Gusmer Enterprises, Inc.®

Total Costs of Filtration

Optimzing all of the costs around the filtration process, not just filter spend, is critical to overall process economics. Gusmer Enterprises works with breweries to optimize their Total Costs of Filtration.

What are the Total Costs of Filtration?

The Total Costs of Filtration include all costs around the process step of final bottling filtration. This does not only include the filter purchase costs. It also takes into consideration labor, beer lost, bottling down time and so forth. All of these costs must be taken into account when evaluating a filter's performance to maximize process economics.

What should be included in the Total Costs of Filtration?

Filter purchase costs including freight, wine lost or downgraded, operator labor, bottling line downtime and utilities, cleaning and sanitation water and chemicals, sewage and water treatment costs, the costs of heating cleaning and/or sanitation chemicals, missing delivery schedules, and quality holds or destroyed product are some of the most important costs.

How does filter throughput affect filter purchase costs?

Filter throughput is the most important metric of a filtration process. Total throughout drives not only the filter purchase costs, but also many other aspects of the Total Costs of Filtration. If a high quality filter achieves 30% greater throughput, then 30% fewer cartridges will need to be purchased over time. If a lower quality cartridge is 10% less expensive in this scenario, then the overall filter purchase costs will

be about 20% less with a higher quality, higher throughput cartridge. Higher throughout also means there are fewer change-outs, less premature filter plugging, less bottling down time, fewer cleaning and/or sanitation cycles, and so forth. This further lowers the Total Costs of Filtration.

How significant are the non-filter costs?

Non-filter purchase costs associated with the filtration process are usually many times more expensive than the actual filter purchase costs. Keeping in mind that the average filter cost is only $0.0008 per bottle - sterile filtration is one of the most cost effective processes in a winery. It does not take much wine lost or labor costs associated with poor filter performance to overtake the filter purchase costs.

How is product quality factored in?

Product holds due to filter failure or product dumped after a hold is a major factor. While it may not occur often, a single major quality incident due to a poorer quality filter may equal many years of filter purchase costs.

EMD Millipore's Vitipore II Plus final membrane cartridge paired with a Bevigard M prefiltration cartridge offers the industry's highest gallons throughput per cartridge. This allows wineries to achieve the best Total Costs of Filtration and operate the most efficient process. Please contact your local Gusmer Enterprises representative to find out how we can help you optimize your total costs of filtration.

**Vitipore II, Vitipore II Plus and Bevigard M are registered trademarks of Merck KGaA, Darmstadt, Germany.*

Gusmer Enterprises, Inc.®

81 M Street
Fresno, CA 93721
Tel: 559-485-2692
Fax: 559-485-4254

640-D Airpark Rd.
Napa, CA 94558
Tel: 707-224-7903
Fax: 707-255-2019

1165 Globe Ave.
Mountainside, NJ 07092
Tel: 908-301-1811
Fax: 908-301-1812

1401 Ware St.
Waupaca, WI 54981
Tel: 715-258-5525
Fax: 715-258-8488