Process Advanced Filtration
Optimal solutions for your fluid applications
Filtration systems are essential to the success of your operation. Each time you incorporate new products into your manufacturing process, you must be confident they will be compatible with your overall system, will perform consistently under stringent demands, will hold up to constant use and, most importantly, will do the job right... the first time and every time.

At Process Advanced Filtration (PAF), your filtration demands are met with the highest performing, most technically-advanced quality filtration systems on the market.

As a part of Parker Hannifin Corporation, PAF is a Division of the Filtration Group with the financial strength, technical resources and global relationships essential to engineer, to develop and to manufacture the exact filtration solutions you need.

At Process Advanced Filtration (PAF), your filtration demands are met with the highest performing, most technically-advanced quality filtration systems on the market.

We deliver engineered filtration solutions through superior customer service, innovative product development, and cost-saving designs that add value to your manufacturing process.
Innovation
Essentials of product development

High-quality products come from technologically-advanced manufacturing systems. Process Advanced Filtration (PAF) constantly strives to improve its offerings in order to serve you better. Using global resources, advanced state-of-the-art design techniques, modern clean rooms, sophisticated test systems, and computer-aided design engineering, PAF stays ahead of the competition, to ensure that you get maximum results. By responding to your constantly changing needs, we continually bring you the most innovative products and services.

Research & Development (R&D)
Our R&D teams are designing new products and discovering innovative technologies that will enhance the performance of process filtration, and thus keep us at the forefront of process filtration technology.

Engineering
PAF’s in-house application and design engineering group is experienced in interpreting design specifications and recommending the most economical filtration solutions. Recommendations are based on the following:
- A thorough understanding of the process & application
- An analysis of fluid for contaminant identification
- A determination & understanding of contaminant removal
- Understanding of the degree of particle removal efficiency
- The effect of sizing of the filter system on total filtration cost
- A review of housing design specifications & cost ramifications
- Communication with the customer on cost-saving options
- Detailed quotation offering both cost & design variations

System Design & Implementation
A fully-qualified filter system can be implemented using product samples and used cartridge analysis from laboratory & pilot scale investigations. This can include the specifications for a fully automated filter system design. When commissioning a filter system through PAF, the filter user can rely on our team of process experts to share and facilitate this otherwise difficult task.
Consistent, outstanding performance is as vital to your operation as it is to ours. That’s why Process Advanced Filtration (PAF), an ISO 9001:2000 (soon to be certified to ISO 9001:2008) registered company, takes every initiative and measure to produce the most superior, highest performing filtration products anywhere in the world. Quality is integrated into the manufacturing process every step of the way. All production takes place under stringent quality control in PAF’s manufacturing operations. Material vendors are selected based on their ability to meet our rigorous requirements. PAF uses, maintains and employs only the best, so you always get the highest quality filtration products.

Operate on key lean and six sigma principles to ensure quality & on-time delivery.

Quality Control
- Recorded lot numbers provide complete traceability back to base materials
- Validation of products, processes and software are conducted regularly
- Integration of productivity, product quality and employee safety into the design and construction of facilities and equipment
- Clean room environment used for all microfiltration manufacturing operations
- Regular process audits conducted by trained auditors from across the business
- Customer audits welcomed

Manufacturing Excellence
- State-of-the-art facilities
- Fully-equipped lab and testing center
- Certified-controlled clean rooms

Parker’s Supply Chain & Lean System Philosophy
From raw materials to manufactured product, Parker brings customers the highest quality products at the best price with the fastest delivery. We utilize the following tools to ensure consistency:
- Kanban pull systems
- Elimination of waste
- Continuous flow of material and information
- Barcode scanning
- Strategic supplier development
Life Sciences
When performance is critical

We specialize in the manufacture and supply of high-quality solutions for the clarification, stabilization and sterilization of liquids, air, and gas designed to meet industry applications and requirements.

Our validated product range is fully supported by our global network of technical scientists and engineers.

Our systems are designed to minimize health and safety risks, lower the potential of product contamination, and reduce capital costs while providing a more convenient way of processing a product.

Market Applications
- Ophthalmics
- Biopharmaceuticals
- Traditional Pharmaceutical
- Vaccine Manufacturers
- Serum & Media Companies
- Contract Manufacturers
- Medical Device/Diagnostics

Products

Membrane Filters
Air/Gas - Remove microbiological contamination to guarantee product safety, quality and extended shelf-life.

Liquids - Multi-format sterile and bioburden reduction filters, which demonstrate low preservative binding and retention of diminutive organisms in critical areas of pharmaceutical production.

Depth Filters
A wide range of polypropylene, glass microfiber media make an ideal choice for aggressive & viscous chemicals and solvents for reliable and economical removal of particulate and microorganisms.

Disposable Capsules
This capsule range incorporates simple but effective design solutions such as feet for increased stability and operation safety. A range of membrane and depth filters are available in this disposable format.

Filter Housings
A comprehensive range of air & liquid housings for virtually any flow, temperature, and pressure; including ASME code and sanitary designs. All are available in different surface finishes.

Range of filters offered in both pre-sterile & non-sterile packaging options.
We know our customers rely on filtration to achieve the characteristics consumers demand - clean, clear, and refreshing beverages and food free of harmful microorganisms and other contaminants. Parker quality control assures that all materials and filters used for contact with foods and beverages comply with FDA regulations. Along with our technical expertise and support, we provide the industry with the best filtration solutions and the lowest cost of filter ownership available anywhere.

**Market Applications**

- **Dairy Processing**
  - Cheese Whey Concentration
  - Skim Milk Concentration
  - Ultra Permeate Concentration
  - Whey Protein Concentrate
  - Cheese Milk Fortification
  - Cheese Brine Clarification
  - Whey Protein Isolate
  - Fat Removal
  - Water Recovery

- **Meat Processing**

- **Beverages**
  - Wine
  - Beer
  - Soft Drinks
  - Juices

- **Syrups**

- **Water**
  - Municipal Water
  - Bottled Water
  - Spring Water
  - Agri-Water

**Products**

- **Pleated Membrane Filters**
  - Extensive range of sterile and bioburden reduction filters providing microbial stabilization that extends shelf-life while maintaining quality and product characteristics.

- **Pleated Depth Filters**
  - Perfect as trap filters for fine particulates and diatomaceous earth (DE) removal, and pre-filters to extend filtration life.

- **Wound Filters**
  - Offer high dirt-holding capacity and true depth filtration for reliable protection of downstream processes and equipment.

- **Melt Blown Filters**
  - Graded-density media provides extended cartridge life and superior product clarity.

- **Metallic Media Filters**
  - Dimensional integrity accommodates high flow rate & high temperature systems for optimized process filtration.

- **Bag Filters**
  - Perform at high flow rates and viscosities for removal of solids.

**Clean, clear and contaminant-free results you can rely on.**

- **Filter Housings**
  - A comprehensive range for virtually any flow, temperature, and pressure; including ASME code and sanitary designs. All are available in different surface finishes.

- **Sanitary Spiral Elements**
  - High rejection and superior performance membranes specifically designed and built for use in reverse osmosis, nanofiltration, ultrafiltration, and microfiltration crossflow applications.

**Bring flavor, freshness and purity to the table**
Industrial
Make every minute count

Our industrial market serves a vast range of applications from the ink, paint and coating industries, to chemical, petrochemical and petroleum. A global network of factory-trained distributors and technical support teams support our products.

Market Applications

- **Inks, Paints, & Coatings**
  - Aqueous
  - Solvent base
  - Hot Melts
  - Newsprint Ink
  - Glass Master Cleaning
  - Adhesive Coating
  - Disc Metallization
  - Disc Sealing
- **Chemical Processing**
  - Acids
  - Base
  - Amines
  - Fine/High Purity Chemicals
  - Industrial Cleaning
  - Polymers/Monomers
  - Others
- **Electrocoating (E-Coat)**
  - Vehicle/Machinery Coating
  - Others
- **Water Treatment**
  - Wastewater
  - Municipalities

Products

- **Membrane Filters**
  - Protect critical equipment by removing sub-micron particles in high purity applications.

- **Pleated Filters**
  - Increased surface area and high dirt-holding capacity to keep equipment clean and your operation running continuously.

- **Large Diameter Pleated Filters**
  - High flow and longer life for lower operating costs.

- **Depth Filter Elements**
  - Used in a range of applications, from water to highly viscous fluids, these filters include wound materials, as well as melt blown and resin bonded media for efficient removal of various particles, such as amorphous contaminant.

- **Filter Bags/Strainers**
  - High flow rate capability and nominal filtration at low cost.

- **Sorbert Cartridges**
  - Absorbency that extends the life of valuable process fluids and reduces presence of hydrocarbon contaminants to meet EPA regulations.

- **Metallic Elements**
  - Optimal choice for high-temperature, high-flow rate applications under corrosive conditions.

- **Single/Multi-Cartridge & Bag Vessels**
  - Ideal in a range of industrial processes, these vessels are available in various materials and combine high-pressure rating capabilities with ease of installation and rugged durability. Available in ASME code and non-code design & construction.

- **E-Coat Ultrafiltration Membrane Spiral Elements**
  - Provides high resistance to fouling from colloidal particles & oily contaminates in electrocoating applications.

- **E-Coat Ion Selective Membrane & Anode**
  - Energy-saving design reduces resistance and blockage of electrical paths in cathodic & anodic applications.

Products that help improve quality, optimize space and reduce overall operating costs.
Microelectronics
Redefine cleanliness

Microelectronics are found everywhere from consumer electronics to satellites, from corporate data centers to microwave ovens. This rapidly-growing market draws upon our core areas of filtration expertise and is driven by a constant demand to supply new products that are faster, with higher capabilities and smaller footprints. The manufacturing of the newest generations of integrated circuit (IC) chips would not be possible without highly effective filtration.

Market Applications

- Integrated Circuit (IC) Manufacturing
- Data Storage
- Flat Panel Display
- Solar Panels

Offer integrated product lines to serve your unique filtration needs.

Products

Membranes
High-purity products, including all-fluoropolymer cartridges, provide high-flow rates and long on-stream life in extreme processing conditions.

Fluoropolymer Capsules
All-fluoropolymer construction offers excellent chemical and thermal resistance, and is available with a variety of configurations and fittings.

Housings
For critical high-purity filtration applications involving aggressive media these housings provide excellent flow performance with minimum pressure drop.

Innovative Technology

SELECT - Pleating technology that improves and lowers costs of wafer processing with twice the throughput.

Ultraclean - Low level of metal extractables ensure highly consistent manufacturing process.

XF Membrane - Offers up to three times the flow rate and throughput than traditional PTFE membranes.
Parker’s Motion & Control Technologies

At Parker, we’re guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineer- ing the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver.

No company knows more about motion and control technology than Parker.

For further information call 1 800 C-Parker (1 800 272 7537) or e-mail c-parker@parker.com.