

Wine Industry

A guide to Products and Services

aerospace climate control electromechanical filtration

fluid & gas handling hydraulics pneumatics process control sealing & shielding



Focused on Adding Value to Your Business

Improving quality and control

Supported by innovative products, state-of-the-art technical facilities and a specialized international team, Parker domnick hunter's capability is based on understanding the specific needs of your business and providing a total solution.

Delivering value from vine to bottle

The Purecare programme represents a joint approach to wine processing to review and manage your entire process. The Purecare package incorporates up-front consultation & assessment to establish your overall goals as well as a range of after sales packages that ensure the Parker domnick hunter solution is working at maximum efficiency. Purecare takes into account all aspects that affect your process, making small changes that can lead to big results.

Purity that goes beyond filtration

Developing solutions that support quality in every aspect of your process makes us a truly unique supplier who can deliver complete purification of your liquid and gas applications enabling you to have confidence and assurance in the quality of your final product.

Global support

Part of the \$10 billion Parker Hannifin corporation, we have subsidiaries in 25 countries worldwide with nine manufacturing locations, so we can offer you truly global support with a local perspective and expertise.

Committed to process improvements

Our goal is to continually improve your productivity, reduce your process costs and ensure the safety of your final product. Parker domnick hunter commits to your goals through Purecare, providing total confidence by way of up-front consultation and aftersales support packages:

- Continued investment in research & technology
- Application driven approach to new products
- Market & geographical experience leading to tailored solutions
- Global network providing technical, service and sales support
- Excellent reputation gained through working with the worlds leading wine producers
- Highly skilled, experienced and trained employees

Remote Monitoring

Web based systems allowing real time monitoring of filter performance.

- Monitor system parameters
- Highlights problems & unexpected changes
- Both customer and Parker domnick hunter support team monitor performance





Integrity testing of sterile grade filters is a fundamental requirement of critical process applications ensuring the biological safety, quality and shelf-life of the product that reaches the customer. Parker domnick hunter provides a range of instruments suitable for beverage applications providing a test protocol that fits well into a HACCP framework.

- VALAIRDATA 3 Aerosol challenge of sterile air filters
- BEVCHECK PLUS Pressure decay testing of membrane filters



Clarification •



- PEPLYN range of liquid filters
- Polypropylene media
- Effective particulate removal • Available in large format diameters

Sterile Gas & Vent Filtration •



• TETPOR & BIO-X ranges of filters

- PTFE media
- Assured biosecurity

Pre-Stabilization •



- PREPOR range of prefilters
- Polypropylene media
- Clarification & spoilage reduction
- Extend life of membrane filters

Final Stabilization



- BEVPOR range of final filters
- PES membrane
- Removal of yeasts & spoilage organisms

Steam •



- Steam to meet culinary standards
- Protects equipment & downstream filters

Carbon



Extruded activated carbon filter Chlorine & odour removal

- Nitrogen Generation • Generate your own gas
- Consistent flow, pressure and purity
- Cost saving of up to 90% Improves safety
- Increases efficiency
- · Applications include:
- Pressure transfer
- Blanketing
- Purging
- Sparging
- Filling

Silt Density Index (SDI) Testing

Laboratory scale test used to determine the filterability of wine. Provides data that can be used for filter selection and sizing.

> An evaluation of suspended particles and colloids in the water, based on the rate of blockage of a test membrane. Samples are taken over a given period of time to provide an indication of the performance of various treatment stages and the effect on water quality due to seasonal variation.

- Disc trial carried out over 15 minutes
- Multiple samples taken

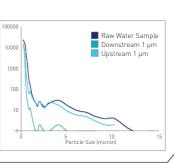
Filterability Index (FI) Assessment

• Periodic testing to monitor seasonal trends

Particle Size Analysis (PSA) Testing

PSA is a measurement of particle size distribution in water samples using a laser particle counter either on-site or in a laboratory environment. PSA can give an indication of the expected workload of a filter system.

• Helps identify the need for more effective prefiltration protecting downstream membranes



Compressed Air Purification

Direct and indirect contact between compressed air and wine may lead to oxidisation or contamination. BRC / BCAS code of practice for food / beverage grade compressed air protects wine manufacturers and bottlers. Parker domnick hunter as market leaders provide a complete solution that will remove a potential of 10 contaminants from up to 4 different sources.

- Water separators
- Coalescing filters
- Adsorption filters Refrigeration dryers
- Dust removal filters

CO₂ Polishing

The PCO2 system is designed as a quality incident protection unit acting as a point of use vapour 'polisher' and is proven to be effective at removing a wide range of potential CO₂ impurities, such as Benzene, Acetaldehyde & Hydrogen Sulphide.

Under HACCP principles, the quality of CO, used at the point of carbonation is defined as a Critical Control Point (CCP) and the installation of PCO2 system at this point will form part of a complete CO2 quality approach.

Chilling

Process cooling is regularly used within the winery for:

- Temperature regulation during fermentation
- Accelerate precipitation of tartrate crystals • Stabilisation of wine for storage

Parker Hiross has more than 30 years experience in the manufacturing of cooling systems and has a wide range of chillers for winery applications.

Products



BEVPOR

Final Stabilization

The BEVPOR PES range of filters from Parker domnick hunter ensures the microbial stability of wine whilst protecting character and quality.

• 0.45 - 1.2 microns

- Validated micro removal
- PES membrane filters
- Repeatedly integrity testable



PREPOR

Pre-Stabilization

A superior level of microbial retention combined with efficient colloidal reduction protects the service life of BEVPOR membrane final filters.

- 0.5 to 1.0 microns
- Validated reduction of regulated organisms
- Graded density construction for increased retention and throughput



PEPLYN

Clarification & Prefiltration

The PEPLYN range of filters from Parker domnick hunter utilizes a graded density polypropylene depth media providing high dirt holding capacity with high flow rates.

- 0.6 to 100 microns
 Large diameter format PEPLYNMAX and MAXGUARD
- Excellent particulate retention



CARBOFLOW

Carbon Filters

Activated carbon filters are offered in both high efficiency and general grades. Utilizing FDA approved materials they are ideal for chlorine reduction.

- Available in 2 grades 5" to 40" lengths
- Excellent adsorptive capacity



Culinary Grade

Sintered and pleated steam filters from Parker domnick hunter are designed to provide culinary grade steam. This protects pipework, equipment and downstream filters. The 1 micron version guarantees steam to 3A Standard 609-03

- 1 to 25 microns Re-cleanable 316L
- stainless steel
 Exceptionally high flow rates
- Jumbo version for increased capacity



HIGH FLOW TETPOR II Air / Gas Filters

HIGH FLOW TETPOR II gas sterilization filters have been developed to benefit from technological advances within the manufacture of PTFE membranes. This new generation of filter sets the standard with an unrivalled combination of efficiency, flow rate and strength.

- Optimum pleat
- Unrivalled flow rates combined with low pressure drops
- High flow rates with low pressure drops
- Steam sterilizable to 255 cycles at 142 °C (287.6 °F)



HIGH FLOW BIO-X

Air / Gas Filters

HIGH FLOW BIO-X combines proven depth filter technology and a pleated construction to provide retention down to 0.01 micron in gas. Flow rates typically 2-3 times that of membrane filters make HIGH FLOW BIO-X the filter that can dramatically reduce cartridge usage and installation size within the fermentation, food and beverage industries.

- High temperature operation 200 °C (329 °F)
- Stainless steel inner core
- Wide bore cartridge construction to maximize flow rate



HOUSINGS

Liquid & Gas

Parker domnick hunter have a range of single and multi-round cartridge housings, designed specifically for use in food and beverage applications. Housings are available in both standard and plus versions to suit individual

- application requirements.Multi-element liquid housings 3 to 30 round
- Industrial vent housings Flow efficient sanitary air
- housings



INTEGRITY TEST EQUIPMENT

Liquid & Gas

Parker domnick hunter have a range of instruments that have been specifically designed for your industry. All instrumentation is supported by our global team of service engineers and support technicians.

- Valairdata 3 Aerosol challenge testing of
- sterile gas filters BEVCHECK
- Hand held unit testing pressure decay of membrane filters BEVCHECK PLUS
- Built-in printer provides printed test report



MIDIGAS & MAXIGAS

Nitrogen gas generators

Nitrogen gas generators produce on-site nitrogen gas from compressed air and are the cost-effective alternatives to traditional nitrogen sources for multiple applications. Excellent energy efficiency and a low life-cycle ownership cost facilitate considerable cost savings of up to 90%.

- Low life-cycle ownership cost and elimination of costs associated with a cylinder supply
- On-demand functionality limits waste
- Energy efficient; operates from a small compresso



WS WATER SEPARATORS

Bulk Liquid Removal

Providing efficient bulk liquid removal at all flow conditions, OIL-X EVOLUTION WS Water Separators also minimize energy consumption and help reduce your carbon footprint.

- ISO8573.9
- Performance independently verified Low pressure loss /

low operational cost

Providing air quality that meets or exceeds the requirements of ISO8573-1, the international standard for compressed air quality, OIL-X EVOLUTION is also the most energy efficient compressed air filter in the world, helping to reduce Tested in accordance with

your carbon footprint.

The most energy efficient filters available

OIL-X EVOLUTION

Compressed Air Filters

- High quality IS08573.1:2001 compressed air
- Running costs that start low and



PNEUDRI

Desiccant Dryers

Providing water vapour removal in accordance with Classes 1, 2 & 3 of ISO8573-1 the international standard for compressed air quality, PNEUDRI modular compressed air dryers offer unrivalled performance, flexibility and expandability in a unique space saving design. Low operational costs and integrated energy management systems also ensure energy consumption is kept to a minimum.

- Highest quality air
- Totally stops corrosion / damage Low installation costs
- Energy efficient



HYPERCHILL

Precision Chilled Water

Hyperchill maximizes productivity and minimizes costs, as well as easy conformity to regulations on water quality. Hyperchill is the perfect solution to industrial chilled water needs.

- Increases productivity,
- reduces costs Adaptable to individual customer needs



PC₀₂

Carbon Dioxide Polishing Systems

Providing quality incident protection for beverage grade carbon dioxide, PCO2 offers protection against carbon dioxide contamination and impurities of up to 10 times the allowable levels.

- Ensures compliance with quality guidelines published by the International Society for
- Beverage Technologies (ISBT) Protects drinks manufacturing processes from vapour impurities

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