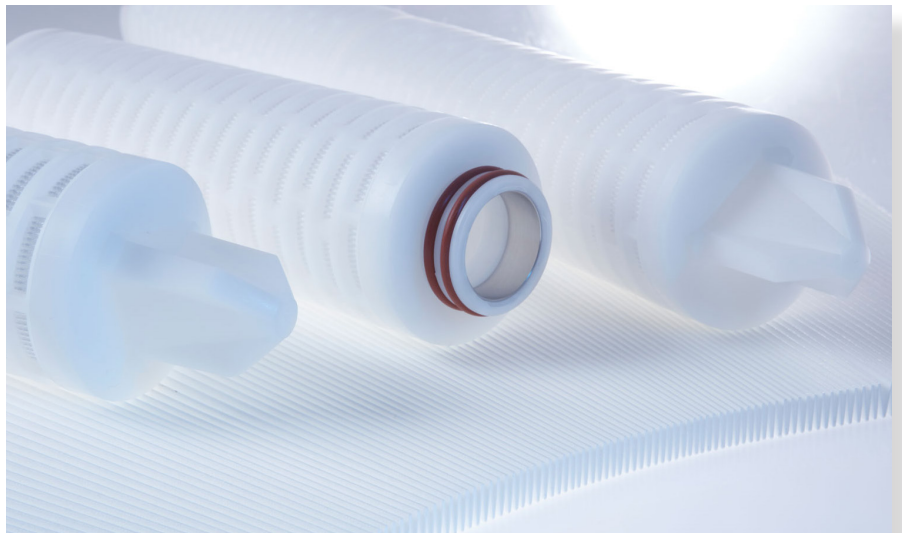


# Customer Case Study

Exceeding brewers' expectations in trap filtration applications

## Customer

One of the largest international breweries in Mexico was looking to expand their production facilities as efficiently as possible.



## Specification

The brewer had planned to increase their production from 500,000 hl to 600,000 hl per month. As part of the project, they wanted to investigate the potential of increasing production without the additional investment and increasing the capacity of their existing trap filtration process.

## Requirements

The brewery had 3 x DE powder filters and each powder filter had its own trap filter stage on the line immediately downstream. Parker organized initial consultation and technical assessment sessions with the brewer in order to establish their expectations and identify how the existing filters from an alternative supplier were performing. This was important to help get a clear understanding of the customer's current process.

Parker chose the largest of the brewer's filter lines for conducting the trial, a 61 round housing running at 600-650hl/hr. The line was perfectly suited to the trial as it had telemetry monitoring equipment capable of measuring and recording flow rate, differential pressure across the filter stage and total volume of beer filtered. The line also had deaerated water backwash capability, which Parker's PEPLYN HA filters have been specifically designed and constructed to perform with.

Technical assessment identified that the current supplier's filters were achieving approximately 2 – 6 weeks lifetime, with an annual average recorded at 20 days continual use. This became the target to exceed in the full-scale trials. 10µm PEPLYN HA filters from Parker were previously qualified to provide the correct level of filtration in the application, giving full yeast retention and beer with a turbidity of <50 ASBC<sup>1</sup>. A detailed trial protocol was produced by Parker's team of technical experts following the review and was presented back to the brewer in a separate follow-up meeting for agreement. The trial involved regular visits to the brewery and input was taken from the operators dealing with this particular line.



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<sup>1</sup>. ASBC stands for the American Society for Brewing Chemists. In this context, it is a measure of turbidity (cloudiness) of the beer. 69ASBC = 1EBC.

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## Parker Solution

Parker succeeded in meeting and exceeding the brewer's expectations.

The first set of 10 µm PEPLYN HA trap filters was installed and the trial began. The cartridges remained in service for 4 months when they were unfortunately removed to comply with a site audit. At this time, the filters were still operating at low differential pressure and the quality of filtrate was within specification.

Taking the relative pricing of the filters into account, this trial demonstrated a >30% cost saving on cost of filtration for the brewer. As the filters lasted approximately 4 times longer before change-out, operational benefits were also returned by Parker's PEPLYN HA such as; less operator input, lower risk of downstream contamination and decreased wastage. Both objectives of the trial were therefore achieved.

During the PEPLYN HA trial on the customer's line, an additional supplier's filter cartridges were also investigated by the brewer on another of their lines. These filters were rejected as the life time to blockage was even lower than the original supplier's offering.

This trial highlighted to the brewer, the superior performance of Parker's PEPLYN HA filters as well as the importance of working with a filter supplier who truly understands their process, allowing them to analyze and optimize the performance of their filtration processes.



**This trial demonstrated a >30% cost saving on cost of filtration for the brewer. The filters lasted approximately 4 times longer before change-out.**



To find out more about Parker Bioscience Filtration, visit [www.Parker.com/Bioscience](http://www.Parker.com/Bioscience).



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