



Brew iQ
By Precision Fermentation

BrewIQ at Western Red Brewing

*Real-Time Fermentation Monitoring Boosts
Solo Brewing Operation with Improved
Yeast Management, Plus Major Time and Cost Savings*

A Commitment to Quality and Customer Experience

Western Red began its journey to brew the best craft beers in the Pacific Northwest in 2017. From its brewery and taproom in Poulsbo, Washington, Western Red brews and serves a variety of beers, including IPAs, specialty lagers and a selection of dark beers, among others. Since opening its doors, the brewery has grown production substantially year over year and today produces about 1000 barrels annually.

The Challenge

Efficiency and Quality Control for Solo Brewery Operations

Head brewer, owner and “everything in between,” Denver Smyth’s passion for brewing far outweighed his desire to spend weekends driving 30 minutes to the brewery for sampling, gravity readings and tracking fermentation progress. “Because I do all the brewing, I had to go in almost every Saturday and Sunday, which meant I was working seven days a week,” said Smyth.

Like many small breweries, Western Red doesn’t have a quality control lab, so Smyth was often erring on the side of caution. “After investing most of our capital into starting the brewery, we didn’t have the resources to set up a lab, which meant we played it safe regarding yeast vitality,” said Smyth. “We would run it for five or six generations, sometimes pushing it to seven generations, and then throw it away because we didn’t have a way to measure yeast vitality. When we first started, there were times when the yeast wouldn’t make it past three generations because, as a new brewery, we didn’t have a ton of tank turns.”



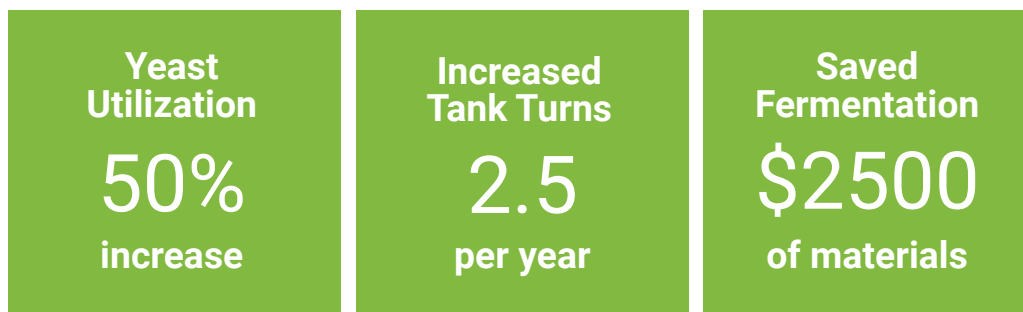
The Solution

How Western Red Leveraged Real-Time Fermentation Monitoring

Smyth began using BrewIQ in 2020 and it didn't take long for his investment to pay off. Weekend trips to the brewery for sampling were replaced with a quick check of the BrewIQ dashboard. "I gained a ton of time by not needing to do the sampling," said Smyth. "Before, I would go to the brewery every weekend because I was still new to the brewing world, and there's a lot at stake when you're brewing 30 barrels of beer. Now, when I pitch a yeast on Friday night, instead of coming back on Saturday, I can check the fermentation data on my phone and see what's happening inside the tanks. No more weekend gravity readings."

BrewIQ has also given Smyth new insight into yeast vitality. "With the BrewIQ System, we're starting to pinpoint the best time to collect yeast," he said. "This is giving us between eight and nine generations out of our yeast. It's easy to look at the dashboard and see everything taking off. Before, we would be 24 hours in before knowing the yeast wasn't taking off because we didn't see bubbles. Seeing the DO drops in real-time saves a lot of money on yeast. Now we can see exactly when the yeast is going dormant."

While BrewIQ provides the critical data Smyth needs without adding massive equipment costs, he also finds tremendous value in support from the Precision Fermentation team. "Sometimes they notice an abnormality in the data and call me before I've even noticed," he said. "One of the first times we used BrewIQ was on a very low ABC oatmeal stout. We weren't expecting problems because we had brewed it before, but the Precision Fermentation team called to let us know we weren't getting a proper fermentation. We didn't have enough data to use as a benchmark, so they shared data from other breweries so we could overlay it with our data and figure out what was going wrong. Luckily it was within the first 24 hours of fermentation, and although we didn't have more yeast, a couple of other breweries in town with the same yeast strains helped us out. We salvaged the fermentation because of BrewIQ. Without it, we would have had to flush \$2,500 worth of materials down the drain."



As a solo operator, Smyth points out the sheer cost savings he's experienced by operating more efficiently. "When we started, we weren't at capacity, so tank time wasn't as critical," he said. "I was brewing once a week and had plenty of time. Fast forward six years, and we are at capacity. Without BrewIQ, we would produce 250 barrels less per year. We've shaved two to four days off of the tank time for many of our brews, which has made a big difference. We went from averaging 17 tank turns to 19.5 tank turns per year. Those two and a half additional tank turns equate to just over 180 barrels per year, which is a big deal."