



Wachusett Brewing Company Relies on Hanna Instruments' Equipment Throughout the Beer Production and Cider Making Process to ensure a Quality Brew and Cider Every Time.

At Wachusett Brewing Company, the quality of their beer is at the core of their business and has contributed to their success for over the past 25 years. Wachusett, located in Westminister, MA, prides itself on having one of the finest QA/QC labs in the craft beer industry. When walking through their brewery you will find an impressive QA/QC lab that is equipped with top of the line instrumentation for a craft brewer. Quality requirements and standards require reliable and accurate instrumentation. With the help of Hanna Instruments, Wachusett Brewing Company is able to ensure that all points of quality during the brewing process are measured and monitored on a regular basis.



A Brewery Rooted in History.

Wachusett Brewing Company was founded in 1994 by three Massachusetts college buddies who developed a significant appreciation for craft beer during their biking, canoeing and hiking adventures around New England. Armed with a “we can do this” attitude, the three veered from their careers in engineering and biology to pursue their passion to make great beer. Today, Wachusett has grown to become one of the largest breweries in the Northeast with a diverse and award-winning portfolio of ales and lagers.

“Hanna has a huge variety of instruments and you can pick exactly what you need for your application. I think something that is great about Hanna Instruments is that they’re so easy to use and they’re a fantastic value for just the quality of information that you get from them, it’s an easy choice.”

-**Cullen Dwyer**, Quality Manager
at Wachusett Brewing Company

Quality is an Integral Part of the Wachusett Beer Brewing and Cider Making Process.

For Wachusett Brewing Company, the emphasis has always been on quality standards to produce a flavorful and consistent brew each time for their customers’ diverse palates. In order to maintain and regulate beer quality requirements, Wachusett Brewing Company needed analytical instruments for their brewery that were easy to use, reliable, and most importantly, accurate.

With a diverse beer portfolio and even venturing into the cider world, Wachusett Brewing Company needed instrumentation for testing during both the beer and cider making process. This led Wachusett to Hanna Instruments. The Wachusett Quality Team utilizes a variety of Hanna’s scientific analytical instruments on a daily basis to test for a variety of parameters during beer and cider production. In particular, Wachusett frequently depends on Hanna’s Haze Turbidity Meter (HI847492), Hanna’s Dissolved Oxygen Meter (HI98193), and lastly, Hanna’s Sulfur Dioxide Mini Titrator (HI84500) to maintain both beer and cider quality standards.



Pictured, the Wachusett Brewing Company Quality Team. (Left) Cullen Dwyer, Quality Manager & (Right) Valerie Brock, Director of Brewing and Cellaring.



Hanna Instruments' Haze Turbidity Meter is part of Wachusett's IPA Beer Making Process.

Wachusett Brewing Company makes a variety of lagers and ales, but IPA's as well. With the help of Hanna Instruments' Haze Turbidity Meter (HI847492), Wachusett was able to precisely measure the amount of haze present in their IPA's.

Cullen Dwyer, Quality Manager at Wachusett Brewing Company, goes on to explain that "We've recently got into the New England IPA game in the last couple of years, especially with our Wally portfolio. One of the qualities of New England IPA's is that they are very hazy and some people say, "Oh, they don't have to be hazy", but it is a perceivable quality of the beer. People expect it to be the same every time. And so, the Hanna Haze meter, that was something that was very important to us so that we actually can set a standard. It is no longer just a subjective thing where you pour the beer in a glass and say if it is hazy enough. We actually have a standard and we can make sure that we meet that standard every time."

Hanna Instruments' Haze Turbidity Meter enabled the Quality Team at Wachusett to accurately measure the level of Haze in their IPA's, eliminating the need to visually determine this by eye. This contributed to more accurate measurements during the beer analysis process and helped Wachusett maintain consistency in the final beer product for distribution. Wachusett has incorporated Hanna's Haze Turbidity Meter into their IPA production process. As a result, this helped Wachusett create a haze quality standard for their IPA's giving them a competitive advantage in the beer market.

Hanna Instruments' Waterproof Portable Dissolved Oxygen Meter plays a crucial role in monitoring Wachusett's beer during the brewing process.

Measuring Dissolved Oxygen throughout the brewing process is necessary in order to produce a quality brew. Using Hanna Instruments' Dissolved Oxygen Meter (HI98193), Wachusett Brewing Company was able to monitor Dissolved Oxygen at various stages and touch



points throughout the brewing process. It was important to the Wachusett Quality Team to have a meter that was portable, easy to use, and to have a piece of equipment that could collect precise DO readings over a wide range.

Cullen Dwyer, Quality Manager at Wachusett Brewing Company, goes on to explain, “We also have a Hanna handheld Oxygen Meter. Keeping dissolved oxygen levels low in packaged beer is important for the shelf life. But, prior to fermentation it’s important that the beer actually has oxygen because the yeast need it for growth. We found that the Hanna handheld meter was really the best solution for that. Ease of use and versatility, flexibility. We didn’t want an inline instrument that was going to be fixed to one location. We wanted something that we could move around the brewery and take up to the lab, take out on the floor, something that was going to be sturdy, waterproof and accurate and it was very important that it had a wide range.”

As a result, Hanna’s Dissolved Oxygen Meter became an important part of the Wachusett Brewing Company’s beer making process, ensuring that quality standards were met from the very beginning all the way to the completion of the final beer product.

Wachusett Brewing Company ventures into cider making, using Hanna Instruments’ Sulfur Dioxide Mini Titrator.

Keeping Sulfur Dioxide levels in check is critical during the cider making process. Hanna Instruments’ Sulfur Dioxide Mini Titrator (HI84500) enabled Wachusett to easily test for the sulfur dioxide present in their ciders at the end of fermentation to ensure that the quality and consistency of their cider was maintained.

When asked to explain Wachusett’s experience with Hanna Instruments’ SO₂ Mini Titrator, Valerie Brock, Director of Brewing and Cellaring at Wachusett Brewing Company, states “Cider production is new to us and an important component of that was being able to measure Sulfur Dioxide in the ciders at the end of fermentation to determine how much Sulfur Dioxide to add for product stability and antimicrobial effects before we package it. And I was like wow, I don’t want to have to standardize an iodine solution all the time and I want something



that is really repeatable and accurate which then led me to Hanna Instruments and their SO₂ Mini Titrator. It's been excellent, very easy to use, reproducible results, it allows me to give reliable numbers during a very tight timeframe."

Hanna Instruments' SO₂ Mini Titrator is an essential tool for the Wachusett Brewing Company during the cider making process. It ensured that the cider produced complies with federal regulations and the SO₂ Mini Titrator also helped Wachusett keep sulfites in check during cider production.

Hanna's SO₂ Mini Titrator provided Wachusett Brewing Company with the peace of mind and assurance that they needed during the cider production process which is something new altogether for the brewery.

The Perfect Combination: Hanna's Quality Instruments help Wachusett Brewing Company Achieve Beer and Cider Quality Standards.

Quality is synonymous with Wachusett Brewing Company and it is an integral part of both their brewing and cider making processes. Various quality standards must be adhered to and certain parameters must be tested for on a regular basis. Wachusett relies on a variety of Hanna Instruments' equipment to ensure that the beer or cider that they are producing meets quality requirements and will be ready for final distribution.

Whether Wachusett is utilizing Hanna's Haze Turbidity Meter to test the level of Haze present in their IPA's or they are relying on Hanna's Dissolved Oxygen Meter to test beer at certain points of the brewing process, they require reliable and accurate instrumentation. Even when Wachusett started to explore a new business venture and expanded their impressive beverage portfolio to include cider, they used Hanna's Sulfur Dioxide Mini Titrator for testing. As Cullen Dwyer, Quality Manager at Wachusett Brewing Company, states, "Hanna has a huge variety of instruments and you can pick exactly what you need for your application. I think something that is great about Hanna Instruments is that they're so easy to use and they're a fantastic value for just the quality of information that you get from them, it's an easy choice."

Like Wachusett Brewing Company, Hanna Instruments' also values quality, and prides itself on providing its customers with the best scientific analytical instruments for testing. This is the perfect combination, quality instrumentation and brews. Hanna Instruments looks forward to continue working with Wachusett Brewing Company for years to come.