

Beer Production 101

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Key Ingredients



Your Task: Determine how we get from A to B

A



B



Key details to keep in mind

- A brewery is a factory making a food product
- High quality, consistent beer is unforgiving



What my friends think I do



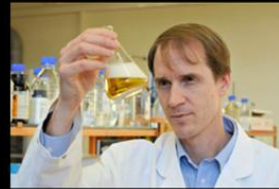
What my mom thinks I do



What society thinks I do



What my wife thinks I do



What I think I do



What I really do



Scale: Homebrewing



Scale: Homebrewing



Scale: Homebrewing+



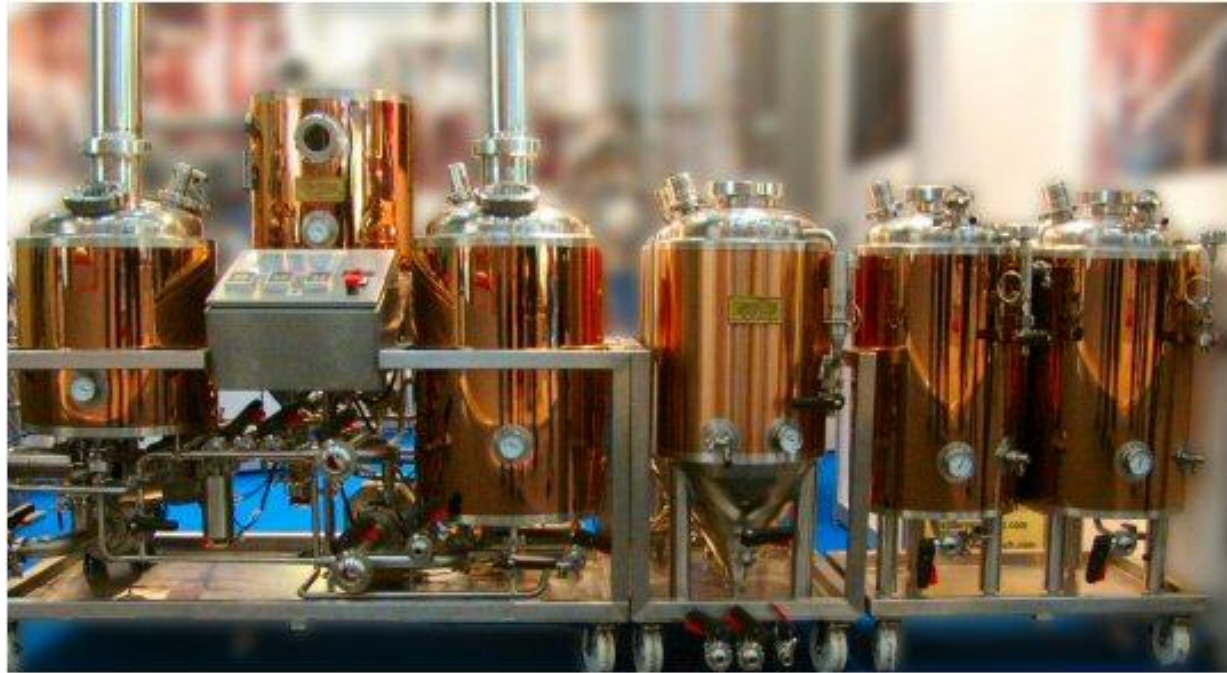
Scale: Homebrewing+



Scale: Homebrewing++ (aka pilot system)



Scale: Homebrewing++ (aka pilot system)



Scale: Micro (<500 bbl/yr)



Scale: Micro+ (500 -1000 bbl/yr)



Scale: Micro+ (500 -1000 bbl/yr)



~9,500 Craft Breweries in the U.S. and...

- Top 50 craft breweries produce as much as all others combined
- Top 10% produce 85% of US beer
- **75% produce under 1,000 bbls/yr**
- Median brewery produces ~335 bbls/yr
- 20% produce 105 bbls/yr or less



Scale: Medium (1,000 – 10,000 bbls)



Scale: Medium (1,000 – 10,000 bbls)



Scale: Large (10,000 – 100,000 bbls)



Scale: Large (10,000 – 100,000 bbls)



Scale: Massive (100,000 bbls+)



Group Exercise



Small Group Discussion

1. Draw a simple process flow diagram
 - Include required elements
 - Discuss other information you would want to include and why
2. Identify one or two questions you would ask your contact at the brewery to make sure you understand the steps they take in making beer.



Large Group Discussion

Let's look at some of your PFDs

- See anything you didn't think about?

What questions would you ask?

Luke (the expert!) responds

- How'd we do?

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