



aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



# Filtration and Separation Division Balston Operation

Filtration and Gas Generation Systems



# Balston Filtration and Gas Generation Systems

Clean Compressed Air and Gases for Contaminant-Free Applications

**P**arker Hannifin Corporation, the global leader in motion and control technology, delivers an unmatched breadth of engineered products and solutions. Parker’s Balston Operation, a unit of the Parker Filtration and Separation Division, delivers a complete line of compressed air and gas filters and

gas generation systems. Balston Inc. was established in 1970 to produce and market a unique filter design that set the standard for coalescing filters. In 1979, Balston introduced the first gas generator for laboratory use. In 2000, Balston was acquired by Parker Hannifin Corporation and, since 2000, has been an integral unit

of the Filtration and Separation Division.

For over three decades the Balston brand has been the recognized leader in filtration, purification and gas generation technology.

All Parker Balston products are supported by a staff of highly trained sales and service specialists and are manufactured within strict guidelines of a total quality management program. All manufacturing facilities are ISO 9001 certified.

### Parker’s Motion and Control Technologies:

Aerospace	Hydraulics
Climate Control	Pneumatics
Electromechanical	Process Control
<b>Filtration</b>	Sealing & Shielding
Fluid & Gas Handling	

**PH**  
**LISTED**  
**NYSE**



### Balston Filters and Accessories:

- Compressed Air/Gas Filters
- Instrumentation and Gas Sampling Filters
- Air Preparation Units (FRLs)
- Steam Filters
- Air Dryers
- Drains, Gauges, and other Accessories
- Nitrogen Generators
- Vacuum Pump Exhaust and Inlet Filters
- Natural Gas Filters

# What Separates Parker's Balston Operation From Other Companies?



More than 75% of our standard items are made to order and ready for shipment within three days of order confirmation.

## Mission

Our mission at the Filtration and Separation Division is to provide all of our customers with innovative, reliable, high quality products and services that will exceed their expectations.

## Exceptional Lead Times

Our LEAN manufacturing capability assures that you will have the right filtration product at the right time. More than 75% of our standard items are made to order and ready for shipment within three days of order confirmation. This enables us to meet 98% of customers' request dates.

## Outstanding Technical Assistance

We are committed to providing unmatched technical support to all our customers. Our degreed application engineers provide immediate response to technical questions and requests for specifications and quotes whenever possible. If they are busy serving other customers when you call, they make every effort to return your call within the hour.



# Superior, Consistent Performance

Superior, consistent performance is as vital to your operation as it is to ours. Certified to ISO 9001:2000, our quality management systems provide products that meet your filtration requirements and exceed your performance expectations. Combined with our superior filter designs, Balston filters produce lower differential pressures and higher dirt-holding capacity. Offered in a variety of efficiencies, the media you select will fit your filtration needs.



## Multiple Ordering Options

Not only are we easy to reach when you have a question, but Balston products are easy to order, using the best method to match your purchasing policy and expedite your order.

Options include PHconnect, EDI, e-mail, phone, and fax. PHconnect

is Parker's preferred web-based ordering, inquiry, and tracking system. This allows you to view the status of all open and shipped orders, the status of all open invoices, tracking numbers for orders shipped via UPS and catalog searches for part numbers, pricing and lead times.



# Custom OEM Product Capabilities

When you need a special filter for a unique application, Balston filter experts are ready to work with you. We'll tailor a configuration to meet your special need from the wide variety of filter media available. And, with LEAN manufacturing, we can produce specials in reasonable quantities, in a reasonable amount of time, at a reasonable price. Not only will this enhance the performance of your product, but it will benefit you with aftermarket sales of replacement elements.

## Value-Added Services

Let us review your OEM product requirements, and we'll save you money while providing flexible engineering, exceptional service, and a team focused on the OEM customer needs.

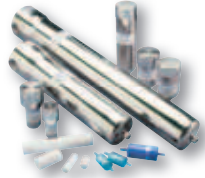
- Filter Media
- Disposable Filter Units
- Membrane Air Dryers
- Nitrogen Generators



# Industrial Filtration Products

Don't start the shift without us

## Sample Analyzer Filters



- Remove liquids and solids from gas samples
- Remove solids and gas bubbles from liquid samples
- Coalesce and separate two liquid phases

## Water Separators



- Remove bulk water from your application
- Connections from 1/4" to 3" NPT
- Pressures to 230 PSIG

## Filters-Regulators-Lubricators



- Two unit combos
- Metal and polycarbonate bowls available
- Pressures to 250 PSIG
- Connections from 1/8" to 1/2" NPT



## Applications

- Spray Painting
- Powder Coating
- Blow Molding
- Printing
- Packaging
- Pneumatic Conveying
- Air Gauging
- Air Bearings

## ASME Coded Vessels



- Coalescing, particulate and adsorption
- Pressures to 185 PSIG
- Connections from 3" NPT to 16" flange
- Flows up to 37,000 SCFM
- Custom designs available

Whether you depend on it to clean, clamp, coat, convey, cool or control, compressed air is just as important in the industrial environment as gas, water and electricity. Balston coalescing, particulate and adsorption filters, dryers, Filter-Regulator-Lubricator combination units, and compressed air accessories assure that clean compressed air is available for all your industrial applications.

## Balston 2000 Series Compressed Air Filters

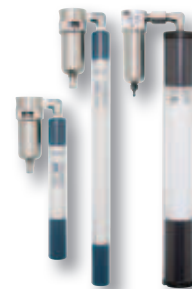
Balston 2000 Series compressed air filters are the most widely used filter. Our standard grade BX element captures 99.99% of particulate, oil, and water contamination, down to 0.01 microns.

- Coalescing, particulate, and adsorption elements
- Pressures to 250 PSIG
- Connections from 1/4" to 2" NPT, BSPT
- Flows from 1 to 52,000 SCFM



## Cabinet Air Dryer

- Protects electrical cabinet components from damage caused by water and high humidity in wash down areas
- Positive pressure keeps dust out
- Requires no electricity, low operating costs to 1" NPT
- Flows up to 75 SCFM



## 6000 Series Compressed Air Filters for Harsh Environments

- 1/4" - 1" line sizes
- 304 stainless steel
- Ideal for harsh environments and washdown areas
- Sterile air filtration available



## Compressed Air Dryers

- Compressed air hollow fiber membrane dryers
- Pressure dewpoints down to -40° F
- Connections from 1/4" to 2" NPT
- Flows up to 200 SCFM



## Accessories

- Differential pressure gauges
- Float, solenoid, and zero-air-loss drains
- Mounting brackets and adapter kits



# Specialty Filters

Protect your products and your working environment



## Stainless Steel Filters

- Used in the most demanding environments
- Pressures to 5000 PSIG
- Connections from 1/8" to 1" NPT



## Vacuum Exhaust Filters

- Eliminate 99.9% of oil mist and smoke from vacuum pump exhaust
- Easily adapts to most vacuum pumps
- Flows up to 850 SCFM



## Stainless Steel FRL

- 316 Stainless steel housings
- Pressures to 300 PSIG
- Connections from 1/4" to 1/2" NPT
- Ideal for corrosive environments



## Steam Filter

- Produce high quality steam
- Pressures to 125 PSIG
- Connection: 2" NPT
- Flows up to 300 lbs/hr





**B**alston steam filters eliminate overall contamination, taste differences and odors in food products and facilitate sterilization in hospitals and pharmaceutical processing facilities.



## Applications

- Food, Beverage Sanitization and Cooking
- Dairy and Meat Packing Sanitation
- Air Conveying of Dry Food Products
- Compressed Air Bakery Mixing
- Pharmaceutical Manufacturing
- Hospital Sterilization
- Respirator Air Purification
- Laboratory Gas Sampling
- Industrial Breathing Air



### Instrumentation & Gas Sampling Filters

- Stainless steel, aluminum & plastic housings and Teflon
- Clear bowls available
- Connections from 1/8" to 2" NPT
- Pressures to 5000 PSIG



### Gas Sampling Filters

- Gas analyzer protection
- Pressures to 5000 PSIG
- Stainless steel and aluminum housings
- Variety of filter elements available



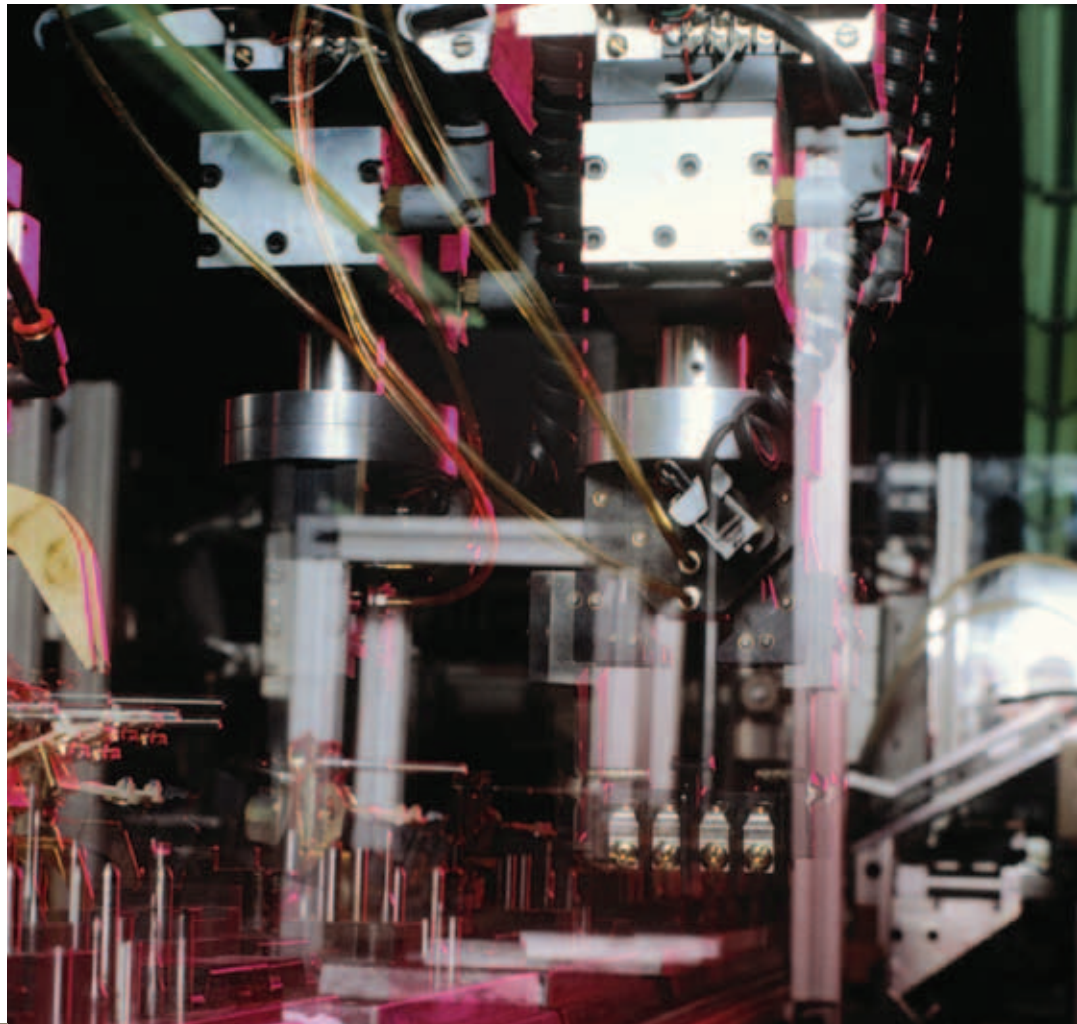
### Specialty Filter Elements

- Coalescing, particulate and adsorption filter media
- Filter media ranging from stainless steel mesh to PTFE membrane
- Compatible with a variety of gases, including refrigerant

# Industrial Nitrogen Gas Generators

Performance under pressure

Parker offers a range of nitrogen systems servicing a wide variety of applications



## Membrane Nitrogen Generators

- Smaller flows and lower purities
- Produce 95-99% pure, commercially sterile nitrogen from a compressed air supply
- Dewpoints to -58°F (-50°C)
- No electrical line required
- All models include a 0.01 membrane filter



## PSA Nitrogen Generators

- Larger flows and higher purities
- Mono and Dual bed designs
- Complete package with prefiltration and receiving tank
- Produce 95 - 99.999% pure nitrogen
- Dewpoints to -70°F (-21°C)



## Nitrogen Generators for Tire Inflation

- Models for automobile and tire dealers
- Models for commercial trucks and fleets
- Better tire pressure
- Improved fuel efficiency
- Longer tire life
- Enhanced safety

Parker Balston Nitrogen Generation Systems continuously produce high purity nitrogen from compressed air. This eliminates the inconvenience and high cost associated with cylinders, dewars and bulk delivery and increases reliability of supply. A nitrogen generator offers long term price stability and insulates the user from uncontrollable vendor gas price increases, long term commitments, contracts and tank rental fees. Operation is simple, select the purity required and set the flow, and within minutes high purity, dry nitrogen is available. Standard features include high efficiency coalescing prefilters, activated carbon adsorption, a nitrogen storage tank and a 0.01 micron final membrane filter.

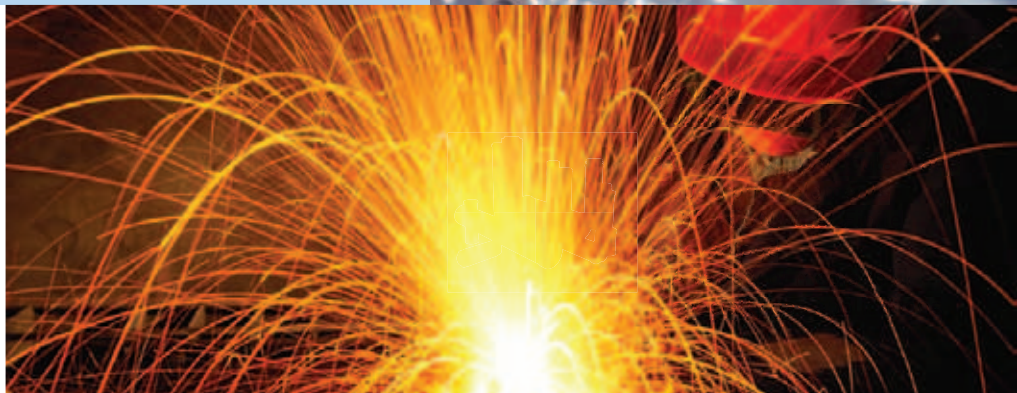
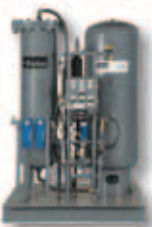


## Applications

- Purging or testing of tanks and vessels
- Solvent blanketing
- Food processing and packaging
- Storage of perishables
- Tire filling
- Packaging
- Sparging and mixing
- Carburizing, hardening, sintering, annealing
- Heat treating
- Degassing aluminum
- Plastic extrusion and molding
- Gas assist
- Laser cutting
- Drilling
- High flow pipeline pigging/purging/inerting
- Pressure maintenance for depleted reservoirs
- Gas lift operations-onshore or offshore
- Offshore utility nitrogen

### Custom Systems

- Containerized systems
- Skidded and truck-mounted systems
- Dry gas seal systems
- High pressure systems
- Oil field systems
- Non-cryogenic generators



# Gas Generators for the Laboratory

Eliminate dangerous, costly gas cylinders

## FID Makeup Gas Generators



- Ideal for 5-6 FIDs
- Produce makeup grade nitrogen with less than .05 ppm THC
- Improves flame shape within the FID detector and maximizes sensitivity

## LC/MS TriGas Generators



- Generates pure nitrogen, zero air, and source exhaust air
- Models available with compressor
- Prevents running out of gases during LC/MS instrument operation

## FT-IR Purge Gas Generators



- Improves signal-to-noise ratio even on non-purge systems
- Increases FT-IR sample throughput and maximizes up-time
- Compact design
- Recommended and used by all major FT-IR manufacturers



## Instrument Applications

- LC-MS
- GC-FID
- GC-FPD
- GC-ECD
- FT-IR
- ICP
- TOC
- NMR
- AA
- Sample Evaporators
- TGA/DSC
- VEM, CEM Testing

## Zero Air Generators for Detector Support Gas



- Produce UHP zero air from house compressed air
- Increase accuracy of analysis and reduce cleaning requirement of detector
- Qualitative SMART-display provides operational status
- Recommended and used by many GC and column manufacturers
- Silent operation
- Models available to service up to 66 FIDs

**B**alston gas generators for analytical instruments eliminate costly and dangerous cylinders of hydrogen, nitrogen, and zero grade air. Whether it's directly on the laboratory bench or insitu to a process monitoring application, Balston gas are the dependable standard which delivers safe, high purity gas. Our leading global presence and portfolio of product technologies is unrivaled within our industry.

## Hydrogen Generators for Fuel and Carrier Gases

### Fuel and Carrier Gas Hydrogen Generators

- Exceed OSHA 1910.103 and NFPA 50A safety guidelines
- Produce a continuous supply of 99.99999+% pure hydrogen gas without downstream purifiers

### Fuel Gas Hydrogen Generators

- Ideal for fuel gas, up to 14 FIDs
- Produce 99.9995% pure hydrogen
- Exclusive water management system and control circuitry maximize uptime



### Nitrogen Generator for Sample Evaporators

- Ideal for any combination of sample evaporators up to 100 nozzle positions
- Produces clean, dry (to -20°F) dewpoint evaporator grade nitrogen from compressed air



### TOC Gas Generators

- Replace high pressure oxygen or nitrogen gas cylinders with hydrocarbon-free, CO2-free compressed gas for TOC analysis
- Ensures consistent, reliable, TOC operation and reduces instrument service and maintenance



### FID Gas Stations

- Ideal for 10 - 11 FIDs
- Produces UHP zero air and 99.9995% pure hydrogen in one enclosure
- Increase the accuracy of analysis and reduces the cleaning requirement of the detector
- Automatic water fill



### GC Gas Stations

- Ideal for 1-3 FIDs and 1-3 capillary columns
- Produces UHP zero air and 99.99999+% pure hydrogen in one enclosure
- Speeds up separation, increases sample throughput and extends column life



# Notes

# Parker Filtration's Products & Systems



## AEROSPACE

### Key Products

- Filter Vessels (API/IP)
- Fluid Conditioning Monitors (Fuel & Hydraulic)
- Fuel Filter/Water Separators
- Fuel Inerting Systems (OBIGGS)
- Fuel Loading Filters (API/IP)
- Fuel, Hydraulic, & Lubrication Filters
- Nitrogen Tire Inflation Systems



## FOOD & BEVERAGE

### Key Products

- Carbon Dioxide Purifiers
- Compressed Air Dryers
- Fiber & Membrane Filters
- Nitrogen Generators
- Stainless Steel Filter Housings
- Steam & Sterile Air Filters
- Validation Test Equipment
- Water Chillers
- Water Filters



## INDUSTRIAL & PLANT EQUIPMENT

### Key Products

- ASME Coded Vessels
- Compressed Air Filters
- Condensate Management
- Contamination Monitoring
- Desiccant Dryers
- Membrane Filters & Dryers
- Refrigerated Dryers
- Hydraulic Filters
- Oil/Water Separators
- Process Filters
- Portable Hydraulic Systems



## LIFE SCIENCES

### Key Products

- Breathing Air Filters & Systems
- Chillers
- Compressed Air Filters
- Filter Integrity Analyzers
- Gas Sterilization Filters
- High Purity Gas Filters
- Hydrogen Gas Generators
- Nitrogen TriGas Systems
- Sterile Water Filters
- Syringe Filters



## MARINE

### Key Products

- Air Intake Filters
- ASME High Flow Vessels
- Crankcase Emission Filter Systems
- Fuel Dispensing Filters
- Engine Fuel Filter/Water Separators
- Engine Oil & Coolant Filters
- Gasoline Filters
- Hydraulic Filters
- Hydrocarbon Fluid Filters
- Oil/Water Separators
- Submarine CO<sub>2</sub> Reduction Units
- Water Desalination & Purification Systems



## OIL & GAS

### Key Products

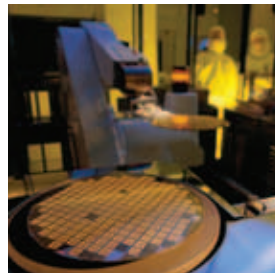
- Air Intake Filters
- ASME High Flow Vessels
- Compressed Air Filters & Dryers
- Compressed Air Water Separators
- Crankcase Emission Filter Systems
- Engine Fuel Filter/Water Separators
- Engine Oil & Coolant Filters
- Fluid Condition Monitoring Systems
- Fuel Dispensing Filters
- Hydraulic Filters
- Hydrocarbon Fluid Filters
- Integrity Test Equipment
- Nitrogen Generators
- Mechanical Separators
- Membrane & Sterile Air Filters
- Oil/Water Separators



## POWER GENERATION

### Key Products

- Air Intake Filters
- ASME High Flow Vessels
- Bioenergy Water Chillers
- Crankcase Emission Filter Systems
- Engine Fuel Filter/Water Separators
- Fluid Condition Monitoring Systems
- Fuel Dispensing Filters
- Load Tap Filters
- Hydrogen Generators
- Magnetic Prefilters
- Nitrogen Generators
- Portable Hydraulic Systems
- Water Sensors



## PROCESS

### Key Products

- Alternative Gas Dryers & Absorbers
- Bag Filters
- Compressed Air Dryers
- Instrumentation Filters
- Nitrogen Generators
- Oil Absorption Filters
- Pleated Filter Cartridges
- Process Filters
- Semiconductor Filter Cartridges
- Stainless Steel Prefiltration Vessels
- Zero Air Generators



## TRANSPORTATION & MOBILE EQUIPMENT

### Key Products

- Air Intake Filters
- Alternative Fuel Filters
- ASME High Flow Vessels
- Crankcase Emission Systems
- Fuel Delivery Systems
- Fuel Dispensing Filters
- Fuel Filter/Water Separators
- Multi-stage Filter Systems
- High Pressure Natural Gas Filters
- Nitrogen Tire Inflation Systems
- Suction & Return Line Hydraulic Filters
- Transmission Filters
- Truck & Railway Dryers



## WATER

### Key Products

- Desalination & Purification Systems
- Oil Absorption Filters
- Oil/Water Separators
- Pleated Filter Cartridges
- Stainless Steel Prefiltration Vessels
- Sterile Water Filters



ENGINEERING YOUR SUCCESS.

## North America

### Engine Filtration

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Parker Hannifin Corporation  
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 www.airtek.com

### Hydraulic Filtration

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Parker Hannifin Corporation  
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