WATSON MARLOW Fluid Technology Solutions

Elevate your brewing processes

Reliable pumps and hoses for consistent, high-quality brewing

In brewing, damaged yeast or inaccurate dosing of additives results in inconsistent beer quality while unplanned downtime due to equipment failures, long harvest lines or ineffective clean-in-place (CIP) drives up costs.

Our peristaltic and sinusoidal pumps, as well as long-life hoses, enable breweries to overcome these challenges by:

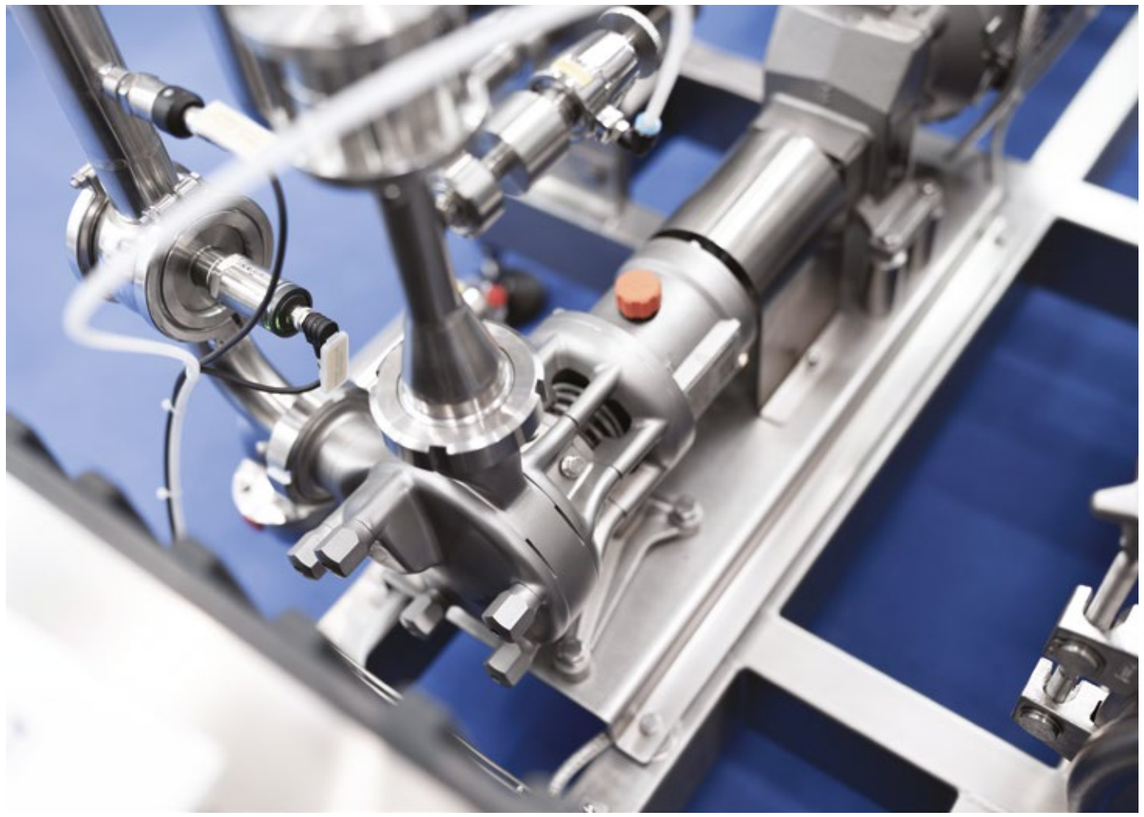
- Maintaining consistent beer quality
- Eliminating the risk of introducing oxygen to the brewing process
- Maximising productivity
- Reducing product waste, energy consumption and water use

From gently handling yeast to accurately dosing additives, pumping abrasive diatomaceous earth, or metering water treatment chemicals, our solutions ensure that product is transferred or dosed accurately and hygienically without damage.

Faster yeast cropping time

With high suction capability, **Certa Sine® pumps** from MasoSine and **Bredel hose pumps** can easily handle a wide range of viscosities without compromising performance.

Certa pumps are easy to clean and perfect for handling viscous products or fluids (1 cP – 8 million cP). Their high suction capability enables yeast to be transferred via long cropping lines, with up to 50% faster yeast harvesting. The sinusoidal rotor ensures an almost pulse-free flow, significantly reducing CO_2 breakout and maintaining a stable, laminar transfer which is ideal for multiple production levels, or long cropping lines.



BrewDog

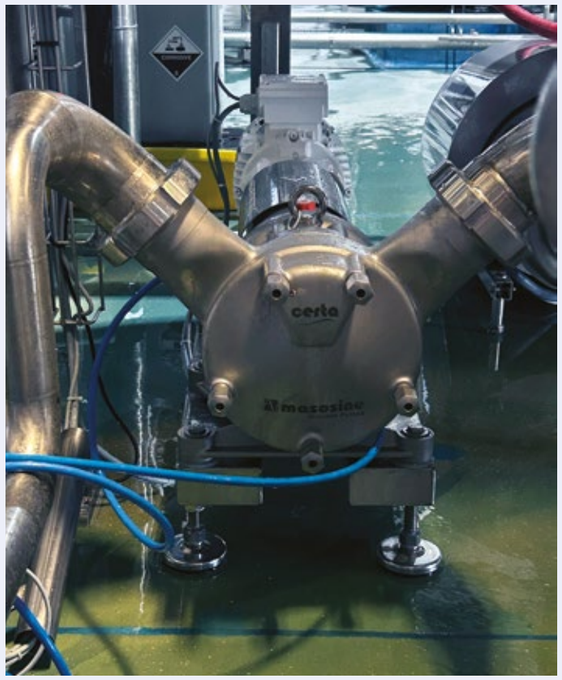
CASE STUDY

BrewDog boosts efficiency and yeast quality with Certa Sine pumps

As part of a cellar upgrade project in 2025, BrewDog replaced traditional lobe pumps with MasoSine Certa Sine 300 pumps. The switch was driven by the need to protect yeast viability and enhance efficiency during two key stages of the brewing process: yeast cropping and yeast pitching.

Certa's sinusoidal technology offers gentle, low-shear pumping that preserves yeast cell integrity. This allows BrewDog to harvest yeast up to ten times without compromising quality—reducing costs and ensuring consistent beer. The pump's precise flow control and high suction capability are particularly valuable given the brewery's long cropping and pitching lines, which span over 75 metres.

The Certa pump handles 45 – 50 hL per crop over approximately five hours and is delivering shorter transfer times and simplified clean-in-place (CIP) for BrewDog.



"The main reason we got the Certa pumps was for better handling of the yeast, and also we now have one Certa pump that does the work of two lobe pumps we previously used for cropping. The gentle handling is vital. The quality of beer would be compromised by a pump that damages the yeast, and we would be left with poor quality beer. We can harvest the yeast ten times with the Certa pump due to its gentle handling."

James Fairfoul,
Technical Brewer at BrewDog

Read full BrewDog case study here

Low-shear and versatile pumps

Bredel hose pumps have excellent suction so can be in a single position to draw from multiple tanks at varying distances. They also operate with a wide range of pipe sizes/lengths and viscosities without affecting performance, and eliminate the risk of oxygen contamination.

The Bredel CIP pump not only maximises hygiene and saves on energy consumption, it also meets the required CIP velocity of > 2m per second and extends hose life.

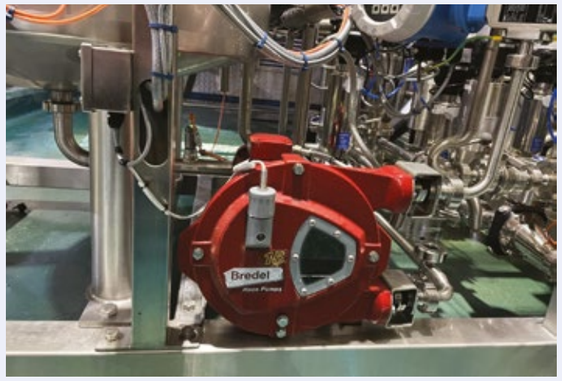
The Bredel CIP pump was designed with a new rotor to enable breweries to achieve the CIP cleaning velocity requirements of more than 2 m per second. Automatic retractable shoes for cleaning the pump element inside are specifically designed for CIP processes to allow the pump and rest of the system downstream to be cleaned at the correct fluid velocity. The Bredel CIP pump enables full pipeline-velocity cleaning without the need for bypass lines.

The Bredel CIP pump supports a range of dosing and transfer duties, including yeast handling, flavour and colour addition, diatomaceous earth (kieselguhr) dosing for filtration, and the application of PVPP (polyvinylpolypyrrolidone) and silica gel for stabilisation. The pump's ability to transfer abrasive or viscous media with 100% volumetric accuracy makes it especially well suited for these tasks.

Qdos® chemical metering pumps deliver the precision required for accurate dosing of tetra hop extract, while their low-shear action preserves the integrity of viscous hop extracts. Its fully contained fluid path eliminates sticky spills and its accuracy avoids costly over-dosing.

CASE STUDY

Bredel hose pumps handle yeast and beer at **St Austell Brewery**



St Austell Brewery has prevented disruptions and additional costs from damaged yeast by relying on Bredel hose pumps for dosing, transferring or harvesting shear-sensitive yeast and circulating beer, due to their gentle, low shear pumping action which preserves yeast integrity. This maintains a high quality of beer, reduces yeast costs, and minimises the generation of waste sludge.

St Austell Brewery, which produces award-winning pale ale Tribute and korev lager among other beers, uses three types of Bredel hose pumps in its production:

- Bredel 15: for yeast dosing and recirculation, and handling beer slurry in the bottling hall
- Bredel 25: for daily yeast dosing during production
- Bredel 50: for transferring beer to cask filling heads

"Most importantly the pumps are low shear. We want healthy yeast going into our beers and the gentle handling of the Bredel pumps makes sure this is the case. We can trust the Bredel pumps to handle yeast carefully. Damaged or roughly pumped yeast would result in increased costs, time lost, product waste, filtration issues, low yeast viability, and incomplete bottle conditioning."

Lee Walker, St Austell Group Engineering Development Manager

Read full St Austell case study here

Hygienic design, low maintenance

Our brewery pumps and hoses are hygienic by design. Robust chemical and temperature resistance ensures dependable CIP/SIP performance and long service life.

Other pump types with chambers or tight clearances create dead zones where residues accumulate and biofilm can develop. Our long-life pumps only have one wearing part to minimise maintenance downtime and costs.

The Aflex Hose range of PTFE-lined hose assemblies are ideal for breweries. Flexible, non-kink FaBLINE™ hoses provide a more robust and reliable solution than conventional hoses for transferring beer or additives to and from the carbonator, as well as feeding beer to bottling, canning or kegging lines at high pressure. FaBLINE's smooth bore construction eliminates any risk of product entrapment, bacterial build up or cross contamination, while its non adsorbing PTFE liner ensures a consistently clean, hygienic flow path.

Dr Gab's

CASE STUDY

Dr. Gab's benefits from longer hose life with Aflex FaBLINE

FaBLINE, with its innovative PTFE liner and no adhesives, has given Dr. Gab's a significant increase in operating time, reliability and process safety, compared to the rubber hoses previously used in the Switzerland-based brewery.

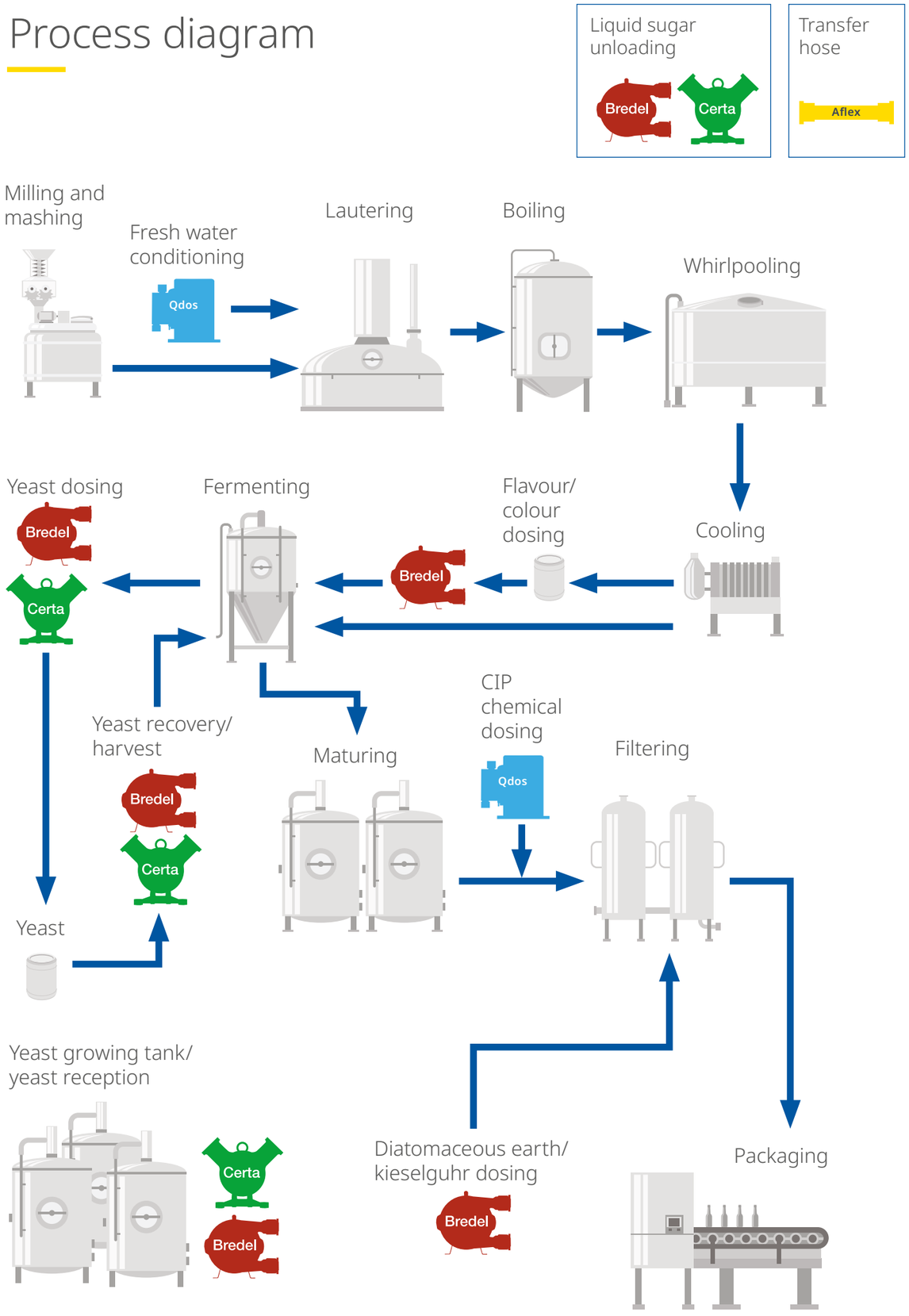
With the previously used rubber hoses, Dr. Gab's experienced defective and burst hoses which resulted in excessive cleaning and loss of product. Dr. Gab's has increasingly relied on the new FaBLINE hoses from Aflex Hose for transferring the beer to and from the carbonator.

"Unlike the old rubber hoses, which usually only lasted a few months, there have been no problems with Aflex—no hose ruptures or burst hoses."

Reto Engler
Co-Founder and Production Director at Dr. Gab's

Read full Dr. Gab's case study here

Process diagram



Less power and water consumption

Due to its one shaft, one seal design, Certa is considerably more energy efficient than other positive displacement pumps and uses up to 50% less power. Their sinusoidal rotor design provides high efficiency at high viscosities, reducing power consumption.

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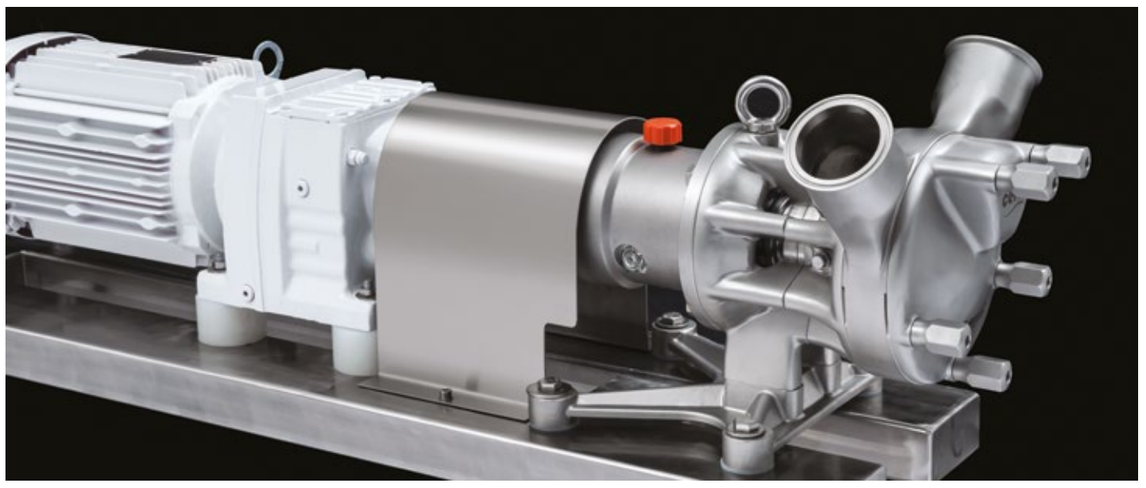

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PROCESS INDUSTRIES HYGIENIC SOLUTIONS

WATSON MARLOW Pumps

WATSON MARLOW Tubing

Flexicon Liquid Filling

bio PURE

ASEPCO

Bredel Hose Pumps

masosine Process Pumps

AFLEX HOSE

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