



APPLICATION NOTE

Optimised lautering process in the Brewhouse

The challenge of efficient monitoring in the lauter tun



Monitoring Plato in the brewhouse is essential for producing beer with a consistent quality, at the final targeted strength and at the highest efficiency. Traditionally, the hot wort is manually sampled, cooled and Plato determined using a hydrometer or refractometer.



The problem is these few measurements do not provide an accurate view into what is happening in real-time during the extraction process. It is particularly true at the end of the process where additional manual measurements of Plato are too slow to detect the optimal time to stop the extraction. At this point, you don't want to over extract the malt generating off taste in the beer and the typical solution is to under extract it resulting in lower efficiency extractions.



BEER BRO® continuous inline monitoring of hot wort



AVENISENSE introduces the BEER BRO® liquid density sensor to the brewing industry. This innovative device provides a **high performance, cost-effective method for in-line measurement of Plato Degrees.**

Plato of the hot wort is measured once per second providing a real-time view into what is happening during the main stages of lautering. **You can now stop the extraction process at the exact right time to optimize your production.**

Our small sensor can be easily integrated using the existing sample port from the lauter tun and still retain the ability to manually collect samples. Embedded electronics measure wort density at the 65-75C temperatures associated with this process and calculate Plato degrees. Data is available to the brewing control system via a digital interface or can be displayed locally at the brew kitchen.

With the BEER BRO® sensor, **you will always know the progress of the extraction and when you reach your targeted Plato value.**



BEER BRO® HIGHLIGHTS



Easy integration

With the supplied adapter, the installation is quick and simple using the existing sample port.



Increased productivity

Detect extraction problems sooner and stop your process at the exact right time to increase overall productivity.



Constant quality

The Devil's high measurement repeatability means consistent recipes from extraction to extraction.



Cost & time savings

Time consuming manual measurement are a thing of the past using BEER BRO®.



Figure 1 : BEER BRO® integration fixation to a lautering tank in a brewery

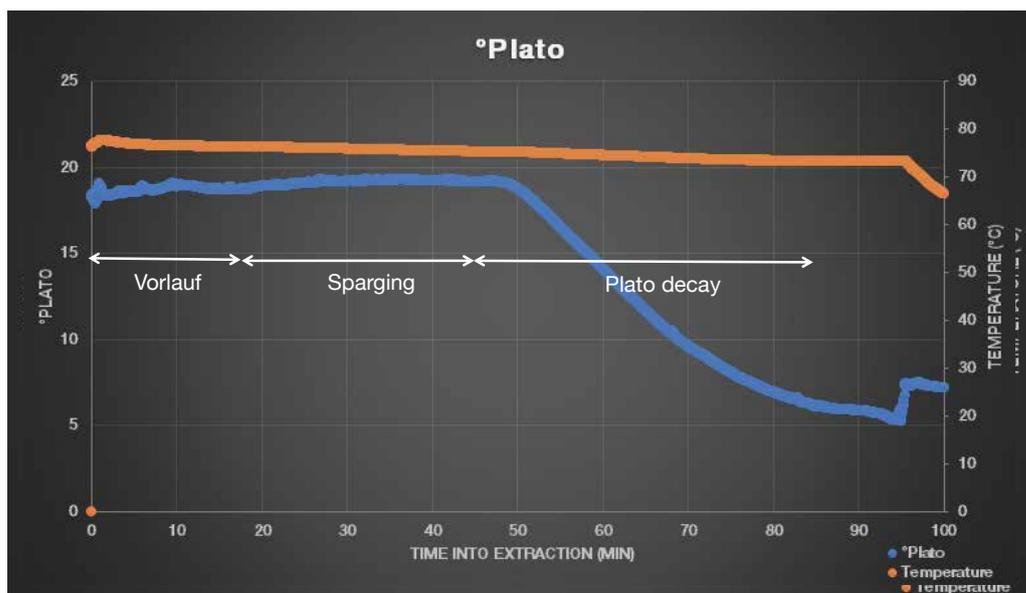


Figure 2: Inline measurement of °Plato during wort extraction using a BEER BRO®



Don't wait any longer to get a better view of your lautering operation, contact us sales@avenisense.com