

Beer Optimization

A Major Qualifying Project submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the degree of Bachelor of Science by:

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Abstract

The use of centrifugal separation in the wine and beer industries is largely expanding and the goal of this project was to explore its feasibility in extending the shelf life of craft beer for our sponsor, Purgatory Beer. To complete this goal, our group brewed two different batches of beer, a double IPA and an Irish stout to analyze centrifugation across varying beer types. These brews were then subjected to various tests to analyze the optimal ways to complete centrifugation, as well as complete analyses of the trub and dissolved oxygen content. The results gathered from each test provided our group with a set of baseline data to draw conclusions from and ultimately led us to recommend that our sponsor should complete further research using samples of their beer.

This MQP contains information deemed confidential to the business interest of the industrial sponsor. Please contact Stephen Kmiotek at <u>sikmiotek@wpi.edu</u> for additional information.