Brewing Efficiency in the Post-COVID Era

Can you still be innovative while cutting costs and increasing efficiency?

In a word, Yes.
Discussion Items

- Historical Perspective
- Squeezing more revenue out of every batch
- Eliminating Hop Creep
- Increasing shelf life
- Case Histories
COVID-19 & Brewing…

in Historical Context

Searching for a Historical Context

Sudden changes in outlook immediately reflected in the Stock Market, a visible measure of fear and panic – the real economy is slower, longer

The Great Depression (1929)

The Great Recession (2008)

The 2020 Pandemic

Dow-Jones Industrial Average

Thank you Alex Barth, CEO Barth-Haas
American Hop Convention 2021
Merchant Panel
After the Great Depression, it took until the mid-1970s to regain the same level of acreage.

The Great Depression drove production efficiency.
Historical Context:
THE GREAT RECESSION

More recently: the Great RECESSION. More efficient use of alpha by changing recipes.
Coming out of the Pandemic Recession, what will happen? History tells us that it is another time of brewing efficiency.
What helped the hop industry recover from the Great Recession?

- Did the Pandemic affect all breweries equally? No.
- What will help the impacted breweries recover from the Pandemic Recession?
- Finding BREWING EFFICIENCIES will have an impact.

IPAs, hop-forward flavorful beers.
Two ways to make more money.

- Cut costs
- Increase Revenues

And don’t forget about long-term sustainability
The more hops you use, the more beer you lose.

**Yield Loss**

DO2, diacetyl formation, out of spec beers, “hop burn”, and more bad stuff

**Hop Creep**

Avg hopping rate is already 11x more than big commercial brewers. Add costly proprietary hops.

**Bigger Hop Bill**
The complication in the post-COVID era: HOP-FORWARD BEERS

Me-Too Beers
More than 9,000 US breweries think they have the best IPA, or the best whatever.

Shelf-Life
Hop flavor that “falls off a cliff”

Freight & Storage
The more hops you use, the more it costs to move it and store it.
Introducing a Solution

Each one of those 6 Pain Points can be solved with Hopzoil®
Case Histories

Efficiency Category:
1) Increase Revenue
2) Eliminate Problems

Objective: Differentiate new HAZY DIPA in a competitive market

Result: Sales are double previous Imperial IPA

Comment: Hopzoil is a convenient tool. Hopzoil beers do not have dry-hop “hop burn” or experience Hop Creep
Case Histories

Efficiency Category:
1) Increase Revenue
2) Reduce Costs

Objective: Create a flagship IPA that stood out from the pack

Result: Beer quickly became flagship brand, and won Bronze at GABF

Comments: Distinct fresh hop note that last longer than just pellets (extends shelf life). Have had success with reducing pellet amounts, as well as boosting aromas on underwhelming hop combinations.
Objective: Looking for a way to increase hop profile that allowed for increased longevity (shelf life) in the can.

Result: More robust & longer lasting hop profile. Allows beer to taste better longer.

Comments: Easy drinking, smooth taste quickly became our #1 seller.
Sustainability.

- No fossil fuels for kiln drying hops.
- Steam Distillation more efficient use of fuel (contained).
- No petroleum-based solvents used in process.
- Less fossil fuels to ship (lighter, smaller package).
- Biomass is composted back into soil.
- Reduced storage energy costs. (Do not freeze. Store at room temp).

Sustainability also cuts costs.
### Costing Worksheet...

A Valuable Tool

Enter your actual data

<table>
<thead>
<tr>
<th></th>
<th>Example #1</th>
<th>Example #2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch Size (BBLS)</strong></td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td><strong>Dry Hopping Rate / lbs per BBL</strong></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Dry hop pellets used (pounds)</strong></td>
<td>26</td>
<td>60</td>
</tr>
<tr>
<td><strong>Hop Pellet Cost/Lb (varies by variety)</strong></td>
<td>$16.00</td>
<td>$15.00</td>
</tr>
<tr>
<td><strong>Dry Hopping Pellet Cost total</strong></td>
<td>$412.80</td>
<td>$900.00</td>
</tr>
<tr>
<td><strong>Freight (avg. UPS cost/lb)</strong></td>
<td>$0.68</td>
<td>$0.50</td>
</tr>
<tr>
<td><strong>Estimated Freight Cost</strong></td>
<td>$17.54</td>
<td>$30.00</td>
</tr>
<tr>
<td><strong>Dry Hop Pellets/High Input Costs</strong></td>
<td>$430.34</td>
<td>$930.00</td>
</tr>
</tbody>
</table>

### Net Difference Using Hopzoil

<table>
<thead>
<tr>
<th></th>
<th>Per Batch / BOTTLES/CANS</th>
<th>Per Batch / BOTTLES/CANS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Dry Hop Pellets / Hard Input Costs</strong></td>
<td>$430.34</td>
<td>$1,058.40</td>
</tr>
<tr>
<td><strong>Soft Costs/Increase in SHELF LIFE</strong></td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Savings - % Reduction in Dry Hop Pellets</strong></td>
<td>$284.03</td>
<td>$1,058.40</td>
</tr>
<tr>
<td><strong>Hopzoil Input Costs/Batch</strong></td>
<td>$188.48</td>
<td>$679.35</td>
</tr>
<tr>
<td><strong>Net Gain/Taproom Sales</strong></td>
<td>$1,532.50</td>
<td>$6,075.00</td>
</tr>
</tbody>
</table>

### Net Difference / PER BATCH

- **$1,628.07**
- **$6,454.05**

Calculate your increased revenue per batch
Go ahead...put a "WOW" in your beer, while making your Beancounters really happy.
THANKS!
To learn more, and to request a complimentary sample of Hopzoil, Email us at:
info@hopzoil.com