

Chapman's Beer Pasteurization

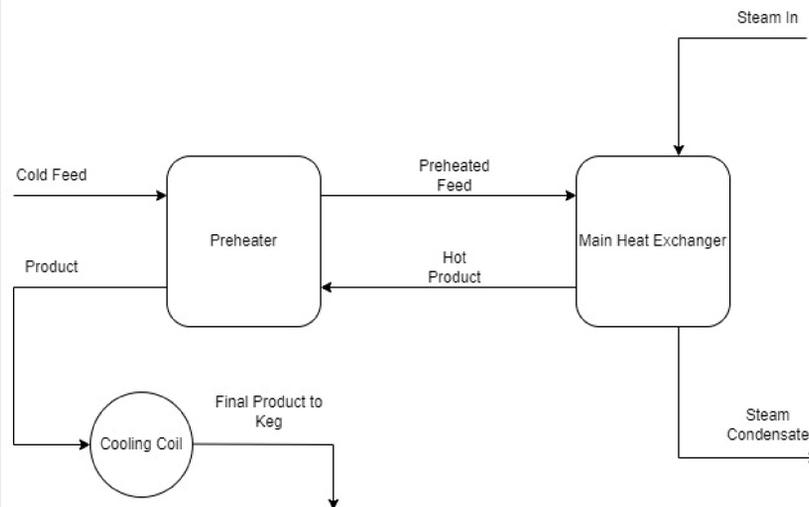
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Introduction

The main goal for this project was to determine the efficiency of pasteurizing beer for Chapman's Brewing Company in Angola, Indiana. They have had previous issues with cans exploding in transit to stores because of the continued growth of yeast after canning.

Process Flow Diagram



Data

Pasteurization Units
Optimal Temps
Diagram of heat in and out?

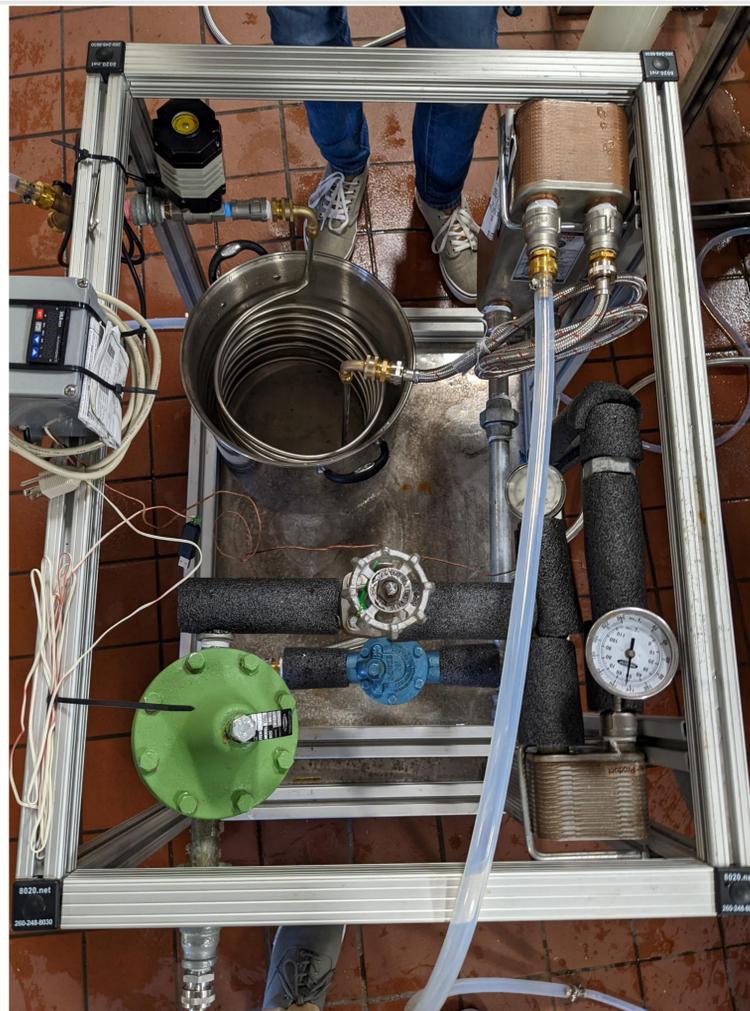
Conclusions

A small-scale preliminary pasteurization test was completed. This involved two beer types: an Ale and a Lager. The overall taste profile was not altered enough to make it unsellable.



Pasteurization Unit

The goal of the pasteurization unit is to heat up the beer to a high enough temperature to kill the yeast and then rapidly cool the beer back to room temperature. The beer's flavor/taste profile must not be altered in a significant way through the pasteurization as well. The type of beer can also affect the sensitivity to the pasteurization.



Future Work

The following are suggestions to further improve the pasteurization tech

- Prevent Foaming
- Third heat exchanger or bath fills with constant stream of cold water
- More sensitive steam valve

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