

www.parker.com/dhbeer



Brewing Filtration

An Overview Guide



ENGINEERING YOUR SUCCESS.



At Parker domnick hunter we recognise that brewers of all sizes are faced with many challenges.

Producing quality beer, at the lowest cost.

Producing beer that does not change in taste, aroma or visual appeal.

Remaining flexible, adapting to ever changing consumer demands.



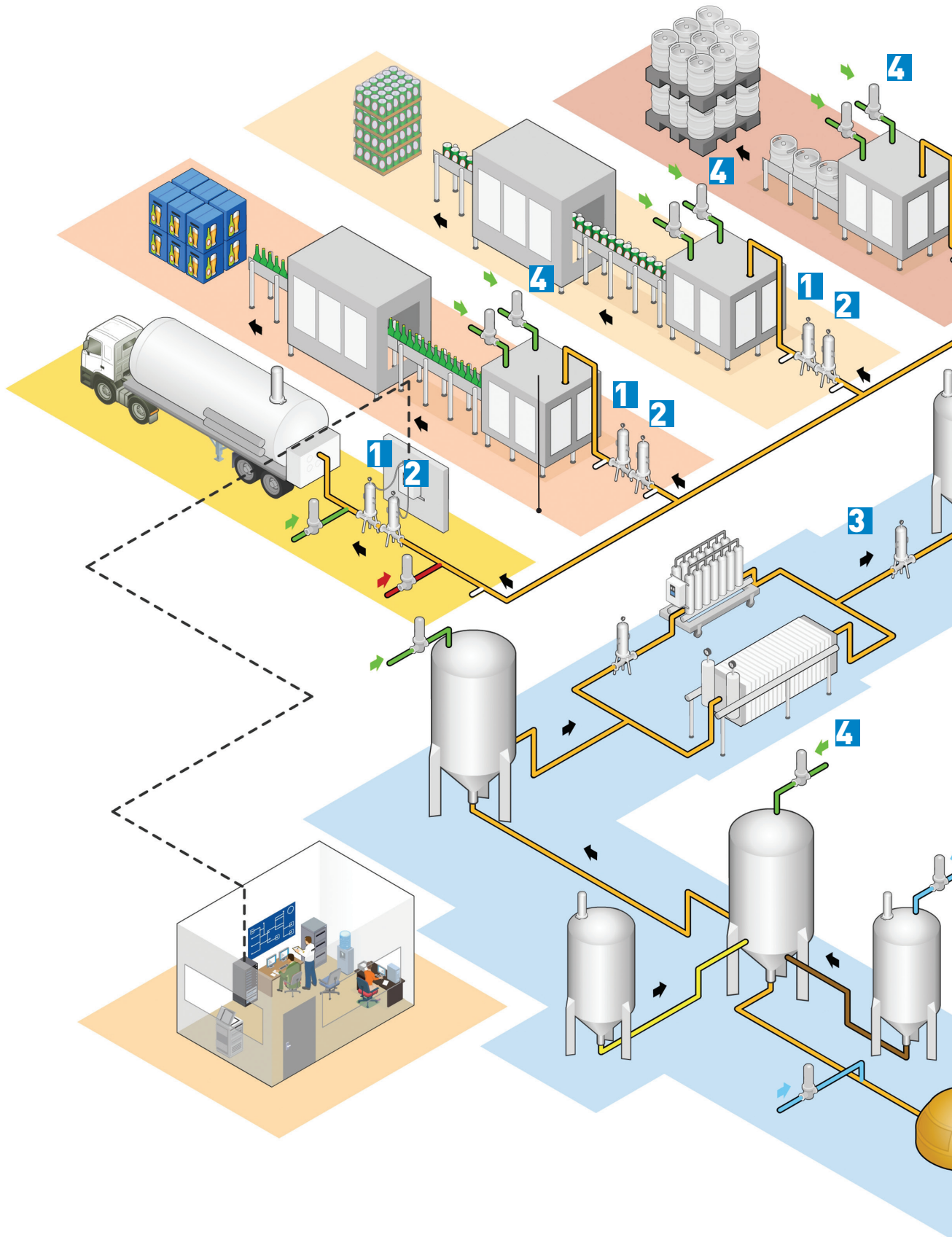


The Perfect Partner

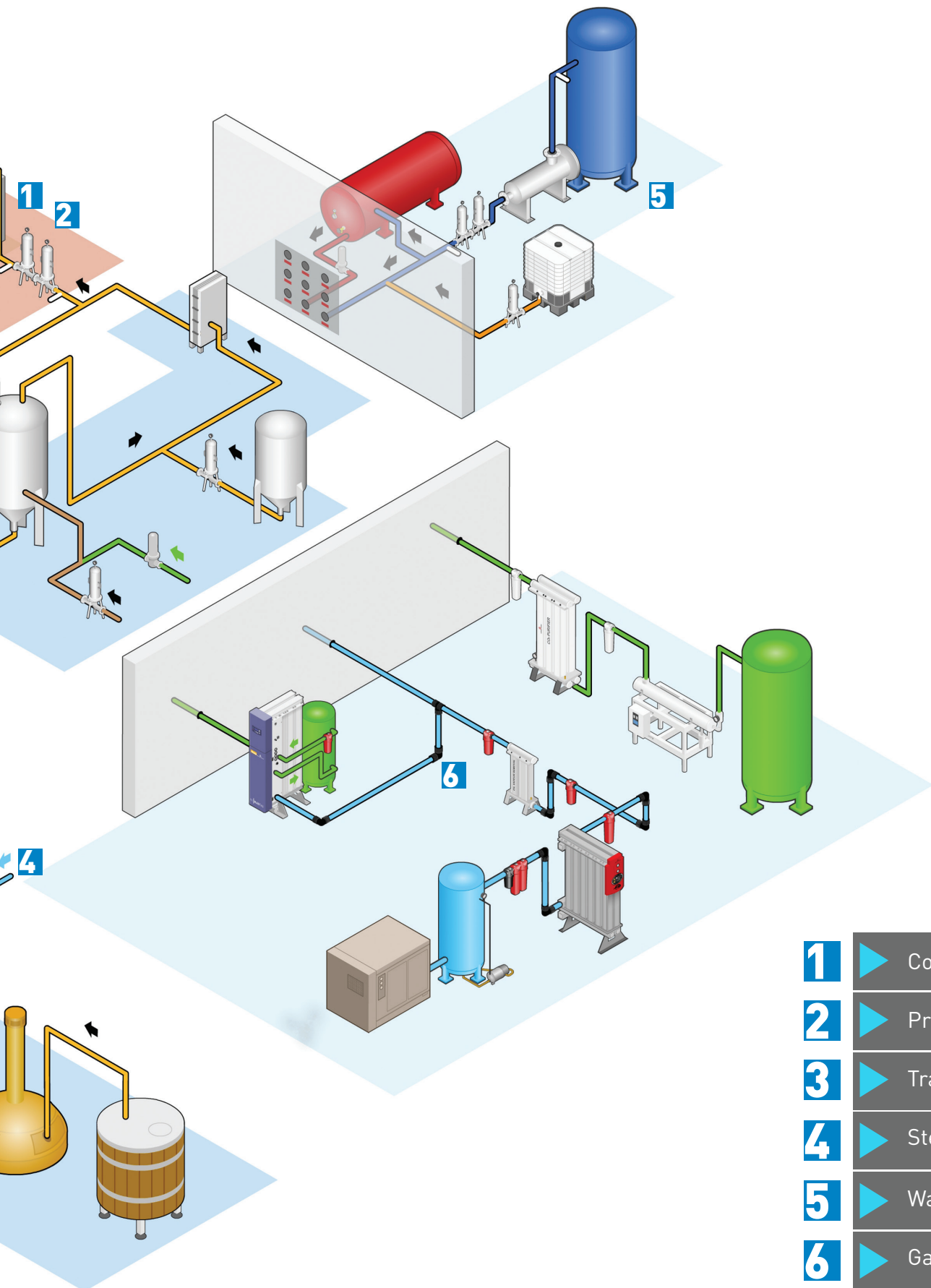
Parker domnick hunter specialise in microfiltration solutions for the brewing industry. With a dedicated range of filtration cartridges, housings and support packages, Parker domnick hunter are the perfect partner.

Protecting beer quality at the lowest cost.

As a customer of Parker domnick hunter, you have access to leading technologies to control specific contamination hazards, enabling you to protect the quality of your beer at the lowest cost.

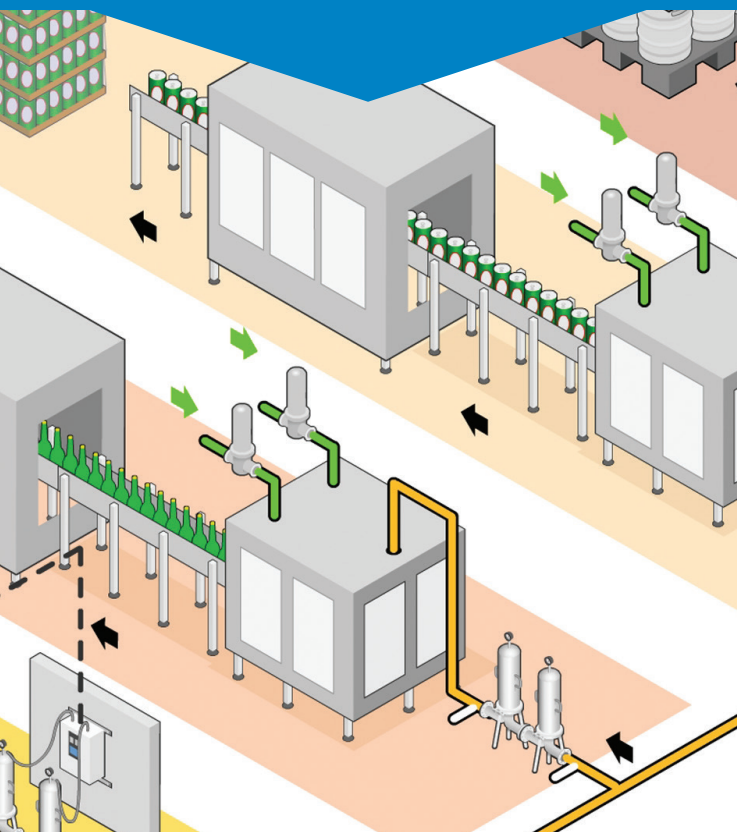


With over 50 years of experience supporting leading brands, Parker domnick hunter is the perfect partner for microfiltration solutions in your brewery.



Excellence in cold stabilisation

Together, we can significantly reduce the cost of microbial stabilisation, whilst protecting the sensory characteristics of your beer.



Cold stabilisation refers to the microfiltration of beer to remove any spoilage microorganisms before it is packaged.

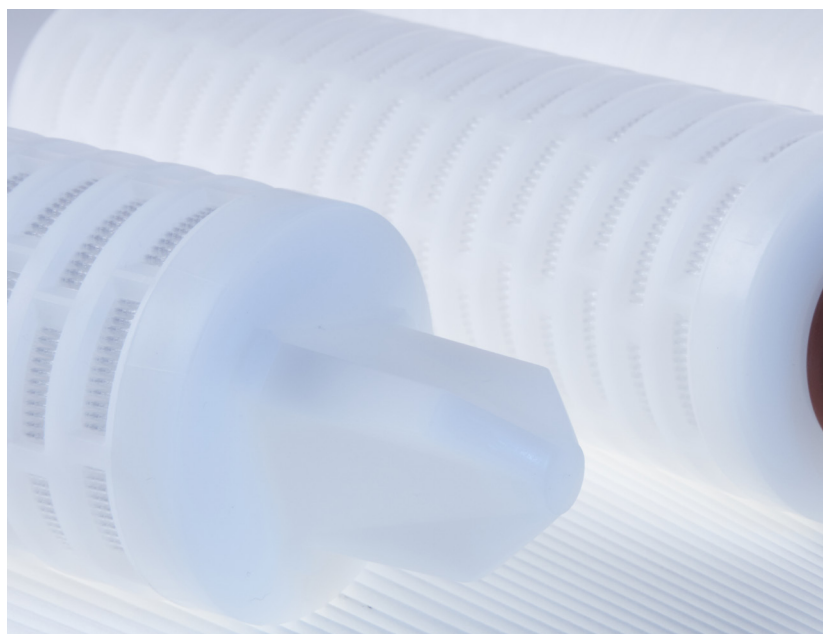
There are a number of different spoilage organisms which must be removed from beer to prevent spoilage and to maintain quality for a long shelf-life. More frequently, brewers are turning to cold stabilisation, as an alternative to pasteurisation, to ensure longer shelf-life of their packaged beer.

Parker domnick hunter offer a range of BEVPOR membrane filters to allow brewers to produce fresh tasting, packaged beer with a stable shelf-life as efficiently as possible.

BEVPOR BR

The new BEVPOR BR filters offer the optimum solution to microbial stabilisation as the unique PES membrane has been validated to retain key spoilage organisms, whilst offering the longest service life in beer filtration.

- Absolute elimination of beer spoilage organisms.
- Longest service life and lowest cost of operation.
- Easily tested in-situ to provide guarantee and control of filter performance.



To find out more about our products for cold stabilisation visit:

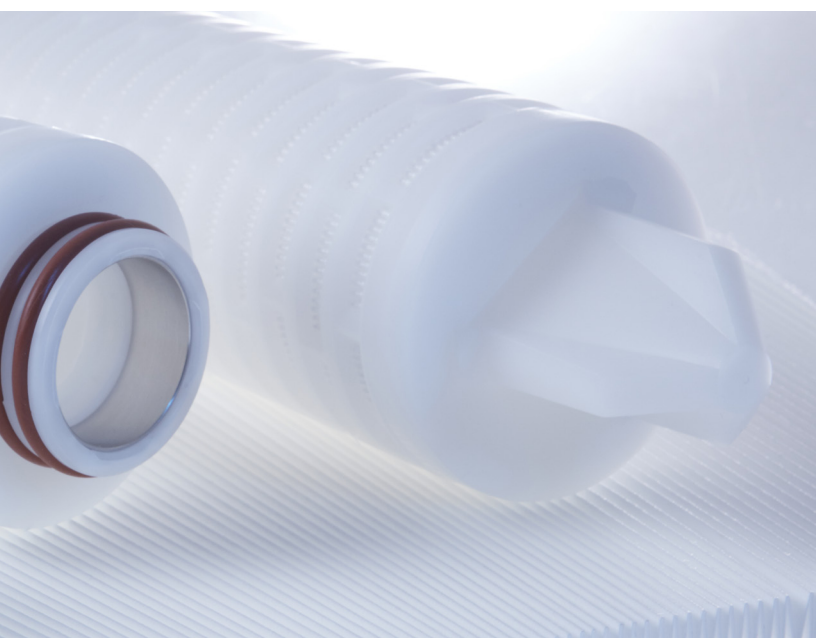
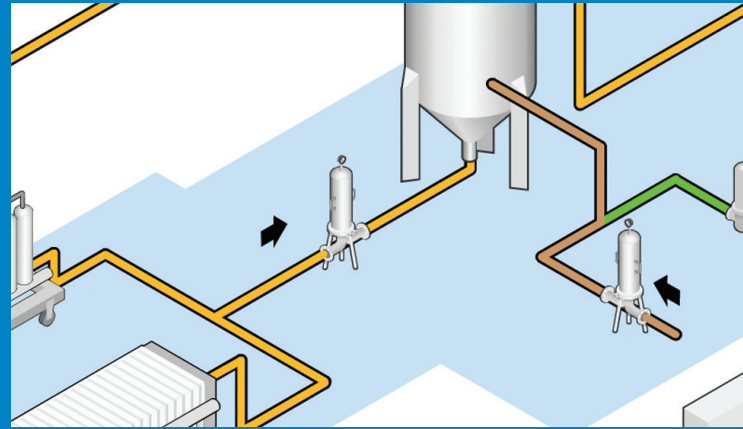
www.parker.com/ColdStabilisation

www.parker.com/BevpORBR

Protecting the quality of beer in the bright beer tank is absolutely key to achieve efficient packaging operations.

Trap filtration refers to the microfiltration of beer after primary clarification and stabilisation processes in order to remove particulate (DE / Kieselguhr, PVPP) and improve haze prior to packaging.

Parker domnick hunter have worked hand in hand with brewers to developed a range of trap filters and processes to control and protect the quality of beer entering the bright beer tank as efficiently as possible.



To find out more about our products for trap filtration visit:

www.parker.com/TrapFiltration

www.parker.com/PreporNG

PEPLYN HA

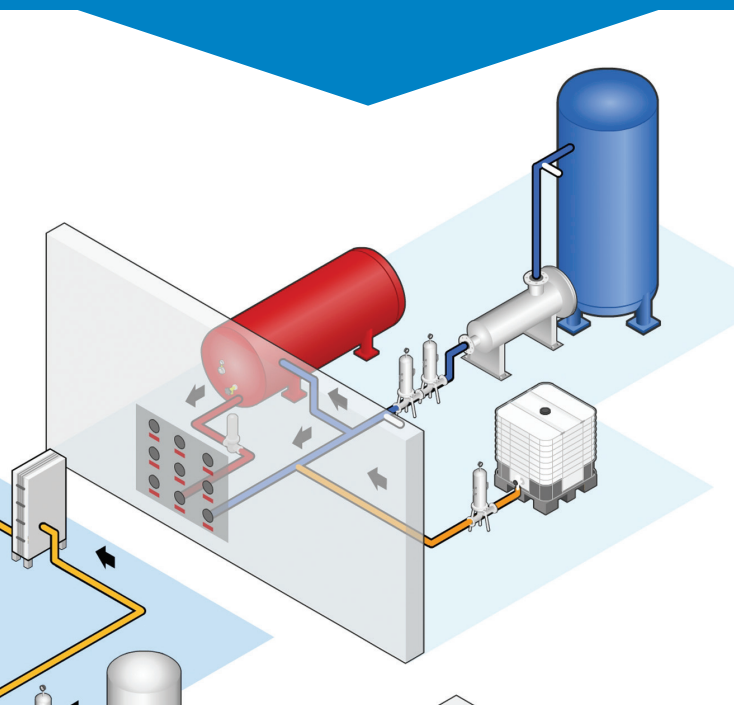
The PEPLYN HA range of trap filters has been developed to provide absolute retention to DE / Kieselguhr particles, whilst being optimised for repeated regeneration with backwash operations.

PREPOR NG

The PREPOR NG range of trap filters has been developed where brewers not only require zero particulate, but also full yeast retention and bacteria reduction.

- Absolute retention down to sub-micron particulate.
- Full yeast retention and bacterial reduction.
- Reduced change-out with optimised backwash regeneration.

Control over water quality is critical for consistent, sustainable beer quality and efficient production operations.



Water quality from typical sources such as bore holes and town water can vary with respect to particulate, ion content and microbiological contamination. These variances can influence beer quality, both in the brewhouse and in packaging operations. As such, care and attention must be paid to eliminate unwanted contamination from the water source to protect beer character and maximise brewhouse operations.

From point-of-entry bulk clarification down to sterilisation, Parker domnick hunter offer a range of filtration processes to allow brewers to control water quality with maximum efficiency.

PARMAX-R

PARMAX-R filters provide the optimum solution to high flow rate / high capacity water filtration requirements. The large format, pleated construction reduces the system size and footprint required and reduces the frequency of change-outs due to blockage.

- Absolute, particle retention down to sub-micron levels.
- Longest service life and lowest cost of operation.
- Easily tested in-situ to provide guarantee and control of filter performance.



To find out more about our products for water filtration visit:

www.parker.com/dhWater

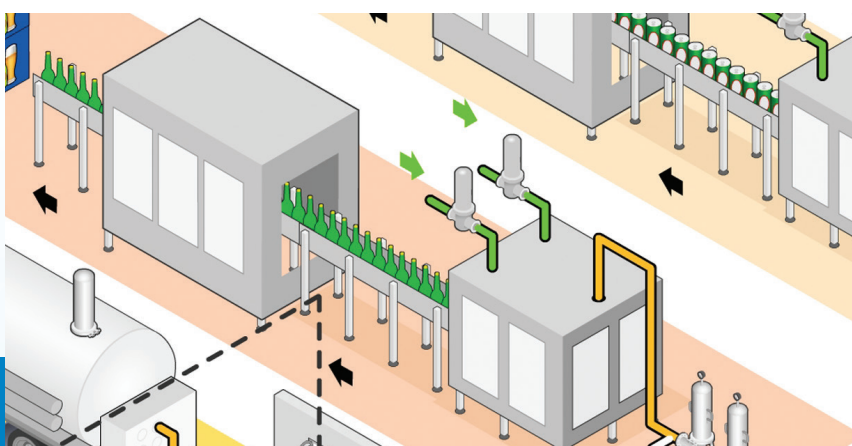
www.parker.com/ParmaxR

Parker domnick hunter offers a range of gas filtration solutions to protect beer quality by eliminating contamination from critical product contact gases.

HIGH FLOW BIO-X

The HIGH FLOW BIO-X range of sterile gas filters allows brewers and packaging managers to protect beer quality by eliminating microbiological contamination from product contact gases used in tank venting and packaging operations. The innovative construction provides unrivalled flow rates to reduce the cartridge size required for each application, returning maximum operational efficiency.

- Elimination of compressor oil, water and microbiological hazards from process gases.
- Steam purification to culinary grade standards.
- CO₂ chemical and microbiological purification.
- Rapid integrity testing equipment available.



Just like any fluid, gases can carry contamination which could compromise process operations, leading to reduced efficiency, or impacting beer quality. To maintain hygienic standards, these contamination hazards need to be understood and controlled with filtration.

Parker domnick hunter are experts in gas treatment processes and offer a range of solutions to control contaminants such as water, compressor oil or microbiological contamination from product contact gases.

To find out more about our products for gas filtration visit:

www.parker.com/dhGas

www.parker.com/HighFlowBioX

Excellence in technical support



Parker domnick hunter have a global network of scientists and engineers available to support filtration operations in the brewery.

As beer is a sensitive product containing a complex mix of natural components, a high degree of attention over the stabilisation systems is required in order to produce beer to correct specification and to achieve the correct shelf-life for the customer.

In order to maximise brewhouse operations and produce fresh tasting, stable beer which preserves its character once packaged, care and attention must be paid not only to the filtration systems, but also the support in operations such as cleaning, disinfecting and integrity testing practices.

From system design, commissioning, operator training and on-going maintenance / support, Parker domnick hunter provide a range of technical support services aimed at maximising brewery efficiency. With expert Scientists and Engineers and access to leading analytical laboratories, Parker domnick hunter are the perfect partner for filtration support.




- ➔ Expert filtration guidance and support.
- ➔ Rapid response to technical enquiries.
- ➔ On-site deployment for technical analysis.
- ➔ System design and best practice recommendations.
- ➔ System audits and process optimisation.
- ➔ Technical training.
- ➔ Used product analysis.

Technical Support
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The complete solution

Parker domnick hunter specialises in filtration and separation technologies for brewing. Below is a selection of products designed to protect the quality of your beer at the lowest cost.




Cold stabilisation

BEVPOR BR	BEVPOR PH	BEVPOR PS
Polyethersulphone 0.45 micron	Polyethersulphone 0.45, 0.65 micron	Polyethersulphone 0.45, 0.65 micron
<ul style="list-style-type: none"> Validated microbial retention for effective stabilisation Optimised PES membrane structure High filtration area - 0.8m² per 10" Integral prefilter layer 	<ul style="list-style-type: none"> Validated microbial retention for effective stabilisation High filtration area - 0.8m² per 10" Integral prefilter layer 	<ul style="list-style-type: none"> Validated microbial retention for effective stabilisation 0.6m² filtration area per 10" 






Pre-stabilisation, membrane protection and BBT protection

PREPOR PP	PREPOR NG	PEPLYN HA
Polypropylene 0.6 - 1.0 micron	Polypropylene 0.5 - 1.0 micron	Polypropylene 1.0 - 20 micron
<ul style="list-style-type: none"> Yeast and bacterial reduction Haze reduction Strong, pleated polypropylene construction for backwash and chemical CIP 	<ul style="list-style-type: none"> Validated yeast removal and bacterial reduction Haze reduction Graded density construction for increased retention and throughput Strong, pleated polypropylene construction for backwash and chemical CIP 	<ul style="list-style-type: none"> Specifically designed for back wash regeneration 




Water treatment

PARMAX-R	PROPLEAT PP	BEVPOR MS
Polypropylene 1.0 - 40 microns	Polypropylene 1.0 - 10 microns	Polyethersulphone 0.2 micron
<ul style="list-style-type: none"> Large diameter filtration for high flow rates and high capacity Absolute retention ratings for critical filtration 	<ul style="list-style-type: none"> Economical solution for particle removal Strong, robust construction Can be cleaned and sterilised in-situ 	<ul style="list-style-type: none"> Validated microbial removal against waterborne bacteria Integrity testable 




Air / gas filtration

HIGH FLOW BIO-X	HIGH FLOW TETPOR II	OIL-X
PTFE Impregnated glass fibre - 0.01 micron sterilising	Polypropylene expanded PTFE 0.01 - 0.2 micron	High efficiency compressed air filters
<ul style="list-style-type: none"> Fully retentive to aerosol bacteria 94% voids volume PTFE impregnated glass fibre Exceptional flow rates with low pressure drops Integrity testable by aerosol challenge 	<ul style="list-style-type: none"> Assured biosecurity with absolute rated filtration High flow rates with low pressure drops High voids volume PTFE membrane Fully integrity testable 	<ul style="list-style-type: none"> The most energy efficient filters available High quality ISO8573.1:2001 compressed air Running costs that start low and stay low 
PC02	NITROSOURCE	
Carbon dioxide purifier	Nitrogen gas generator	
<ul style="list-style-type: none"> Ensures compliance with quality guidelines published by the International Society for Beverage Technologies (ISBT) Protects drinks manufacturing processes from vapour impurities Easy maintenance 	<ul style="list-style-type: none"> Energy saving technology Lower cost maintenance and extensive working life Unique gas quality control system Remote monitoring 	

Housings

VSH	HBA	HSL
Beverage filter housing	Beverage filter housing	Beverage filter housing
<ul style="list-style-type: none"> Multi-element sanitary liquid housing Designed specifically for the food and beverage industry High quality crevice free construction Available for 3 to 30 round filters 	<ul style="list-style-type: none"> Flow efficient range of air / gas housing Designed to maximize flow and minimize pressure drop Designed specifically for the food and beverage industry 	<ul style="list-style-type: none"> Single-element sanitary liquid housing Designed specifically for the food and beverage industry Sanitary vent, tri-clamp connections as standard Sanitary tri-clamp body closure as standard 

Integrity test equipment

Valairdata 3	BEVCHECK	BEVCHECK PLUS
Gas filter test	Liquid filter test	Liquid filter test
<ul style="list-style-type: none"> Aerosol challenge testing Integrity testing of gas filters 	<ul style="list-style-type: none"> Pressure decay and diffusional flow testing Hand held portability with rechargeable battery option Flexible: suitable for use with compressed air or nitrogen 	<ul style="list-style-type: none"> Pressure decay and diffusional flow testing Convenient built-in printer provides printed test report Flexible: suitable for use with compressed air or nitrogen 

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