FermCap™ increases fermenter capacity, enhances hop utilization and improves beer foam stability

FermCap™ is primarily used during the fermentation step of the brewing process, but can also be used in the copper to reduce expensive wort losses due to over boiling and to improve on subsequent brewhouse and tank cleaning costs.

FermCap™ is classified as a 'process aid' because it is completely removed from the beer under normal processing conditions.

The dose rate is dependent on wort composition, gravity and fermentation conditions.

Why foam is inconvenient:

- Excessive foaming in wort boiling and/or fermentation reduces process and cost efficiencies
- Coating of vessels - more rigorous CIP needed
- Excessive foaming during process can greatly reduce cleaning efficiencies
- Inaccurate readings from control and measuring equipment such as temperature, level and density controllers
- Negative impact on CO_2 purity / recovery

FermCap™ Benefits:

- Increases FV capacity – up to 7-15%
- Enhances hop (alpha-acid) utilization – up to 10%
- Reduces expensive wort losses
- Increases speed of fermentation
- Improves beer foam stability
- Maximises CO_2 recovery
- No special cleaning required for cross flow filtration (ceramic) membranes
- No reduction on flux rates with cross flow filtration (ceramic) membranes

NON-GMO, KOSHER, HALAL, SUITABLE FOR VEGETARIANS AND VEGANS

Better for the Planet

FermCap™ can deliver an 8% energy savings and 19% reduction in CO_2 emissions equivalent to ~1,362 $mtCO_2e$ per annum in a 1Mhl brewery.

For further information download our technical paper: **https://www.kerry.com/insights/resources/brewing-sustainably**

Better for your Bottom Line

FermCap™ has been shown to enable cost savings of up to €0.09 per hectolitre beer.

FermCap™ Production Trial - Asia

	Fermenter BU	Final pack BU	Nibem (sec)	DMS	Diacetyl	Filtration	Haze
Control	13.1	8.5	206	n.d.	n.d.	n.d.	n.d.
Trial FermCap™	15.0	10	218	n.d.	n.d.	n.d.	n.d.

n.d. = no difference detected, BU = Bitterness Units, DMS = dimehtyl sulphide

FermCap™ delivered an increase of 1.5 BU and an increase of 12 sec (Nibem 30).

CAPEX Avoidance - Customer Case Study

Challenge:

A global brewer in Latin America experienced significant capacity challenges due to a rapid growth in demand in local markets.

Solution:

FermCap™ was used to increase the existing fermenter capacity through the prevention of foam formation. When used in the copper it also reduced expensive wort losses due to over boiling and reduced subsequent brewhouse and tank cleaning costs.

Result:

- Increased fermenter capacity by 11%
- Improved hop (alpha-acid) utilisation by 7%
- Improved beer foam
- Increased sustainability
- Increased output without CAPEX
- Saved ~€73/'000 hl based on the improvement in hop utilisation

The impact of using FermCap™ meant they could meet increased demand with their existing plant setup and avoid expensive capex.

The brewer is now looking at introducing FermCap™ at additional plants around the world in order to achieve further operational efficiencies.

FermCap™ Production Trial - Africa

Parameter	Beer Specification	Control	Trial FermCap™
Alcohol (%v/v)	5.0 - 5.2	5.02	5.12
Colour (EBC)	5.0 - 8.0	6.23	6.15
pH	4.0 - 4.4	4.23	4.21
CO_2 (g/l)	5.6 - 6.0	5.7	5.8
Turbidity (EBC)	≤ 2.0	0.67	0.65
Nibem 30 mm(secs)	> 200	269	285
Bitterness (IBU)	20 - 24	20.0	22.9

FermCap™ delivered an increase of 2.9 BU and an increase of 16 sec (Nibem 30).

Kerry has been providing brewing solutions for over 50 years, a business founded by a master brewer.

Our enzymologists and many of our brewing researchers, are trained as master brewers because we know that to develop the optimum solution, you have to understand all aspects of the brewing process.

We work with customers in over 80 countries to develop solutions that meet their most demanding challenges.

Kerry.com

For further information, please contact your local sales representative.