebel and the Siebel Institute of Technology. This beer was brewed using ingredients and techniques that harken back to pre-Prohibition times, honoring the heritage of Dr. Siebel and his contributions to the brewing industry.

**Brewed by Tim Foley, Research Brewer at  
Siebel Institute of Technology in Chicago, IL**

# J. E. Siebel 1-Fifty

## Classic American Pilsner

*Recipe by Tim Foley, John Hannafan, Keith Lemcke*

Target starting gravity of wort: 11.6 degrees Plato (pH @ 5.4)

Target final gravity of beer: 1.9 degrees Plato

Approx. target alcohol: 5.3% ABV

### GRAIN BILL:

- 60% US 2-row malt
- 20% US 6-row malt
- 20% US flaked corn (maize)

### WATER PROFILE:

- Calcium 60-70 ppm
- Sulfates 95-100 ppm
- Magnesium 8-10 ppm
- Sodium 15-20 ppm
- Chloride 70-85 ppm

### MASH PROFILE:

- Mash-in at 62°C / 143.5°F for 45 minutes
- Raise to 72°C / 162°F, hold for 45 minutes
- Raise to 78°C / 172°F, hold for 10 minutes
- Begin lautering to achieve kettle full gravity of 11.3°P

### HOPS:

Target IBU contributed by bitterness = 25 BU (brewer should calculate the weight of hops to add based on hop alpha acid content and addition times shown below)

- Cluster hops added 50 minutes before the end of boiling, second addition of Cluster at 20 minutes before end of boil
- Hallertau Hersbrucker added 5 minutes before end of boil

### BOIL:

Total kettle boil time: 60-70 minutes (depending on kettle physics/design)

Target end gravity of wort: 11.6 °P degrees Plato (pH @ 5.4)

Whirlpool and cool to approx. 13.5°C / 56°F in the fermenter, aerate or add oxygen to reach 10 to 12 ppm. Lower to approx. 10°C- 11.7°C / 50°F-53°F

### FERMENTATION:

Yeast: Diamond Lager Yeast by Lallemand, pitched at 1.5 grams per liter of wort (note: pitching rate amended from prior published 3.5 grams)

Nutrient: Servomyces yeast nutrient by Lallemand added at 1.2 grams per 100 liters of wort added to the kettle

Approx 10 days fermentation time, with diacetyl rest starting at day ~10 at 13°C / 55°F for 3 days (your conditions may vary)

Maturation and cellaring time of ~30 days, with a total fermentation and maturation time of ~45 days.



**Siebel Institute**  
OF TECHNOLOGY

This recipe was created to be a close representation of beer that dates to the early days of Siebel Institute in the late 1800s to early 1900s.

Please feel free to brew this recipe with whatever “twist” you would like to add as you scale it to the volume and configuration of your brewing system. As you brew it, talk about your adventure of brewing the beer online, and take the time to make the best version of “Siebel 1-Fifty CAP” you can.

Drop us a line with your results, especially if you pick up a medal in a beer competition, and don’t forget to raise a toast with your beer to Dr. Siebel and his contributions to brewing!

*Comments from consumers during taste testing at Chicago-area breweries:*

*“The bitterness is on point”*

*“Enjoy the light body and crisp taste”*

*Really beautiful finish”*

*“Excellent finish”*

*“Bouquet and taste very appealing”*

*“Clean, light & crisp”*

